



# EXPLORATORY RESEARCH IN THE QUALITATIVE APPROACH IN EDUCATION

## A PESQUISA EXPLORATÓRIA NA ABORDAGEM QUALITATIVA EM EDUCAÇÃO

## LA INVESTIGACIÓN EXPLORATORIA EN EL ENFOQUE CUALITATIVO EN EDUCACIÓN

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ABSTRACT: This article aims to describe and provide a set of fundamental guidelines for conducting exploratory research in the educational context. It presents a qualitative research approach, specifically the bibliographic type, with an interpretive nature, carried out in articles, books, theses, and dissertations that address the subject. Based on the conducted investigation, it was possible to identify that there are few publications in the Portuguese language with this delimitation. This type of research enables the exploration of complex and little-known issues, which can lead to a deeper and more comprehensive understanding of the studied phenomenon. It was also possible to identify that Exploratory Qualitative Research in education allows us to examine participants' experiences and perspectives, identify underlying trends and patterns, and generate hypotheses for future research.

**KEYWORDS**: Qualitative research. Exploratory research. Education.

**RESUMO**: Este artigo tem o objetivo de descrever e oferecer um conjunto de diretrizes fundamentais para a realização da pesquisa exploratória no contexto educacional. Apresenta uma pesquisa de abordagem qualitativa, do tipo bibliográfica, de natureza interpretativa, realizada em artigos, livros, teses e dissertações que tratam da temática. A partir da investigação realizada, foi possível identificar que existem poucas publicações em língua portuguesa com essa delimitação. Esse tipo de pesquisa possibilita explorar questões complexas e pouco conhecidas, o que pode levar a uma compreensão mais profunda e abrangente do fenômeno estudado. Também foi possível identificar que a Pesquisa Qualitativa Exploratória em educação nos permite verificar experiências e perspectivas dos participantes, identificar tendências e padrões subjacentes e gerar hipóteses para pesquisas futuras.

PALAVRAS-CHAVE: Pesquisa qualitativa. Pesquisa exploratória. Educação.

RESUMEN: Este artículo tiene como objetivo describir y ofrecer un conjunto de pautas fundamentales para llevar a cabo investigaciones exploratorias en el contexto educativo. Presenta una investigación cualitativa, de tipo bibliográfico, de naturaleza interpretativa, realizada en artículos, libros, tesis y disertaciones que tratan el tema. A partir de la investigación realizada, fue posible identificar que existen pocas publicaciones en lengua portuguesa con esta delimitación. Este tipo de investigación permite explorar cuestiones complejas y poco conocidas, lo que puede llevar a una comprensión más profunda y amplia del fenómeno estudiado. También fue posible identificar que la Investigación Cualitativa Exploratoria en educación nos permite examinar experiencias y perspectivas de los participantes, identificar tendencias y patrones subyacentes y generar hipótesis para investigaciones futuras.

PALABRAS CLAVE: Investigación cualitativa. Investigación exploratoria. Educación.

#### Introduction

Exploratory research has been increasingly used to investigate the complex phenomena of educational reality. This type of investigation seeks answers to questions and is dedicated to identifying and understanding facts/events in education that need to be explored. This is not a simple popular consultation, the purpose is to involve the subject who will participate in this investigation process in a moment of reflection, analysis of reality and production of knowledge.

In this study model, the researcher can use different types of data collection instruments to capture the phenomenon to be investigated, and can make use of various qualitative data analysis techniques that can contribute to the rigor and quality of the investigation. This is justified because, by presenting a flexible methodological process that makes it possible to triangulate data in different ways, qualitative analysis in exploratory research has been gaining ground in investigations.

In the qualitative approach, exploratory research – or exploratory study – aims to understand the phenomenon studied as it presents itself or happens in the context in which it is inserted. And for this type of investigation, in the area of Human and Social Sciences, the qualitative approach allows for a better understanding of human behavior and the social context. Exploratory research allows, in this process, the researcher to contemplate qualitative data in a systemic way, with a detailed understanding or interpretation of the analyzed phenomenon.

The choice for the theme of exploratory research in the qualitative approach in education arises from the need to understand and deepen knowledge about this type of investigation. Furthermore, we seek to contribute to methodological advancement in educational investigations and fill the lack of detailed information about exploratory research in Brazilian specialized literature.

From this perspective, this article presents the following research problem: How to conduct exploratory research using a qualitative approach in educational research? To answer this question, the investigation aims to describe and offer a set of fundamental guidelines for carrying out this type of research in the educational context.

Methodologically, this investigation presents a qualitative, bibliographical approach, of an interpretative nature, carried out in articles, books, theses and dissertations that deal with the aforementioned theme.

In the field of Human and Social Sciences, especially in the area of Education, it is believed that this investigation can contribute to the training and development of researchers.

Likewise, it is understood that, by focusing on the perspectives, experiences and interpretations of the individuals involved, a richer and deeper understanding of social and educational phenomena is established. This contributes to a more comprehensive and contextualized view of social and educational problems and challenges. Likewise, it is understood that this type of study is an initial investigation process that seeks a deeper and more complete understanding of a specific phenomenon in the area of Education, or even that its scope is to carry out other research based on of data obtained through exploratory research.

## **Qualitative Research in Education**

Qualitative research in Education is a type of investigation that seeks to understand social, cultural and educational phenomena through the analysis of subjective data, such as interviews, observations, life reports, among others. Its scope is to obtain a deep and detailed understanding of the subject in question, rather than quantitatively measuring the phenomenon. It is frequently used in case study, exploratory, action research, ethnographic research, among others, in addition to investigations into pedagogical practices and the perspective of students or teachers regarding educational issues.

For Alberto and Ferreira (2022, p. 359, our translation), "human complexity and social issues challenge researchers to reach a precise definition for the term qualitative research", which, according to the authors, occurs "Since, in each area of knowledge, this term can present different definitions, concepts and themes in its constitution". Yin (2016) adds that qualitative research allows the researcher to interpret human events based on their singularity and multiplicity, based on different methodological options.

In addition to those mentioned, other authors contribute to the understanding of what qualitative research is, and do so based on the understanding that it is a polysemic concept, that is, it can have different meanings and approaches depending on the context in which it is used and the authors who use it. This is because the term can have different definitions, approaches and interpretations in different areas of knowledge, contexts, and cultures. In Table 01, different concepts of qualitative research are presented:

## **Table 1** – Different concepts of Qualitative Research

#### Concepts

Duarte (1988, p. 15): "the selection of pertinent data is a basic characteristic of qualitative research and its value does not lie in itself, but in the fruitful results it can lead to. On the other hand, the rigor of research of this nature is not only measured by statistical evidence, but precisely by the breadth and relevance of explanations and theories, even if these are not definitive and the results achieved are not generalizable".

Luna (2000, p. 21-33): "[...] in qualitative research, the choice of analysis technique has to do with the formulation of the problem to be investigated. Thus, the theory must both suggest questions and indicate possibilities of interpretation, serving as a reference for the results that are observed".

Minayo (2001, p. 21): "qualitative research works with the universe of meanings, motives, aspirations, beliefs, values and attitudes, corresponding to the deepest space of relationships and processes. It has the advantage of being an effective study with nuances of life and human social behavior over a determined period of time, it lists the possibility of exploring a situation that interferes or allows itself to be interfered with in the understanding of the social world in which one is inserted".

Nogueira-Martins and Bógus (2004, p. 44): "emphasize that the qualitative approach seeks to understand what is studied, it is not concerned with population generalizations, principles or laws; attention focuses on the specific, with an emphasis on the meaning of the phenomenon, seeking its understanding. The scientific criterion in this case is intersubjectivity, since knowledge is constituted by the subject and the object in a dialectical relationship".

Vieira and Zouain (2005, p. 44-46): "qualitative research attributes fundamental importance to the statements of the social actors involved, to the speeches and meanings transmitted by them. In this sense, this type of research values the detailed description of the phenomena and the elements that surround them".

Denzin and Lincoln (2006, p. 15): "qualitative research involves an interpretative approach to the world, which means that researchers study things in their natural settings, trying to understand phenomena in terms of the meanings that people give them".

Barbour (2009, p. 12): "seeks to scrutinize the way people construct the world around them, what they are doing or what is happening to them in terms that make sense and offer a rich vision".

Yin (2016, p. 33): "highlights five characteristics that define qualitative research: 1st, it studies the meaning of people's lives in everyday conditions; 2nd represents the opinions of participants in the studies; 3rd covers the context in which people live; 4th reveals existing concepts that allow explaining human social behavior; 5th uses multiple sources for data collection".

Source: Prepared by the authors

From Table 01, it can be seen that, in general, qualitative research is concerned with the reality of the actors involved in the object of study on screen, taking into account their uniqueness and perspective. Therefore, in order to have a greater understanding, it is necessary to get in touch with deeper readings and understand the reflections that different authors bring about the topic, as this research approach provides the opportunity for a wide variety of ways of researching subjects linked to social and educational areas.

Thus, Creswell (2014, p. 15, our translation),

analyzes the concepts and methodological definitions referring to qualitative research as a guide and macro scientific interpretation through an investigative universe obtained through data collection and experiments that will focus on a fundamentalist conception of the researched object.

Godoy (1995, p. 62, our translation), in turn, highlights that "qualitative work has a set of essential characteristics, where the research field is the subject's environment and the

researcher is the fundamental instrument for obtaining data to be collected in the most impartial way possible." In the same direction, Cyriaco *et al.* (2017) list the main characteristics that permeate qualitative research, which are: natural environment as a direct source of data; researcher as a fundamental instrument; descriptive character; meaning that people give to things and their lives as a concern for the researcher; behavioral observations and social interactions; inductive approach.

It is evident that qualitative research, by definition, is descriptive, therefore, the data are not reduced to variables, but generate themes that will be observed and explored as a whole. The analysis method, in turn, is inductive or inferential, that is, conclusions are drawn from a deep analytical interpretation of interviews and observations. In this process, knowledge is given in an explicit and descriptive way, and it is necessary to establish a process of crossing information and classifying data so that the interpretation is objective, precise, transparent and reproducible, in order to guarantee the scientific rigor of the study.

In the area of Education, qualitative research is the most appropriate, mainly due to its subjective approach, which is concerned with understanding the subjects and their productions and is dedicated to interpreting and observing reality and the phenomena that occur. The investigation can use various data collection instruments and analysis techniques that can contribute to the rigor and quality of the study. It can be seen from this that qualitative research is important for the area of Education for several reasons:

- Deep understanding: allows for a deep and detailed understanding of complex and subjective issues related to Education, such as motivation, learning, attitudes and values.
- Inclusion of diverse perspectives: gives participants a voice, allowing them to share their perspectives, opinions and experiences. This is important to include the perspective of students, teachers and other actors involved in Education.
- Flexibility: it is flexible and allows adjustments during the course of the investigation, which is important when dealing with complex and dynamic issues.
- Validation of hypotheses: is a useful tool for validating or refuting hypotheses and theories related to education.

In short, qualitative research is important for the field of Education because it allows a more complete and detailed understanding of complex educational issues, including diverse perspectives and being flexible enough to adapt to the needs of educational phenomena.

For a qualitative researcher, it is essential to have a developed sensitivity to capture the subtleties contained in the information collected during the study. This requires prior skills, as

well as the ability to perceive connections between explicit and implicit information to obtain relevant and distinct data. It is important for the researcher to be clear about what is relevant and what is not in relation to their object of study. In summary, the success of qualitative research depends, to a large extent, on the researcher's ability to analyze and interpret information in a sensitive and objective way.

The theoretical-methodological basis used plays a crucial role in carrying out qualitative research. He is responsible for connecting the theoretical framework to the problem investigated and the data collected, providing support for reflections that support or contest the hypotheses presented. Therefore, it is essential that the researcher carefully selects the theoretical framework he will use, in order to consistently support the conclusions presented in his research.

It can be said, therefore, that the concern when developing this type of work is with the aspects of reality that cannot be quantified, focusing on understanding and explaining the dynamics of educational relationships. Qualitative research offers the researcher the opportunity to explore a reality that may not have been experienced by him or her, allowing the production of an object of interpretative study. In this type of approach, the researcher has the ability to interpret and understand the participants' perspective and the nuances of the reality studied, even without having experienced this reality firsthand. This approach can lead to a deeper and more complete understanding of the object of study, allowing a more detailed and meaningful analysis to be carried out.

On the other hand, the professional who conducts the study must be aware of possible limitations and risks that qualitative research can bring, such as: excessive dependence on the researcher as a data collection tool; risk of an incomplete reflection in the field notes that represents an attempt to concentrate the subject studied; control of the observer's influence on the subject; lack of details about the processes for reaching conclusions; disrespect for different aspects under different approaches; the researcher's own certainty in relation to their data; a deep sense of mastery over the subject of study; the researcher's involvement in the research situation, or with the research subjects (GERHARDT; SILVEIRA, 2009).

This intrinsic care in the qualitative approach is effective because it assumes an objective or subjective nature within the research addressed, also due to the relationship with the quality, interest, function and position it can take towards a given object of study.

[...] all research requires interpretations and, in reality, human behavior requires interpretations every minute. But interpretive research is

investigation that depends greatly on the definition and redefinition by observers of the meanings of what they see and hear (STAKE, 2011, p. 46, our translation).

All qualitative, social and/or empirical research seeks to typify the variety of representations of people in their experiential world (BAUER; GASKELL, 2008), above all, it aims to understand the way in which people relate to their everyday world.

As for its scenarios, these are defined in relation to the choice of object and the problem to be investigated. To this end, the insertion of the researcher and its acceptance through formal authorization provided by the institution, reference to the participating public, financing conditions (if any) and involvement on the part of the researcher, through strategies to be used, becomes relevant. for a participatory and evolutionary practice. The limits that appear during this journey need to be overcome by researchers and transformed into challenges, in each scenario researched.

In the qualitative approach, the researcher can carry out different study models and use various data collection instruments, as well as choosing different techniques for analyzing the collected data. The choice of paths to be followed in a study depends on the stipulated objectives and the methodological possibilities that it offered to the researcher. One of these different types of research in the qualitative approach is exploratory research.

#### **Conceptualizing Exploratory Research**

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Exploratory is a type of research that aims to understand and explore a phenomenon or issue of interest with the aim of becoming familiar with a subject that is little known or little explored. In the end, the researcher needs to be able to construct hypotheses. It is usually carried out at the beginning of a research project with the aim of gaining an initial and broader understanding of the subject and may involve literature review, interviews, observations and other qualitative methods to collect data. It is useful for identifying trends, problems or opportunities for future, more in-depth studies. To this end, Table 02 below presents some authors and their explanations/concepts about Exploratory Research.

## **Table 2** – Exploratory Research Concepts

Selltiz, Wrightsman and Cook (1965, p. 17): "all those who seek to explore ideas and intuitions, with the aim of obtaining greater familiarity with the phenomenon sought, are of the exploratory type".

Gil (1999, p. 56): "the main objective of exploratory research is to develop, clarify and modify concepts and ideas, in order to formulate more precise problems or research hypotheses for in-depth research".

Zikmund (2000, p. 89): "exploratory studies are often useful for diagnosing situations, discovering alternative solutions or discovering new ideas. This work is done in the early stages of a broader research process, aimed at clarifying and defining the nature of a problem and generating more information that can be collected to complete the study."

Malhotra (2001, p. 63-64): "when using exploratory research it is necessary to define the problem with greater precision. Its aim is to provide 21 criteria and understanding. Its characteristics are: information determined randomly and a search process that is flexible and unstructured".

Mattar (2001, p. 34): "exploratory research methods are widely used and flexible. The methods used include: secondary source research, empirical research, selective case studies and informal observations".

Aaker, Kumar and Day (2004, p. 53): "exploratory research generally involves qualitative approaches, such as the use of focus groups. In general, it is characterized by the absence of premises or premises that are not clearly defined".

Source: Prepared by the authors

As shown in Table 2, exploratory research is a type of scientific research that aims to explore, identify and understand concepts, phenomena or relationships that are still little known or investigated. This type of investigation can be applied in different areas of knowledge, such as Social Sciences, Psychology, Health, Education and Engineering, for example.

Fundamental for the development of new theories and scientific discoveries – as it enables the identification of new paths of investigation and the expansion of knowledge in a given field of study – exploratory research has the following characteristics:

- Broad objective: aims to obtain a broad and initial understanding of the subject.
- Qualitative data collection: generally, it involves collecting qualitative data, such as literature review, interviews and observations.
- Non-measurable: does not seek to measure the phenomenon or issue, but rather to understand it.
- Flexibility: it is flexible and allows adjustments during the course of the investigation, which is important when dealing with complex and dynamic issues.
- -Preparation for future research: it is an important step in building a solid foundation for more in-depth research.

Furthermore, its important characteristic is the deepening of preliminary concepts on a given topic that had not previously been satisfactorily covered, which contributes to the clarification of superficially addressed questions on the subject. Therefore, the study based on

an exploratory nature must adhere to some characteristics that define the way in which the research should be conducted, which may be primary or secondary, as shown in Table 03.

**Table 3** – Types of Exploratory Research

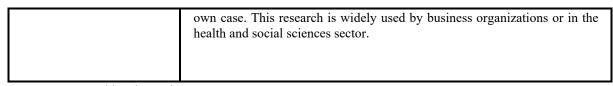
| Primary   | Primary research is information collected directly from the subject, which can occur through a group of people or even a single individual. It can be done directly by the researcher himself or by a third party hired to do it on his behalf. Primary research is carried out specifically to explore a particular problem that requires in-depth study. |
|-----------|--|
| Secondary | Secondary research is collecting information from previously published primary research. In such an investigation, information is collected from case study sources, magazines, newspapers, books, etc.  |

Source: Prepared by the authors

Thus, with regard to these two types of exploratory research, it is clear that there are several methods to be used. In Table 04, some of these methods are highlighted.

**Table 4** – Methods for carrying out Exploratory Research

| Methods                          | Concept  |
|----------------------------------|--|
| Primaries                        |  |
| Documentary review               | It involves the critical analysis of documents as a data source. It is a strategy that complements other data collection techniques, allowing <i>insights</i> and a deeper understanding of the research topic.  |
| Researches                       | They are used to collect information from a predefined group of respondents. It is one of the most important methods, it presents several types of research that can be used to explore opinions, trends, etc.   |
| Interviews                       | They allow you to know, at first, the assessments, opinions and knowledge of people related to the subject.  |
| Focus groups                     | A group of people is chosen and can express their ideas about the subject being studied. However, it is important to ensure that when choosing people for a focus group, you ensure that they have a common background and comparable experiences.   |
| Observation                      | Observational research can be qualitative or quantitative. It consists of observing a person, extracting discoveries from their reaction to certain parameters. In this research, there is no direct interaction with the subject.   |
| Secondaries                      |  |
| Online search                    | Currently, it is one of the fastest ways to collect information on any topic. There are many reliable <i>websites</i> that have countless data available on the internet and the researcher can download them whenever they need. An important aspect that must be considered is the authenticity of the source from which the researcher sources this data to collect accurate information. |
| Search of specialized literature | There is a huge amount of literary information available, libraries, <i>online sources</i> or even commercial databases. Sources may include newspapers, magazines, books, documents from the most diverse bodies, articles, literature, reports, published statistics, among other sources.   |
| Case study                       | Case Study research can help a researcher find more information through careful analysis of existing cases that have experienced a similar problem. The researcher just needs to make sure to analyze the case carefully in relation to all the variables present in the previous case in relation to their  |



Source: Prepared by the authors

It is therefore noted that exploratory research materializes as a valuable investigation to obtain an initial and broad understanding of a phenomenon or issue, it is a useful investigation to pave the way for future, more in-depth research. In a comprehensive way, it involves bibliographical research, interviews with people who have had practical experience with the problem to be researched, focus groups, participant or non-participant observation. In turn, for data analysis, it is necessary to adopt a technique that is consistent with what was collected and with the research problem.

Regarding the purpose of carrying out, Gil (2002, p. 41, our translation) highlights that: "exploratory research is developed in order to provide a general view of a certain fact". This is justified because "this type of research is carried out, above all, when the chosen topic is little explored and it becomes difficult to formulate precise and operational hypotheses".

However, when using exploratory research, the researcher has the duty to be careful not to transform it into a descriptive study. This is because the exploratory nature itself is related to empirical analysis (data search), so that the researcher cannot interfere with the data collected. The investigation needs to identify the research problem, analyze it and relate it to the theory, bringing hypotheses or propositions, otherwise a definitive conclusion about the phenomenon addressed will never be reached.

The objective of exploratory research is, therefore, to provide greater familiarity with the problem, with a view to making it more explicit or building hypotheses. In this way, the exploratory study helps to answer the questions that guide the research, building hypotheses with the collected material, which the researcher intends to study. In short, it can be observed that the planning of an exploratory type of research is quite flexible, as it allows the consideration of the most varied aspects related to the fact studied.

## Guidelines for carrying out Exploratory Research

Careful planning and a clear understanding of how the research will be conducted are fundamental components of any study. Before starting the investigation itself, it is important to define the objectives to be achieved and plan how data collection and analysis will be carried out. These steps are essential to guarantee the effectiveness and efficiency of the work and ensure that the results are useful and relevant to what was proposed.

According to Selltiz (1967, p. 63, our translation), "these research aims to provide greater familiarity with the problem, with a view to making it more explicit or constituting hypotheses". Its planning is, therefore, a flexible basis, so that it allows the consideration of the most varied aspects related to the fact studied.

Knowing the flexibility of the qualitative approach and also of exploratory research, it is proposed, for this type of investigation, a bibliographical research based on the following steps: (1) bibliographical survey and research; (2) interviews with people who had practical experience with the problems researched; (3) data analysis; and (4) final considerations (at which time the researcher seeks to answer their questions and understand the facts and events of education) or recommendations.

From this perspective, the **survey and bibliographical research** are consolidated as the identification of works that are of interest and that will contribute to the development of the study. The bibliographic survey plays a fundamental role in exploratory research, as it is a process of searching and analyzing relevant sources of information, such as books, scientific articles, theses, technical reports, academic journals and other academic publications, related to the topic of research in question. In bibliographic research, the professional involved analyzes and critically evaluates the bibliographic sources collected during the bibliographic survey. At this stage, the selected sources of information are examined, notes are made, the main points are summarized, patterns and trends are identified, gaps in knowledge are highlighted and a synthesis of relevant information for the work is prepared.

For Marconi and Lakatos (2003, p. 158, our translation), "At this stage, the researcher curates scientific articles, books, theses and other materials that talk about the topic studied. The bibliographical research work includes printed materials and also available exclusively in electronic media".

In the same process, the **interview** is an important tool for collecting data in qualitative research in the area of Education. Through interviews (structured, unstructured, semi-structured), researchers can obtain detailed and in-depth information about participants'

perceptions, attitudes and experiences. Furthermore, through the analysis of the word, or discourse, it is possible to establish a rapprochement with the participants and better understand their points of view. Careful analysis of interlocutions can provide valuable *insights* for Education research. Regarding the interviews, Duarte (2004, p. 215, our translation) emphasizes:

Interviews are essential when you need/want to map practices, beliefs, values and classificatory systems of specific social universes, more or less well defined, in which conflicts and contradictions are not clearly explained. In this case, if done well, they will allow the researcher to do a kind of deep dive, collecting evidence of the ways in which each of those subjects perceive and signify their reality and gathering consistent information that allows them to describe and understand the logic that governs the relationships that are established within that group, which, in general, is more difficult to obtain with other data collection instruments.

The interview thus plays a crucial role in exploratory research by allowing a deeper and richer understanding of the object of study. Regarding its implementation, it is worth highlighting that the person responsible for applying this stage must focus on interviewing people who have had experiences directly linked to the research problem addressed. This procedure involves direct questions about a specific behavior or situation that you want to explore. However, care must be taken not to delve into the particularities of the participants or even to ask questions that may contain or direct some type of embarrassment.

With regard to **data analysis**, there is reflection and understanding of the topic studied based on the information collected in the previous stages, thus focusing on describing the facts and exploring the discovery, explaining what was sought. Qualitative data analysis is a crucial component in qualitative research in the field of Education, as, through the study of data, it is possible to identify patterns, themes and underlying trends in participants' responses. This can provide valuable information about how participants perceive and experience Education. Furthermore, qualitative data analysis allows for a deeper and more comprehensive understanding of the collected indices, thus enriching the proposed research. The researcher can make use of different data analysis techniques, such as: content, discourse, thematic, and conceptual analysis, among others.

With a fundamental role in exploratory research, qualitative data analysis contributes to an in-depth understanding of the phenomenon under study, exploring individual perspectives, identifying new themes and concepts, establishing relationships and connections, contextualizing and interpreting the data, and validating the results through triangulation. It also

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provides a rich and contextualized view of the research object, contributing to the discovery of innovative knowledge and the construction of a solid foundation for future research.

Finally, **final remarks** are also fundamental elements in exploratory research. This step allows the researcher to reflect on the results and relate them to the research objectives. Furthermore, this section materializes as a space in which the researcher discusses the implications of the results for the study area and highlights limitations and suggestions for future research. Final considerations are very important, as they help to consolidate and communicate the main findings of qualitative exploratory research. Exploratory research data can be analyzed using different qualitative data analysis techniques, such as content analysis, discourse analysis, thematic analysis, conceptual analysis, among others.

The manifesto for the success of a study with exploratory research occurs when the theme investigated is not limited to the phenomenon that you want to investigate. This process can be deepened with different readings and strengthened by the incessant search for materials that can contribute to the development of research. Furthermore, the study of the stages of exploratory research becomes essential to understand the subject in depth, in order to make it evident in the construction of the questions that will provide the research action.

In other words, exploratory studies are rarely an end in themselves. Generally, they determine trends, identify potential relationships between variables, and establish an outlook for more rigorous subsequent investigations.

#### Final remarks

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Based on bibliographic research on exploratory research using a qualitative approach, we sought to answer the following problem: How to conduct exploratory research using a qualitative approach in educational research? Based on the investigation carried out, it was possible to identify a lack of bibliography on the topic in question, a factor that is extremely important given the relevance of the subject. To this end, we sought to describe and offer a set of fundamental guidelines for carrying out exploratory research in the educational context.

This led to the realization that exploratory research is conceptualized based on the improvement of ideas or discoveries of intuitions, with its planning being quite flexible, considering the most varied aspects related to the topic investigated. This fact becomes relevant considering the following steps: (1) survey and bibliographical research; (2) interviews with

people who had practical experience with the researched problem; (3) data analysis; and (4) final remarks.

Exploratory research is a valuable methodology for exploring complex and constantly evolving issues in the field of Education. Through bibliographic research, it was possible to obtain a deeper and richer understanding of the phenomenon studied. To carry out a qualitative exploratory investigation in Education, it is important to clearly define the objective of the study, select participants carefully and conduct detailed interviews. Along this path, the detailed analysis of qualitative data and the careful elaboration of final considerations prove to be fundamental to consolidating and communicating the research results. Therefore, it is pertinent to suggest that future studies explore different techniques for collecting and analyzing qualitative data in exploratory research in education.

When developing this new investigation, the researcher must take into account some limitations associated with exploratory research, which can be described as follows:

- Subjectivity and researcher bias: exploratory research in the qualitative approach is influenced by the researcher's subjectivity. Your beliefs, experiences and interpretations can affect the collection, analysis and interpretation of data. It is important that researchers are aware of their own biases and take steps to minimize their impact, such as reflexivity and data triangulation.
- Sampling limitations: exploratory research often involves small and non-probabilistic samples, which can limit the representativeness of the results. The choice of participants may be based on specific criteria and may not allow for broad generalizations. However, it must be clear that this type of research focuses on depth and richness of information, rather than statistical representation.
- Difficulty in comparison and replication: the exploratory nature of qualitative research often results in rich, contextual data, which can be difficult to compare and replicate in subsequent studies. Despite these limitations, research of this nature is valuable in the area of Education. It is important to recognize the limitations and consider them when interpreting and applying the results.

In this universe, it is clear that qualitative exploratory research can offer significant contributions to the area of Education, allowing the exploration of complex and little-known issues, which can lead to a deeper and more comprehensive understanding of the phenomenon studied. It is important to clarify that contributions mean the possibility of exploring

participants' experiences and perspectives, identifying underlying trends and patterns, and generating hypotheses for future research.

Furthermore, this approach can be used to develop educational interventions that meet the specific needs of students and promote the improvement of Education, being a valuable methodology to improve knowledge and practices in the area. In the educational context, which involves constantly evolving challenges and complex issues, exploratory research plays a fundamental role in revealing new perspectives, exploring innovative approaches and offering valuable *insights for future studies*.

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