

**The Literature Depth Review on the Study Design in Qualitative Research Methodology (2025)**

Carlos Boavida Tilman, ESE FMCS UNTL, Antonio Pedro Belo, DM FECT UNTL, Herculano dos Santos Seixas, UC HNGV, Junheya Francisca de Jesus Belo, MG FMCS UNTL, Domingos Jose Guterres, INCT, Paulo Henriques, CFJJ MJ.

*\*Correspondence:* Carlos Boavida Tilman

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**Abstract**

*The modality of knowledge of the research study design process contests to the approach to current situation on research methodologies. This study objectives to highpoint the various models of research study design and their suitability for qualitative research methodology in studies. The research was and exploratory essay and research design in qualitative study. The study conducted by the literature review of many similar articles on investigation paper design using Google Scholar or Academica. Edu, European and American journal online. PubMed, midline and SPSS as baseline data. A point public health and medicine subject titles mix (Research Design in qualitative research study namely the observational and non-observational analytic methodology) study designs. The observational situation includes prospective (i.e., clinical observations and diagnostic study, In case control and analytical progress in cross-sectional studies, that a key point of study. In the conclusion, the research design in qualitative research methodology is broadly classified into observational and no observational study designs. If role plays a significant role in decision-making of the data collection process. It is a vital aim for the justification of the credibility of a qualitative research methodology. In the studies mentioned.*

**Keywords:** Research, Study Design, Qualitative Research Methodology, Observational Study and Depth Review.

**Introduction to the Study in Qualitative Research Methodology**

Qualitative research is a fundamental approach in the social sciences that seeks to understand complex phenomena through the collection and analysis of non-numerical data. Unlike quantitative methodologies, which focus on measuring and quantifying, qualitative research aims to explore meanings, experiences, and contexts.

In this study, we will address the relevance of qualitative methodology, emphasizing its ability to capture the richness of human experience and the nuances of social interactions. Qualitative research is particularly effective in areas where issues of context, subjectivity, and interpretation are central, allowing researchers to develop a deep understanding of the phenomena investigated is a great idea and fundamental cited by (Tilman CB., et al, 2025).

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## Research Objectives

The main objectives of this study are:

1. **Explore:** Investigate the experiences and perceptions of the participants in relation to the chosen theme.
2. **Understand:** Deepen the analysis of the social and cultural contexts that influence these experiences.
3. **Interpret:** Identify patterns and meanings in the participants' narratives, contributing to a broader understanding of the phenomenon in question.

## Importance of Qualitative Methodology

The choice for the qualitative methodology is justified by its flexibility and adaptability. This approach allows researchers to answer open-ended questions and address topics that may not be adequately explored by quantitative methods. In addition, qualitative research promotes closer interaction between researcher and participant, facilitating the collection of rich and detailed data of implementation of researchers cited by (Alvarenga E.M., 2018; Tilman CB., et al, 2025).

In this context, we will use several data collection techniques, such as semi-structured interviews, focus groups and participant observation. These tools will allow you to capture a variety of perspectives and provide a more holistic understanding of the topic being investigated.

## Study Structure

The study will be organized into several sections, including:

- Literature review: where we will discuss previous studies related to the topic.
- Methodology: detailed description of the research design, including participant selection

and data collection techniques.

- Data analysis: presentation and discussion of the results obtained.
- Final considerations: implications of the findings and suggestions for future research.

## Conclusion

The introduction to qualitative methodology in this study highlights its importance and potential to unravel social and human complexities. We believe that by adopting this approach, we will be able to offer a significant contribution to the field of research, expanding the understanding of the phenomenon in question and its multiple dimensions cited by (Alvarenga E.M., 2018; Tilman CB., et al. 2025).

## Classification of the research design

The classification of qualitative research design may vary according to the objectives of the study, the research questions, and the methods used. Here are some of the main approaches and types of designs within the qualitative methodology:

### Case Shekels

- **Description:** Investigate a specific phenomenon within a real context. They may involve a single or several units of analysis (individuals, groups, organizations).
- **Example:** Analysis of a particular school and its pedagogical practices.

### Ethnographic

- **Description:** In-depth study of cultures or social groups, usually through participant observation and immersion in the environment.
- **Example:** Research on daily life in an indigenous community.

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## Phenomenological

- **Description:** Focuses on understanding the experiences lived by individuals, seeking to capture the essence of these experiences.
- **Example:** Study of the perceptions of patients with chronic diseases.

## Grounded Theory

- **Description:** Develops theories from the data collected, allowing concepts to emerge in an inductive way.
- **Example:** Research on how support groups impact the recovery of drug addicts.

## Action Research

- **Description:** Involves collaboration between researchers and participants to solve practical problems by combining action and reflection.
- **Example:** A project that seeks to improve community participation in local decisions.

## Narrative

- **Description:** Focuses on the collection and analysis of personal stories, exploring how people make sense of their experiences through storytelling.
- **Example:** Study of the lives of immigrants and their stories of adaptation in a new country.

## Qualitative Content Analysis

- **Description:** Examines communication (texts, images, videos) to identify patterns, themes, and meanings.
- **Example:** Analysis of political discourses in electoral campaigns.

## Focus Groups

- **Description:** They bring together groups of people to discuss a specific topic, facilitating

interaction and the exchange of ideas.

- **Example:** Discussion about perceptions of a new consumer product.

## The observational study as well as the experimental study in qualitative research

In qualitative research, both observational study and experimental study can be applied, but their approaches and purposes are different compared to quantitative research. Let's explore each of them in a qualitative context:

### Observational Study in Qualitative Research Features

- **Participant Observation:** The researcher engages in the environment being studied, collecting data through direct observation and interaction with participants.
- **Detailed Logging:** Descriptive notes, field diaries, and recordings are often used to document behaviors, interactions, and contexts.

### Types

1. **Naturalistic Observation:** The researcher observes phenomena in their natural environment, without interfering. Example: observing group dynamics in object school.
2. **Structural Observation:** The researcher can have a specific focus and record relevant behaviors or interactions. Example: study how to students communicate during a group in project very important.

### Advantages

- It captures the complexity and richness of social interactions.
- It allows for a deep understanding of the context.

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## Challenges

- Observer bias can influence interpretation.
- The analysis can be subjective and dependent on the researcher's experience.

## Experimental Study in Qualitative Research

Although experimental studies are more common in quantitative research, some qualitative approaches may incorporate experimental elements, especially in intervention contexts. However, this is not the same as in a traditional experimental study.

## Features

- **Controlled Interventions:** The researcher can implement a specific change (intervention) and observe how it affects the behavior or perceptions of the participants in the depths of knowledge.
- **Post-Intervention Analysis:** The focus is often on qualitative analysis of participants' responses after the intervention.

## Examples

1. **Action Research:** A group of researchers collaborates with a community to implement a change and then qualitatively evaluates the impact of that change. Example: implementation of a new educational program and the collection of feedback from participants.
2. **Intervention Studies:** A study may test a new method of therapy and, after the intervention, conduct interviews to understand participants' experiences.

## Advantages

- It allows for a rich analysis of participants' experiences in response to an intervention.
- It can generate insights into how and why the intervention worked (or not).

## Challenges

- Manipulating variables can introduce to complexity into the analysis.
- Ethical issues is related to intervention in vulnerable populations.

## Conclusion

In qualitative research, observational study is a key approach, allowing for an in-depth understanding of contexts and behaviors. Although experimental study is not as common, experimental elements can be incorporated into intervention contexts, offering a rich qualitative view of participants' responses. Both methods have their value and can be used to generate meaningful insights into complex phenomena cited by (DC-WB., 2018; Tilman CB., et al, 2025).

## Descriptive and inferential analytical in qualitative research

In the qualitative research methodology, the descriptive and inferential analytical approaches have different roles, although both are important for understanding the data collected. Let's explore each of them:

### Descriptive Study

#### Features

- **Objective:** To describe phenomena, behaviors or experiences in depth. The focus is on capturing the essence of what is being studied without trying to generalize or make inferences.
- **Data:** Utilizes narratives, direct quotes, and rich descriptions of the observed contexts and interactions (Rego M.A., 2018; Tilman CB., 2025).

### Common Methods

- **Interviews:** Collect detailed accounts of individual experiences.

- **Participant Observation:** Record behaviors and dynamics in natural environments.
- **Document Analysis:** Examining relevant texts and materials to understand meanings.
- **Content Analysis:** Exploring patterns and meanings in text, images, or other materials.

### Examples

- A study that describes the experience of patients in a hospital, capturing their emotions and interactions with medical staff.
- A survey that documents cultural practices in a specific community.
- A study that investigates teachers' perceptions about the inclusion of students with disabilities and, based on this, develops a theory about inclusive practices.
- Research that analyses how different communities interpret public policies and identifies common themes in reactions.

### Advantages

- It allows for a rich and contextualized understanding of the phenomenon.
- It captures the complexity of human experiences.
- It allows for limited generalizations and inferences about broader social phenomena.
- Enrichment of understanding through the identification of patterns and relationships.

### Challenges

- It can be subjective, depending on the researcher's interpretation.
- Generalization is limited as it focuses on specific cases.
- It may be more susceptible to bias, depending on the researcher's interpretation.
- The complexity of the data can make it difficult to identify clear patterns.

### Analytical Inferential Study

#### Features

- **Objective:** To make inferences from the data collected, seeking to identify patterns, relationships and broader meanings. Although the focus is qualitative, it seeks to understand how data can relate to broader theories or contexts.
- **Data:** Analysis of themes, categories, or concepts that emerge from data collection, seeking to build a deeper understanding.

### Common Methods

- **Thematic Analysis:** Identification and analysis of recurring themes in the data.
- **Grounded Theory:** Development of theories from data, allowing concepts to emerge inductively according by (Angouleme, 2018; Tilman CB., 2025).

### Examples

- A study that investigates teachers' perceptions about the inclusion of students with disabilities and, based on this, develops a theory about inclusive practices.
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### Conclusion

In qualitative research, both descriptive and inferential analytical studies are essential for a comprehensive understanding of the phenomena studied. The descriptive study offers a rich and contextualized view, while the analytical inferential study seeks to identify broader patterns and relationships. The choice between these approaches depends on the objectives of the research and the questions that are intended to be answered cited by (Anton L.R., 2019; Tilman CB., et al, 2025).

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## "Control Case" and "Cohort Study" in qualitative research

In qualitative research methodology, the concepts of "case-control" and "cohort study" may not be applied in the same way as in quantitative research, where these terms are more common. However, we can discuss how similar ideas can be adapted in qualitative research.

### Control Case in Qualitative Research

#### Features

- **Definition:** Although the term "case-control" is often associated with quantitative studies, in qualitative research, it can refer to the study of one group (case) compared to another group that does not have the characteristic or experience in focus (DC-WB., 2018; Tilman CB., 2025).
- **Objective:** To explore and understand the differences and similarities between the two groups in relation to a specific phenomenon.

#### Examples

- **Study of Experiences:** To compare the experience of patients who received a specific type of treatment (case) with those who did not receive it (control) to understand how each group perceived the effectiveness of the treatment.
- **Cultural Analysis:** To study the cultural practice of a community (case) compared to another that does not have it (control), seeking to understand how this practice impact's identity and social cohesion.

#### Advantages

- It allows a detailed analysis of the differences and similarities between groups.
- Enrichment of the understanding of the phenomenon by contrasting experiences.

#### Challenges

- The selection of cases and controls can be subjective.
- The generalizability of the conclusions may be limited.

### Cohort Study in Qualitative Research

#### Features

- **Definition:** In qualitative research, a cohort study may involve collecting data from a specific group of individuals over time, looking at how their experiences and perceptions change.
- **Objective:** To understand the trajectories and transformations of experiences over time, allowing a longitudinal analysis.

#### Examples

- **Patient Follow-up:** Study a group of patients with a chronic condition over months or years, collecting reports on their treatment and adaptation experiences.
- **Changes in Educational Practices:** Follow a group of teachers who have implemented a new pedagogical approach over the course of a school year, analyzing how their perceptions and practices have evolved.

#### Advantages

- It provides a rich and detailed view of changes over time.
- It allows the identification of patterns and themes that emerge in the experiences.

#### Challenges

- Collecting data over time can be logistically challenging.
- Longitudinal analysis can be complex and require rigor in interpretation.



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## Conclusion

While case-control and cohort study concepts are most often utilized in quantitative contexts, their adaptations in qualitative research can offer valuable insights into understanding social phenomena and human experiences. A focus on rich description and interpretation of participants' experiences is key in both approaches cited by (Tilman CB., et al, 2025).

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### Exemples

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## Perspective study and retrospective study on smoking in qualitative research

In qualitative research on smoking, the "perspective study" and "retrospective study" approaches can be adapted to understand individuals' experiences and perceptions of tobacco use. Let's explore how these approaches can be applied second (Anton L.R., 2019; Tilman CB., 2025).

## Prospective Study

### Features

- **Definition:** A prospective study focuses on collecting data on events and experiences as they occur, in real time.
- **Objective:** To understand how people experience smoking in the present, including their motivations, challenges and perceptions about addiction and efforts to quit smoking.

## Application Exemples

- **Follow-up of Smokers:** Conduct semi-structured interviews with smokers who are trying to quit. The goal is to explore their experiences and feelings during the process of quit-

ting tobacco.

- **Focus Groups:** Bring together groups of young people to discuss their perceptions of smoking and the social and cultural influences that affect their smoking behavior.

**Advantages**

- It offers a current and contextualized view of the participants' experiences.
- It allows the exploration of real-time dynamics, such as social pressure or changes in health policy.

**Challenges**

- Data collection can be long, requiring ongoing follow-up.
- The analysis can be complex due to the amount of data collected over time.

**Retrospective Study**

**Features**

- **Definition:** A retrospective study involves the collection of data on past events, seeking to understand the experiences and contexts that led participants to their current situations in relation to smoking.
- **Objective:** To understand the trajectory of smokers, how their previous experiences with smoking have shaped their current attitudes and

behaviors.

**Application Exemples**

- **Interviews with Former Smokers:** Collect reports from individuals who have quit smoking, exploring the reasons that led them to start, their experiences as smokers, and the factors that contributed to their decision to quit.
- **Narrative Analysis:** To study the life histories of smokers, examining how social, familial, and cultural factors have influenced their tobacco use over time.

**Advantages**

- It allows the understanding of the causes and consequences of smoking throughout the participants' lives.
- It offers insights into the evolution of perceptions and behaviors towards tobacco.

**Challenges**

- The accuracy of memories can be a limitation, since people may not clearly remember past events.
- The subjectivity of the reported experiences can make it difficult to generalize the conclusions, maybe other solution to fine alterntative of research.

Table 1. In comparison with observation and experimental study.

| Criterion        | Observation                                  | Experimental Study                                   |
|------------------|--|--|
| Definition       | Recording of phenomena without manipulation. | Manipulation of variables to observe effects.        |
| Goal             | Describe and understanding the phenomenal.   | Test hypotheses and establish causes.                |
| Variable Control | Low control; External factors can influence. | High control; variables are deliberately manipulated |



|                    |   |  |
|--------------------|---|--|
| Method             | Qualitative, data collection in natural environments. | Quantitative, use of structured methods and controls.                    |
| Reproductibility   | Difficult to replicate exactly.                       | Easily replicable under controlled conditions.                           |
| Example            | Study the behavior of animals in their habitat.       | To test the effect of a new drug in a group of patients.                 |
| Data Analysis      | Descriptive, often qualitative.                       | Statistics, often quantitative.  |
| Time and Resources | Generally, less demanding in terms of resources.      | It can be more expensive and time-consuming due to the need for control. |

Table 2. Relations between descriptive and analytical variables.

| Criteria          | Descriptive   | Analytical   |
|-------------------|---|--|
| Definition        | Summary and description of data characteristics                             | Exploration of the relationships between variables                               |
| Goal              | Provide an overview of the data   | Test hypotheses and identify correlations or causalities                         |
| Common Methods    | Averages, medians, modes, graphs  | Regression, correlation, ANOVA   |
| Types of data     | Raw or summarized data  | Data that can include both dependent and independent variables                   |
| Result            | Descriptive and visual reports  | Relationships and inferences between variables                                   |
| Intricacy         | Generally simpler and more accessible                                       | More complex; it requires statistical interpretation                             |
| Exemples          | Age Distribution in a Population  | Relationship between sugar consumption and diabetes                              |
| Applications      | Research Abstracts  | Causality studies, impact analyses   |
| Criterion         | Retrospective Study   | Prospective Study  |
| Definition        | Analysis of data already collected in the past.                             | Data collection from the present to the future.                                  |
| Goal              | Identify past associations and trends.                                      | Investigate causes and effects in real time.                                     |
| Direction of Time | Past to present.  | Present for future.  |
| Data Source       | Medical records, old questionnaires, files.                                 | Real-time observations, longitudinal data collections.                           |
| Completion Time   | Usually faster, depending on data availability.                             | Longer time-consuming, as the events need to occur after the start of the study. |
| Cost              | Usually cheaper, since it uses existing data.                               | It can be more expensive, due to the continuous collection of data.              |
| Variable Control  | Less control over variables; Data may be incomplete or biased.              | Better control over study variables and conditions.                              |
| Example           | Study on the effects of a drug with data from patients treated in the past. | This study followed patients from the moment the drug was prescribed.            |
| Risk of Bias      | Increased risk of selection and recall bias.                                | Lower risk of bias as data is collected in real-time.                            |

Sources: Based of research study qualitatively mentioned by Tilman CB., et al, 2025.

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## Conclusion:

Both approaches perspective and retrospective are valuable in qualitative research on smoking. The prospective study offers a contemporary view of the experiences and challenges faced by smokers, while retrospective study provides historical context can help to understand personal trajectories in relation to tobacco. Together, these approach in provide a richer more comprehensive understanding of the smoking phenomenon that the key point.

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