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Inference in Qualitative Research: An Overlooked Index of Quality

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Abstract

Making valid inferences in research is a critical quality indicator. In quantitative research, making valid inferences from the sample data is rather straightforward and streamlined. That is, since quantitative researchers work with a sample, they use specific procedures to make inferences about the target population from which the sample was selected. This is usually done through inferential statistics procedures. However, when it comes to qualitative research, there is no such straightforward and streamlined procedure for making inferences. There are some general guidelines, but these are not regulated, and qualitative researchers use different procedures to make inferences from their data sources. This paper intends to discuss inference making in qualitative research by focusing on and bringing it into foreground. To shed light on this critical issue, the paper will discuss inference in quantitative and qualitative research, compare the procedures in the two methodological approaches, and discuss some criteria for making quality inferences in qualitative research. The paper will end with some concluding remarks.

Keywords: inference, inference in research, inference in qualitative research, qualitative research

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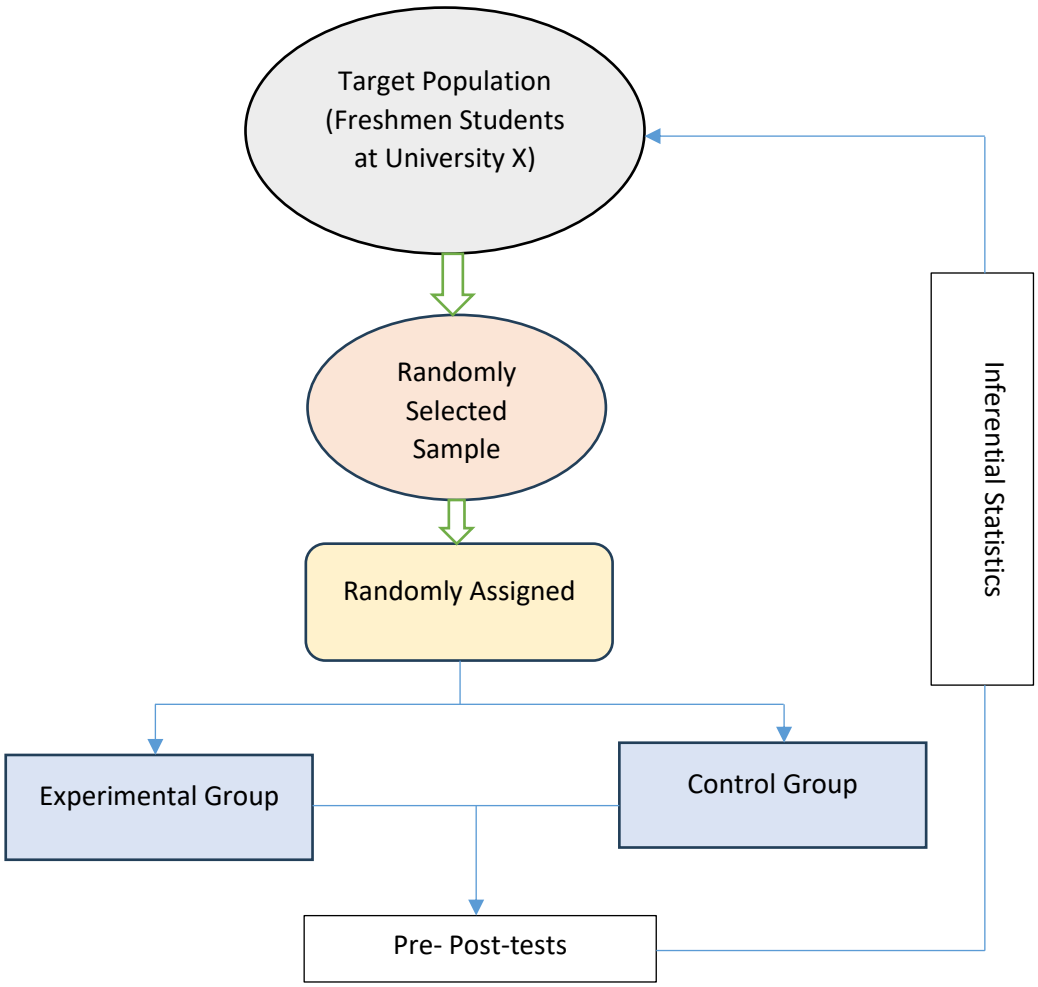
1. Introduction

One of the critical steps in any research, whether it be quantitative, qualitative, or mixed methods, is making inferences from data and analysis. In quantitative studies, inference has a clear and standard definition and procedure for generating it. That is, it is defined as reaching conclusions about the target population through statistical tests of significance that use sample data and analysis. The standard process is to use sample data and draw conclusions about the target population using inferential statistics (statistical tests of significance that reveal whether the results achieved at the sample level are meaningful and generalizable to the target population or are merely due to chance). In other words, through statistical methods, quantitative researchers provide evidence as to whether relationships and/or differences observed in the sample are generalizable to a larger target population. Inference in quantitative research is typically focused on making predictions by estimating population parameters and testing hypotheses about relationships between variables or group differences. For example, a quantitative researcher might conduct an experiment to infer about significant differences between two groups. In a true experiment, a random sample is selected from a target population (e.g., freshmen students in a particular university). The randomly selected participants are then randomly assigned to an experimental and a control group. Pre- and post-tests are then used to find out whether the two groups would be the same regarding the intervention (belong to the original target population), or different (belong to two different populations due to the intervention. Figure 1 illustrates this.

Figure 1

Inference Making in an Experimental Design



In qualitative research, inference refers to the process of drawing meanings, interpretations, or conclusions from the data collected through qualitative data. Qualitative data are usually collected through interviews, observations, or texts and documents. Inference in qualitative research is more focused on meaning making from qualitative data rather than intending to make generalizations to a target population. However, it is still about drawing conclusions from the sample data. The problem, however, is that there is not much in the literature to explain how qualitative researchers make inferences from qualitative data and analysis and what are the criteria for checking the quality of these inferences. The general understanding is that the process for inference-making in qualitative research is done through coding process. That is, researchers build inferences from the data by going through relevant methodological procedures. For example, in a thematic analysis, the procedure

includes identifying codes, forming categories, and generating themes or patterns that emerge from the data. The inference or conclusions (as a product) are thus the themes or patterns extracted from the data analysis, typically thematic analysis. However, the observation is that the process of inference-making in qualitative research is not as well established as it is in the quantitative research.

This paper, therefore, addresses the crucial issue of inference making in qualitative research. The paper is organized into several sections. After this introduction, a brief discussion of inference making in quantitative research will be presented. The paper will then focus on inference-making in qualitative research in section 3. The discussion will address both the process (coding) and the product (themes or patterns extracted from coding). Section 4 provides a discussion of how inference making in quantitative and qualitative research is compared. The focus will be on consciousness raising so that readers can see how making inferences in the two research approaches are compared. Section 5 will discuss the required criteria for a robust coding process and the credibility of the conclusions (inferences) made from the data analysis. The discussion will also draw on the key aspects of trustworthiness in qualitative research. Section 6 will conclude the paper, highlighting key issues to consider for inference making in qualitative research.

2. Background to the Discussion

2.1. Inference making in quantitative research

In quantitative research, inference refers to the process of drawing conclusions about a population based on data collected from a sample. This is usually done through statistical methods, where relationships and/or differences observed in the sample are used to generalize findings to a larger population. Inference in quantitative research is typically focused on making predictions about certain variables in the target population, inferring group differences, or testing conceptual models by estimating population parameters.

Some of the key features of inference making in quantitative research are listed below.

- Generalization: One of the main goals of inference-making in quantitative research is to generalize findings from a sample to a wider target population. This generalization is possible because quantitative research typically involves random sampling, which helps ensure that the sample is representative of the population. Obviously, where random sampling has not been used, making inferences about the target population would not be warranted.
- Statistical Tools: Quantitative research relies on statistical techniques such as correlation, regression analysis, t-tests, analysis of variance (ANOVA), and chi-square tests to make inferences. These tools help

researchers determine the likelihood that the observed relationships or differences in the sample would also exist in the population. In other to be able to apply these statistical tests, the sample data must meet some criteria; otherwise, the inference made would be questionable.

- Hypothesis Testing: Researchers often begin with a null hypothesis, which assumes no effect or relationship between variables. Inference in quantitative research involves determining whether there is enough evidence to reject the null hypothesis and accept the alternative hypothesis. This procedure is referred to as hypothesis testing in quantitative research and is done through statistical tools and procedures as stated above.
- Confidence Levels and Significance: Inferences are typically accompanied by a confidence level (e.g., 95%) and a significance level (e.g., $p < 0.05$), which indicate the degree of certainty about the generalizability of the results. In other words, quantitative researchers identify a level of confidence they will rely on to make inferences about the target population. For example, they may say they only accept results with only 99 or 95 percent of confidence level. Any statistical outcomes that do not meet these criteria will be treated as chance and not meaningful. The confidence level is translated into statistical level of significance and represented by $p \leq 0.01$ or $p \leq 0.05$. Once the statistical package (e.g., SPSS) provides the outcome of the statistical data analysis, researchers will look at the p value and if it is equal or less than the defined level, they consider the statistical outcome meaningful and one they can make inference about the target population.

Let's look at an imaginary example of making inference in quantitative research. A researcher is interested to know whether there would be a significant difference between freshmen students' academic performance in University X when they are exposed to different teaching methods. The study is important because if such a difference is found then the university can plan for training students on the effective ways of teaching. The statistical inference made from this study allows the researcher to make conclusions about whether there is a significant difference between teaching method (conventional vs. flipped) and students' academic performance.

In order to conduct the study, the researcher first defines the target population, which is all freshmen undergraduate students University X., for example, 500. Since it is not possible to work with and collect data from all the 500 students, the researcher selects a random sample of 75. To choose the random sample, the researcher obtains a list of all freshmen undergraduate students from the registrar's office. Since there are five undergraduate

programs in the university, the researcher randomly chooses 15 students from each program. The researcher then randomly assigns the selected students into an experimental and control group, with 38 in the experimental and 37 in the control group (see Figure 1). The experimental group will be exposed to flipped classroom methodology, while the control group will be taught using the conventional lecture-based methodology. Both classes are taught the same subject matter. The experiments run for a whole semester. Pre- and post-tests are collected to assess participants' learning of the subject matter. The researcher then runs t-tests between pairs of scores to find out if there are any statistically significant differences between the two groups as a result of the teaching methodology. If a significant result is found in the learning scores of the two groups, the researcher can make an inference that flipped methodology better help students with their learning and thus recommend it to the university.

In order to make an inference about the target population of the freshmen undergraduate students in University X, the researcher needs to ensure that what has been achieved at the level of sample is generalizable to the target population. This is where the confidence level and statistical significance come in. The researcher, therefore, must consider the significance level (p) in addition to the mean scores. Usually in studies like our imaginary one, the level of confidence is set at 95% and thus any results with a p value of 0.05 or less is considered significant and meaningful, and generalizable to the target population. If the p=0.03 in the imaginary example, then it means that the researcher is 97% confident that the achieved results are not due to chance (sampling error) and can thus make an inference that the intervention (flipped methodology) will be beneficial to the undergraduate students in the target university.

2.2. Inference making in qualitative research

In qualitative research, inference refers to the process of drawing meanings, interpretations, or conclusions from the data collected from a sample. However, the sample size in qualitative research is typically much smaller than in quantitative research, although sometimes it might involve an entire and unique cases. This is because in qualitative research the focus is on depth and understanding rather than breadth and generalization. Qualitative data are usually collected through interviews, observations, documents, images, etc. The process of making inference in qualitative research includes collecting data from a sample (purposive, snowball, etc.), coding the data using an appropriate method, and developing themes or inferences. Inference in qualitative research is more focused on understanding meanings, experiences, and social processes, rather than generalizing to a target population.

Some of the key features of inference making in qualitative research are listed below.

- Interpretation of Meaning: Unlike quantitative research, inference in qualitative research does not aim for generalization. Instead, it aims to understand the deeper meaning of participants' experiences, behaviors, and social interactions. This involves drawing insights from rich, contextual data to explain specific phenomena.
- Contextual Understanding: Inference in qualitative research is often linked to the specific context of the research setting. The findings are seen as unique to the setting and participants and may not be directly generalizable to other contexts. However, they provide detailed and nuanced understandings of particular issues or processes.
- Inductive Approach: While quantitative research is often deductive, testing predefined hypotheses based on theories, qualitative research is often inductive. Researchers build inferences from the data itself, identifying categories, patterns, or themes that emerge from the participants' responses. However, deductive qualitative data analysis is not excluded in qualitative research. That is, if researchers have already got a theoretical framework, they may apply its categories to the data analysis. Compared to an inductive thematic analysis (Braun & Clark, 2006), the deductive qualitative thematic analysis is less common (see, e.g., Gilgun, 2004).
- Thick Description: Inference in qualitative research is strengthened through "thick description," (Geertz, 1973) which provides detailed accounts of the research context, participants, and findings. This allows other researchers to understand the depth of the findings and judge whether they are transferable to similar settings.
- Theoretical Inference: Some qualitative researchers engage in theoretical inference, linking their findings to broader theoretical frameworks. The goal is not to generalize but to contribute to theoretical knowledge about a phenomenon.

As can be seen, making inferences, especially theoretical inference, in qualitative research is not as streamlined and objective as in quantitative research. Researchers are very instrumental in developing themes and making inferences in qualitative research. This depends on their ability to follow systematic procedures of data analysis, using appropriate methods of coding, categorizing, and developing patterns and themes they could present as inferences.

Let’s look at an imaginary example of making inference in qualitative research. A researcher was interested in gaining insights about Chinese English as a Second Language (ESL) learners’ motivation of studying English in Australia. The objective of the imaginary research is to infer insights about Chinese ESL learners’ motivation of learning English in Australia that can

inform different stakeholders. The inferences made from the project are indeed grounded in the Chinese ESL participants in Australia with no claim for generalization to all ESL learners, even not all Chinese ESL learners. However, the insights could be useful to learners, teachers, curriculum developers, and even tourism industry.

Using a purposive sampling procedure, the researcher identified a pool of Chinese ESL learners in three Australian language centers. The researcher then sent invitations to those ESL learners and 15 learners responded with positive feedback to participate. The researcher conducted in-depth interviews with this small group of Chinese ESL learners to understand their motivation of learning English in Australia. The recorded interviews were then transcribed for data analysis. The researcher had two options to analyze the data, an inductive or a deductive approach. The inductive approach typically defined in grounded theory (see, e.g., Hadley & Hadley, 2024) uses three levels of coding. The first level is open coding, the second level is axial, and the third is selective. Through open coding, key concepts are coded using appropriate codes. These codes are then reviewed and organized around an axis (thus axial coding). The researcher begins to reorganize and reassemble the data after the initial open coding phase. While open coding fractures the data into discrete parts (codes), axial coding puts the codes (data) back together by making connections between coding categories and subcategories**.** Selective coding is the final stage of coding, where the researcher integrates and refines the categories developed during open and axial coding to construct a coherent theoretical explanation of the phenomenon**.** It involves selecting a core category and systematically relating it to other categories to explain the main phenomenon being studied.

A more popular inductive approach is thematic analysis (Braun & Clarke, 2006). Through thematic analysis, researchers attempt to systematically identify, organize, and offer insight into patterns of meaning (themes) across a qualitative dataset. It enables researchers to make sense of collective or shared meanings and experiences. Braun and Clarke emphasize that themes are not simply emerging from data (as is the case in grounded theory); rather, they are actively constructed by the researcher through a process of engagement and interpretation. Braun and Clarke suggest the following steps for a thematic analysis.

1. **Familiarization with the data**: Immerse yourself in the data by reading and re-reading it, noting down initial ideas. This step often involves transcribing verbal data, which aids in deep familiarization.
2. **Generating initial codes**: Systematically code interesting features of the data across the entire dataset, collating data relevant to each code.

3. **Searching for themes**: Collate codes into potential themes, gathering all data relevant to each potential theme.
4. **Reviewing themes**: Check if the themes work in relation to the coded extracts and the entire dataset, generating a thematic 'map' of the analysis.
5. **Defining and naming themes**: Refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. **Producing the report**: The final opportunity for analysis. Select compelling extract examples, relate back to the research question and literature, and produce a scholarly report of the analysis. (Braun & Clarke, 2006, pp. 86-87)

The process is recursive rather than linear; researchers may move back and forth between phases as needed. Braun and Clarke's approach is particularly noted for its emphasis on reflexivity, encouraging researchers to acknowledge their own influence on the research.

The deductive approach to qualitative data analysis and inference making, on the other hand, uses an already available coding framework and uses the components or categories of the framework to code the data. The deductive approach may be considered more straightforward considering that the categories are already available. The researcher thus decided to use Deci and Ryan's (1985; 2000) and Ryan and Deci's (2000) self-determination theory (SDT) as a guide to code the data.

SDT identifies autonomy, relatedness, and competence as crucial elements of human motivation. They also distinguish between intrinsic and extrinsic motivation. Therefore, the main components of Deci and Ryan's (1985; 2000) work include intrinsic and extrinsic motivation, supported by the needs for autonomy, relatedness, and competence. These elements influence individual motivation and behavior in various contexts. The researcher uses elements from Deci and Ryan's SDT to code the interview data. The following is a tentative coding scheme based on SDT framework.

Coding category	Sample Interview Evidence
Autonomy	"I could decide where to study English, and I chose Australia" (intrinsically motivated)/ "My parents asked me to study English in Australia to get prepared for enrolling in a university program" (extrinsically motivated)
Relatedness	"I enjoy watching Austrlian movies and learning Australian accent" (intrinsically motivated)/ "I try to learn Australian English so I can enroll in a degree program" (extrinsically motivated)
Competence	"I feel confident when I use Australian English" (intrinsically motivated)/ "I need others approve my English" (extrinsically motivated)

Once all the interview data are coded using the above categories, the researcher will extract the coded categories and look for evidence for the extent to which this group of Chinese ESL learners are intrinsically or extrinsically motivated. That is developing a pattern or a theme that will enable the researcher to make a valid inference. If the researcher finds that these three psychological needs are not satisfied (whether intrinsically or extrinsically), the evidence will lead the researcher to infer that this group of learners were amotivated (lacked motivation).

The following section compares inference making in quantitative and qualitative research.

3. Comparison of Inference Making in Quantitative and Qualitative Research

As stated earlier, quantitative researchers seek to generalize findings and test theories, focusing on the accuracy and generalizability of conclusions. In qualitative research, inferences are built on measurable, numerical data, using statistical tests of significance to ensure reliability and validity. On the other hand, qualitative researchers focus on meaning, context, and understanding specific phenomena within a particular setting. Inference in qualitative research is less about generalization and more about depth, interpretation, and rich description. It uses an inductive or deductive approach to develop theoretical or hypothetical explanations from the data. Table 1 presents a comparison of inference making in quantitative and qualitative research across different aspects.

Table 1

Inference Making in Quantitative and Qualitative Approaches

Aspect	Quantitative Research	Qualitative Research
Purpose of Inference	To generalize findings from the sample to the target population	To interpret meaning and understand context-specific phenomena
Method of Inference	Statistical analysis, hypothesis testing	Coding, thematic analysis, pattern recognition
Focus	Prediction, estimation, hypothesis testing	Understanding, interpretation, and meaning making
Generalization	Generalizes findings to a broader population	Seeks to explain or understand a specific context; transferability may be considered
Nature of Data	Numerical, measurable, objective	Rich, descriptive, subjective, and often non-numerical
Tools for Inference	Statistical tests (e.g., t-test, ANOVA, regression)	Coding, thematic analysis, grounded theory, narrative analysis
Sampling	Often random and aiming for representativeness	Often purposive or theoretical, not focused on representativeness
Confidence in Inference	Results accompanied by significance levels, confidence intervals	Trustworthiness through credibility, dependability using thick description, member check, and triangulation
Theory Involvement	Typically, theory testing and deduction	Typically, theory building and induction

While Table 1 presents a comparison of inference making in the two research approaches across different aspects, the fundamental difference lies in seeking law-like generalizations that could apply broadly in quantitative approach, versus findings that are unique to specific contexts that could provide in-depth insights. However, one of the critical issues in both qualitative and quantitative research is ensuring the quality and credibility of inferences drawn from data analysis (Riazi et al., 2023a). Regardless of the specific approach or method, be it statistical testing in quantitative research or thematic interpretation in qualitative research, the key question remains: Are the inferences reliable, valid, and well-founded? This is crucial because the strength of any research lies in the robustness of its conclusions. Different analytic techniques, whether numerical or non-numerical, can influence the patterns and themes identified, making the assessment of inference quality essential. The next section explores some important criteria and standards for

making credible and sound inferences in both qualitative and quantitative research.

4. Criteria for Quality Inference Making in Qualitative Research

The concept of quality in research is central to both quantitative and qualitative paradigms, but it is conceptualized and operationalized differently in each. In quantitative research, quality is primarily evaluated through the lens of validity and reliability. Since instruments of data collection play a crucial role, validity first refers to the extent to which a research instrument measures what it purports to measure (Campbell & Fiske, 1959). There are different types of validity, including face validity, content validity, criterion-related validity, and construct validity. Researchers may use one or several of these validity criteria to show the validity of the research instrument. However, the most important criterion in quantitative research is *construct validity*, which refers to the degree to which an instrument measures the theoretical construct it is intended to measure (Cronbach & Meehl, 1955). There is indeed another index or criterion, which is reliability that refers to the consistency of a measurement procedure. It is typically assessed through internal consistency, test-retest reliability of the instruments, or inter-rater reliability of scorings (Creswell & Creswell, 2018).

In addition to research instrument validity, the concept also applies to the meaningfulness of the outcomes of the research and is defined as internal and external validity. *Internal validity* is defined as the extent to which (causal) inferences made are based on the data and not beyond that (Shadish et al., 2002). On the other hand, *external validity*, is defined as the generalizability of the findings to the target population and other similar contexts (Cook & Campbell, 1979). Together, validity and reliability ensure that quantitative research produces findings that are credible, replicable, and generalizable. However, it is mostly internal and external validity that apply to the quality of inferences made from sample data.

In qualitative research, quality is often addressed through the concept of trustworthiness, a term introduced by Lincoln and Guba (1985) and applied by other researchers (see, e.g., Riazi et al. 2023a). Trustworthiness comprises four key criteria:

- Credibility (analogous to internal validity in quantitative research): The extent to which the findings are believable from the perspective of the participants and readers.
- Transferability (analogous to external validity in quantitative research): The degree to which findings can be applied to other contexts, supported through “thick description.”

- Dependability (analogous to reliability in quantitative research): The stability of data over time and conditions, often addressed through audit trails.
- Confirmability (analogous to objectivity in quantitative research): The extent to which findings are shaped by participants rather than researcher bias, maintained through reflexivity and documentation.

These criteria recognize the contextual, subjective, and interpretive nature of qualitative research, where the aim is depth and meaning rather than prediction or generalization (Denzin & Lincoln, 2018). When it comes to quality inference making in qualitative research, the following three criteria are more relevant.

- *Dependability* → Are the inferences consistent with your methodological logic?
- *Credibility* → Are the interpretations grounded in data?
- *Transferability* → Can the inferences speak to other contexts through rich description?

Dependability is the first criteria to check the quality of the inferences made in qualitative research. It refers to the alignment of the inferences made to the methodological logic. For example, if in a qualitative research project, the researcher stated they used grounded theory (GT) as their methodological approach, then we need to see that the data analysis has followed the principles of grounded theory. One of the principles in grounded theory is the three level coding procedure, namely, open, axial, and selective.

More specifically, open coding is the initial stage of grounded theory analysis. According to Strauss and Corbin (1990), it involves breaking down qualitative data into discrete parts, closely examining them, and assigning conceptual labels (codes) to chunks of data (e.g., words, phrases, sentences). In axial coding, the researcher begins to reassemble the data fractured during open coding by identifying relationships among codes and forming categories and subcategories. Selective coding is the final phase, where the researcher integrates and refines the theory by identifying the core categories, around which all other categories are related. The goal is to develop patterns or themes that can lead to a coherent narrative or theoretical explanation of the phenomenon. Inferences made in a project with a grounded theory approach are the process and the outcome of this process. That is, readers should see the alignment of the methodological approach (in this case GT), and how the researcher went through the three phases of the coding and how patterns or themes were developed. If, in another example, the researcher stated they used thematic analysis, there must be an alignment between the principles of thematic analysis and the specific procedures of coding and theme development. Inconsistency in procedures, or a misalignment between the

methodological guidelines and data analysis, along with a lack of transparent description of the process, can undermine the dependability of inference-making. Ensuring clear, consistent, and well-documented procedures is essential for producing credible and dependable results.

Another important criteria for checking the quality of inferences made in qualitative research is credibility. While dependability showed the alignment between the methodological approach and the procedural aspects of data analysis, credibility focuses on the rigorous coding procedure and the extent to which the final inferences are based on the data and the analytical procedure and not explanations beyond the data. For example, in most of the qualitative studies, it is usually stated that a thematic analysis is used. However, in many cases the details of the thematic analysis and how the final themes were developed are not provided (see, e.g., Braun & Clarke, 2021; Riazi et al. 2023b). As mentioned earlier, thematic analysis can be performed either in a deductive (top-down) or inductive (bottom-up) way, and with multiple versions of the method (Braun et al., 2021). It is thus crucial to explicitly specify which method was used. Additionally, regardless of the chosen approach, researchers need to provide detailed explanations and examples of how coding was performed, how codes were categorized, and how patterns or themes developed from these categories, enabling sound inferences about the research problem.

The final criterion for checking the quality of the inferences in qualitative research is transferability. Can the inferences speak to other contexts through rich or thick description? For other readers and stakeholders to be able to judge about the transferability of the qualitative inferences to other contexts, they need a rich or thick description. As it was originally introduced by Geertz (1973), thick description refers to a detailed, rich, and contextualized account of social actions, behaviors, and meanings as understood by the participants within their specific cultural and situational contexts. Thick description goes beyond mere surface-level reporting of facts (or "thin description") to include the interpretation of those facts within the framework of the participants' worldviews and the broader sociocultural setting. According to Denzin (1989), thick description "presents detail, context, emotion, and the webs of social relationships that join persons to one another" (p. 83). It is both descriptive and interpretive, providing insight into not just *what* people do, but *why* they do it, what it means to them, and how it fits within a larger cultural or institutional structure.

Unlike generalizability in quantitative research, which is based on statistical sampling, transferability relies on the depth and richness of the contextual detail provided by the researcher so that readers can evaluate the level of applicability of the inferences to other similar contexts. Thick description, therefore, supports transferability by offering readers enough

contextual and interpretive information to determine whether the findings are relevant to or resonant with their own settings. As Patton (2015) notes, rich, detailed descriptions enable others to make "informed judgments about the applicability of findings to other settings and people" (p. 685). Lincoln and Guba (1985) argue that it is not the responsibility of the original researcher to ensure transferability; rather, by providing thick description, the researcher enables others to assess whether transfer is possible to their context. In this sense, thick description enhances the credibility and utility of qualitative research inferences across different settings.

Based on the above discussion, both researchers and readers of qualitative research need to evaluate the quality of qualitative inferences by mapping them against the three criteria of dependability, credibility, and transferability. There is indeed no standard way of doing this, but researchers can provide enough evidence for each of these criteria so that readers and other stakeholders can make their evaluation.

5. Conclusions

Inference making is a central yet under-discussed component of qualitative research, critical to both the analytical process and the credibility of findings. Unlike a relatively structured statistical inference in quantitative research, qualitative inference is rooted in meaning-making, contextual understanding, and interpretive depth. This paper has highlighted how qualitative inferences emerge through systematic coding procedures—whether inductive or deductive—and result in themes or patterns that illuminate participants lived experiences.

To ensure the quality of these inferences, qualitative researchers must attend closely to three core criteria: dependability**,** credibility, and transferability. Dependability concerns the logical alignment between the chosen methodological approach and the procedures used in coding and theme development. Credibility relates to the trustworthiness of interpretations based on rigorous and transparent data analysis. Some specific methods like member check and triangulation can help to the dependability and credibility of the inferences. Transferability, grounded in the principle of thick description, offers readers sufficient detail to judge whether findings might be applicable to other settings.

Ultimately, inference in qualitative research is not merely a product of analysis but a reflective, interpretive act grounded in data, theory, and context. By foregrounding inference as an index of quality, qualitative researchers can more effectively justify their conclusions, enhance the impact of their work, and contribute to cumulative knowledge in their fields. Future research and methodological training should place greater emphasis on how inferences are constructed, validated, and communicated in qualitative inquiry.

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