Contextual Coding in Qualitative Research Involving Participants with Diverse Sociocultural Backgrounds

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Abstract

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Keywords

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Contextual Coding in Qualitative Research Involving Participants with Diverse Sociocultural Backgrounds

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Understanding participants' perspectives in qualitative research is contingent on unravelling the essential meaning of their speech. When data are collected in native language and translated into English language, the underlying sociocultural meaning of participants' speech can be missed. This paper discusses a new contextual coding approach and illustrates its application in research. The technique was used in a phenomenological study in Pakistan and a mixed methods study in Europe. Contextual coding entails a preliminary coding stage involving data reading in native language, choosing socially and culturally relevant words and phrases, and developing preliminary codes. The concluding coding stage focuses on creating a sociocultural query list, seeking answers through discussions among multilingual individuals, and finding a common language for code description. Contextual coding can enable researchers to understand sociocultural meaning of their data at an early stage, rather than waiting at the later stage of theme development to contextualize the findings.

Keywords: data coding, qualitative research, research methods, cross-cultural research, multi-lingual research, contextual coding

Introduction

Qualitative research involves exploring and gaining insights into the experiences and perspectives of individuals about diverse phenomena related to their living world, culture, and society (Austin & Sutton, 2014; Teherani et al., 2015). Understanding the actual and implied meaning of words and phrases individuals use to describe their experiences is of utmost importance in qualitative research (Austin & Sutton, 2014; Daher et al., 2017). Therefore, rigorous qualitative data analysis can be a daunting task because it requires creativity, intuitiveness, and multifaceted reasoning. If those expectations are not met, the analysis would likely be inadequate and superficial and cause misinterpretation of individuals' experiences and perspectives (Saldaña, 2021). Various qualitative approaches do not involve coding such as narrative analysis, poetic analysis, and memoing. Nevertheless, coding is an essential step in many approaches to qualitative data analysis such as content analysis, thematic analysis, descriptive and interpretative phenomenological analysis, constant comparative analysis, and so forth. While ample methodological guidance is available on a range of qualitative data analysis methods and techniques and coding types for distinct qualitative designs (Braun &

Clarke, 2006; Corbin & Strauss, 2015; Eatough & Smith, 2008; Graneheim et al. 2017; Saldaña, 2021; Terry et al., 2017; Willis et al., 2016). Most of these techniques are based on the underlying assumption that the qualitative data would be in English at the time of data analysis (Younas et al., 2022). Nevertheless, in cross-cultural qualitative research with individuals with diverse languages, cultures, and social beliefs, data is often collected in the native language of the research participants. Therefore, it is common practice that qualitative data is translated into English at different stages of transcription and analysis when collected in other languages (Feldermann & Hiebl, 2019; Helmich et al., 2017). For instance, after coding the data in the original language, researchers often translate codes and several selected quotes into English (Smith et al., 2008). However, since language is context-dependent and researchers from different cultures may interpret some concepts differently, the socio-cultural nuances of some of the words and expressions used to describe the codes may be lost during this process (Angel, 2013; Larkin et al., 2007). Therefore, this paper proposes a new coding technique, namely contextual coding, for generating codes about the underlying context and implied cultural and social meaning of participants' words, statements, and phrases.

Literature Review

Coding refers to examining data (i.e., words, phrases, statements, or paragraphs) and assigning a short word or statement as a label to summarize the inherent or apparent meaning and content of the data (Linneberg & Korsgaard, 2019). Coding is, therefore, a symbolic representation of qualitative data, where symbols could be words, letters, numbers, or graphic illustrations (Vogt et al., 2014). Since raw qualitative data are dense, coding is instrumental in making sense of this type of data (Creswell, 2015) and transforming it into a comprehensive and reliable narrative (Linneberg & Korsgaard, 2019; Saldaña, 2021). Coding helps in reducing large amounts of data, making it accessible for analysis (Linneberg & Korsgaard, 2019) through priming the data and denoting statements, words, and experiences of analytical value (Lester et al., 2020). As a researcher-generated construct used to symbolize the data (Vogt et al., 2014), coding enables researchers to develop a broad understanding of their specific data, allowing them to make sense of their research aims (Elliott, 2018). Coding may be laborious, but it greatly enhances researchers' understandings of the data and enables them to generate a critical and creative interpretation of the study participants' experiences, perceptions, and beliefs (Linneberg & Korsgaard, 2019).

Several authors have proposed various techniques and types of qualitative coding. Gibbs (2018) identified five coding techniques, including descriptive, analytical, categorization, data-driven, and content-driven coding. Adu (2019) proposed three types of coding: description-focused, interpretation-focused, and presumption-focused coding. Timmermans and Tavory (2022) offered two forms for coding for abductive qualitative analysis, namely open coding and focused coding. Saldaña (2021) provided the most comprehensive account of various coding techniques under three rounds of coding. The first round includes 24 coding techniques under grammatical, affective, elemental, exploratory, literary and languages, and procedural methods. The second coding cycle includes eclectic coding, while the third cycle includes pattern, focused, axial, theoretical, elaborative, and longitudinal. All these types of coding techniques are listed and defined in Table 1. They are all invaluable for effective, rigorous data analysis and can be used in most approaches to qualitative data analysis. For example, in vivo, axial, pattern, and theoretical coding techniques are commonly used in grounded theory analysis. Similarly, simultaneous coding is often used in thematic and qualitative content analysis.

Table 1
Coding Techniques

Coding Techniques	Description
Gibbs (2018)	
Data driven	Coding without any preconceived theory or idea
Concept driven	Coding words and phrases based on previous literature or theories
Descriptive codes	Coding the actual data and phrases
Analytical codes	Coding the inherent or perceived meaning of the data
Categorization	Coding various apparent and implied categorizations in words and phrases
Adu (2019)	
Description-focused	Basic description of events, behaviours, settings, and experiences using actual words and phrases of participants
Interpretation-focused	Making meaning of the actual words and phrases of the participants and moving beyond mere description of empirical indicators of the data
Presumption-focused	Examining the data for empirical indicators and generating codes based on our assumptions or understanding of the data, the assumptions are tested and refined as new data are collected or becomes available
Timmermans & Tavory (2022)	
Open	Coding the words and phrases to identify a single observation, but being open to the possibility of recoding and changing codes as new insights are developed
Focused	Identifying a key theme in the words or phrases and then coding within the theme to generate better codes to capture the essence of data
Saldaña (2021)	
Attribute	Coding demographic characteristics before actual analysis
Magnitude	Using symbolic codes and sub-codes to denote frequency (e.g., often)
Sub coding	Categorizing, or developing taxonomies or hierarchies
Simultaneous	Assigning multiple codes simultaneously to one set of data
Structural	Content or concept-based coding in relation to questions/aims through comparison of differences and commonalities
Descriptive	Using one word or phrase to describe or capture the meaning of data
Process	Communicating actions in data using gerunds
In vivo	Using participants' words or phrases as codes
Initial	Breaking down data into parts to examine similarities and differences
Emotion	Labelling emotions of participants
Value	Coding for values, beliefs, and attitudes
Versus	Dichotomous or binary coding such as yes or no present or not present
Evaluation	Judging the worth, merit, and significance of the data
Dramaturgical	Coding for intrapersonal and interpersonal experiences and actions
Motif	Symbolic elements to denote repeated terms or phrases
Narrative	Coding for structural characteristics of participants' stories
Verbal exchange	Coding for key moments in conversations or personal stories
Holistic	Single code to a large amount of data
Provisional	Researcher judged codes that might appear in the data and can be modified with data
Hypothesis	Extension of provisional coding resulting in generation of hypotheses
Protocol	Codes developed or provided during planning
Outline of cultural material coding	Coding for categories of social life
Domain/taxonomic	Coding cultural knowledge of participants to organize their behaviours
Causal	Coding beliefs and experiences denoting causal relationships
Eclectic	Coding and theming data based on pre-existing codes
Pattern	Assigning a meta-code to codes based on their similarities

Focused	Categorizing coded data based on thematic or conceptual similarities
Axial	Describing a category's characteristic and dimensions to denote the relationship categories and subcategories
Theoretical	Discovering the central/core category to identify the primary theme of the research
Elaborative	Coding based on the code and themes from a previous study to elaborate new meaning
Longitudinal	Attributing selected change processes to data collected and compared across time

Nevertheless, none of the coding techniques cited above focus on coding for the contextual and underlying implied meaning of the data, where the contextual meaning could be dictated through exploration of the cultural, social, and political meaning of participants' words or phrases. An argument could be made that all qualitative research is focused on exploring the contextual meaning of participants' beliefs, experiences, and perceptions. However, the same argument may not hold water when the meanings of words, experiences, and perceptions may change due to differences in languages, dialectics, and unique meanings and connotations of words and phrases (Feldermann & Hiebl, 2019; Helmich et al., 2017; Santos et al., 2015). For example, in cross-cultural qualitative research, the meaning of similar words may change across locations and regions of a community with similar apparent characteristics (Choi et al., 2012). The same English language word could have different meanings in different cultures and regions. This issue could be more pronounced when conducting qualitative studies with participants from diverse cultural and social backgrounds speaking various distinct languages. The inability to capture the contextual meanings of participants in cross-cultural qualitative research can result in misinterpretation or completely ignoring the cultural essence of their words, experiences, and perceptions (Helmich et al., 2017; Nasri et al., 2020). Moreover, the dominance and assumptions of English contribute to bias in the work of qualitative researchers in non-English speaking countries and may limit their ability to provide a more accurate understanding of the social and cultural meaning of the data collected in other languages. To address this potential problem, in this article, we describe a new coding technique to accommodate for cultural and social meanings and differences while analyzing qualitative data in cross-cultural studies. That is, our purpose is to discuss contextual coding for qualitative data analysis and to illustrate its application and use in research involving participants with diverse cultural and social backgrounds. The proposed contextual coding technique can be valuable for multilingual researchers conducting cross-cultural research and those in non-English speaking countries who intend to demonstrate the relevance of their research to local researchers while preserving the essence of participants' views and experiences.

Data Sources

This new coding technique is based on our experiences conducting the following two studies: (1) an interpretative phenomenological study in Pakistan (Zeb et al., 2021), and (2) a mixed methods project in three European countries (Durante et al., 2022). These two studies are used as examples to illustrate the contextual coding technique outlined in this paper. The first author (AY) contributed to the data analysis and interpretation stages of these two studies, whereas the last author (AD) was the principal investigator of the second study. These two authors had experience conducting cross-cultural research on self-care and caregiving in chronic illness in various contexts and recognized the need to make explicit the precise meaning of non-English speaking participants' experiences. While carrying out the studies, these two authors and the rest of the research team realized that existing coding procedures fail

to offer a meaningful account of research participants' experiences and that some substance is lost during translation. To overcome the difficulty of coding qualitative data in multiple languages, we developed the contextual coding technique. Specifically, our need to capture the essential meaning of participants' experiences through qualitative research as well as our interest to share the results of the encoding process with a global as well as a local audience compelled us to develop a new approach to coding that is sensitive to the cultural nuances of the different contexts examined. The following subsections describe these two studies, and a more detailed explanation of the procedures can be found in Zeb et al., (2021) and Durante et al., (2022).

Example Study 1: Interpretative Phenomenological Study of Experiences of Patients with COPD

Zeb et al. (2021) conducted an interpretive phenomenological study to explore the self-care experiences of patients with COPD and the role of the family in self-care. Ethical approval for this study was obtained from the Ethical Review Committee of the Saidu Medical College, Swat, Pakistan and all the participants provided written informed consent (Zeb et al., 2021). A purposive sample of 13 patients was recruited from outpatient settings of two hospitals in Swat, Pakistan. The inclusion criteria were: (a) patients above 30 years of age at any stage of COPD, (b) patients who had received a confirmed diagnosis of COPD and were receiving the treatment, (c) patients who are engaged in self-care at their homes or communities and (d) patients who showed an interest to participate and were able to provide informed consent. Semi-structured interviews lasting from 35 to 60 minutes were conducted face to face in Urdu and Pashto language in 2019. The initial coding and analysis were completed in the native language, followed by the English translation of the codes and themes. Based on Ricoeur's (1976) interpretation theory, the data analysis comprised the following three steps: explanation, naive understanding, and in-depth understanding. During explanation, the data were read several times and coded using the in vivo coding technique. At this step, the researchers did not attempt to interpret the participants' views because the aim was to develop a comprehensive understanding of the text. The codes generated during the explanation stage were collated based on similar meanings and ideas and converted into meaningful codes. Naïve understanding of participant experiences was achieved at this stage. Data analysis was conducted in Urdu and Pashto. Finally, the researchers created initial themes and subthemes to understand the inner nature of the data. After reaching consensus, the themes were interpreted by moving back and forth between the explanation and interpretation in accordance with the hermeneutic arc (Tan et al., 2009).

Resulting from this process, five themes that captured the self-care experiences of patients and the role of families were generated. The themes included: (a) striving to self-care: from solitary to familial endeavors, (b) spiritual and traditional approaches to self-care, (c) self-care is for rich: battling poverty and meeting self-care needs, (d) sharing the "burden" of self-care, and (e) encouraging continuous self-care. Self-care began as an individual effort and became a family endeavor. The self-care abilities of patients and their families were influenced by many personal and socioeconomic factors. The patients focused on spiritual, cultural, and traditional approaches to self-care because poverty was one of the core social determinants of self-care.

Example Study 2: Mixed Methods Study of Informal Caregivers

The heart failure (HF-2) convergent mixed method project (Durante et al., 2022) was conducted from February 2017 to December 2018 across three European countries (i.e., Italy,

Netherlands, and Spain). This study was approved by the Ethical Review Committee of the University of Rome "Tor Vergata," Roma, Italy. The study participants provided written informed consent (Durante et al., 2022). This transnational mixed methods study aimed to examine the experiences of informal caregivers of heart failure patients and factors that lead to poor caregiver outcomes. In the qualitative phase, a convenience sample of 50 caregivers in Italy (n = 20), Spain (n = 19), and the Netherlands (n = 11) was recruited. The inclusion criteria were: (a) being an informal caregiver (i.e., spouse, child, friend; Deschler et al., 1999) of a patient with a diagnosis of HF for at least three months before the data collection; (b) be older than 18 years, and (c) being willing to sign the informed consent. The data were collected through individual, face-to-face, semi-structured narrative interviews, and were analyzed using qualitative content analysis by Mayring (2014). The inclusion criteria for the quantitative phase were almost the same, with the difference that the sample size was increased to 200 dyads (i.e., caregivers and patients). Caregivers were recruited in outpatient settings in three university hospitals in each country. Quantitative data were collected using validated instruments such as Connor-Davidson Resilience Scale, Caregiver Burden Inventory, and Hospital Anxiety and Depression Scale. Researchers from Italy, Spain, and the Netherlands collaborated on this project.

The necessity of coding qualitative data in different languages and sharing the results of the coding process within the team necessitated the development of a new type of coding that allowed researchers to identify common patterns across different cultural contexts while embracing their subtleties and nuances. The research team was comprised of Italian, Dutch, American, Spanish, and Pakistani researchers. While some of these researchers were proficient in their own languages as well as Italian, Spanish, Dutch, and Urdu, we realized that if translated data were shared with the team, it could lead to limited understanding of participants' experiences. Therefore, we decided to initially code the data in our native language before sharing codes with the team for discussion and interpretation.

Drawing from our interpretative phenomenological study and the mixed methods study, we illustrate below the process we used to code participants' data in their native languages. First, we provide our definition of contextual coding and then, using our studies as exemplars, we outline the step-by-step process of implementing this novel coding technique.

Contextual Coding

We define contextual coding as coding for the underlying context and implied cultural and social meaning of participants' words, statements, and phrases, considering the culturally and socially sensitive connotation of the data. This type of coding is particularly appropriate when carrying out qualitative studies involving participants from diverse cultural and social backgrounds. Contextual coding is different from a recently published coding technique called Contextual Text Coding (CTC; Lichtenstein & Rucks-Ahidiana, 2021). CTC is a mixed methods technique for analyzing large-scale complex data based on a quantitative analysis followed by a qualitative analysis. The steps of the CTC include data preparation, defining the unit of analysis, developing, and testing a codebook, applying codes to the dataset, quantifying data to identify prominent trends, and targeted qualitative analysis. Compared to CTC, the contextual coding technique described in this paper is a method for coding participant data in qualitative studies such as phenomenology, descriptive qualitative before generating sub-themes and themes. CTC is a method of data analysis in mixed methods studies that involves the quantification of qualitative data. It is generally understood that qualitative researchers would always consider the context and the social meaning of the data during coding and analysis (Creswell, 2015; Richards, 2020). Nevertheless, specifically coding for the sociocultural context and culturally and socially sensitive connotation and meaning of
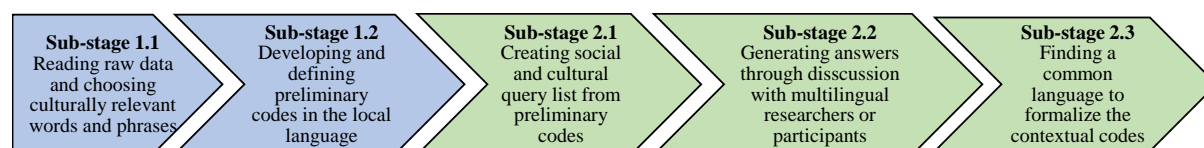
participants' words and phrases has not been addressed in previous qualitative data analysis approaches. Therefore, the proposed contextual coding technique brings to attention the coding for social and cultural meanings of participants' quotes more explicitly.

A Step-by-Step Process of Contextual Coding

The contextual coding technique comprises a two-stage process entailing a preparatory stage and the actual coding stage. The steps to be completed in the two stages and five sub-stages of contextual coding are explained and illustrated in Figure 1.

Figure 1
Contextual Coding: A Step-by-Step Process

| Sub-stage 1.1 Reading raw data and choosing culturally relevant words and phrases | Sub-stage 1.2 Developing and defining preliminary codes in the local language | Sub-stage 2.1 Creating social and cultural query list from preliminary codes | Sub-stage 2.2 Generating answers through disscussion with multilingual researchers or participants | Sub-stage 2.3 Finding a common language to formalize the contextual codes |

Stage 1: Preliminary Coding Stage

The preliminary coding stage is a preparatory stage entailing conscious decisions about the method of data analysis and the number of researchers involved in the coding process. The nature and depth of raw data should also be considered in contextual coding because the prerequisite condition is that the data is collected from participants from diverse cultural and social backgrounds. Therefore, before initiation of contextual coding, researchers should write notes and memos about the cultural and social backgrounds of the participants. For example, Durante et al., (2022) separated the sample of Italian, Spanish, and Dutch participants and subsequently annotated the core social and cultural practices of each participant type concerning the caregiving process. By analyzing the participants' experiences separately, the researchers were able to compare the effects of social, cultural, and political contexts on caregiver experiences. Particularly, separate analysis of the sample opened the possibility of gaining a deeper understanding of each of these contexts and how they influenced the participants' experiences.

At this stage of contextual coding, the researchers should also be mindful of the research questions to be explored and assess the quality of data to develop an understanding of the studied phenomena. The preliminary coding stage can begin during data collection when the researchers engage participants in a prolonged discussion. During this time, researchers take notes of relevant cultural and social cues and beliefs that may inform the contextual coding process. The preliminary coding stage sub-stages are discussed below.

Sub-stage 1.1: Reading the Raw Data and Choosing Culturally Relevant Words and Phrases

In this sub-stage, the researchers should engage in the in-depth reading of their transcribed data in the original languages (e.g., Urdu and Pashto) to develop an initial understanding of the experiences, views, and beliefs of the participants. Although reading the data is an essential first step before employing any type of coding (Creswell, 2015), the emphasis in the contextual coding is to read the data to choose culturally relevant words and phrases that connote and capture a distinct cultural or social meaning for the participants' experiences and views. If the research team includes researchers with different cultural and

social backgrounds who can read and understand the native language, it is helpful to read the data independently. However, if some members of the research team cannot read or understand the native language, they can work with the member who is proficient in the native language. Sub-stage 1.1 has several benefits. First, it allows researchers to assess the quality of data for detailed coding. If the data is considered unsuitable and superficial for contextual coding, further data collection is recommended. Second, multiple researchers can share their accounts, facilitating the identification of discrepancies and consistencies in the overall understanding of participants' cultural and social contexts. This sub-stage offers an opportunity for researchers to resolve discrepancies at an early stage and then adapt the processes of contextual coding and analysis as per the needs of the research. Finally, it allows researchers to select keywords, statements, and phrases as potential candidates for further exploration of social and cultural meanings during the detailed coding stage. For example, Zeb et al. (2021) completed the preliminary coding of data in Urdu and Pashto language and realized that the researcher, who lacked proficiency in Pashto, needed clarifications on various codes that could have affected the subsequent stages of analysis. Therefore, for non-Pasto speaking researchers to comprehend the nuanced meaning of preliminary codes, Pashto-speaking researchers compiled a glossary of essential words and phrases.

Application in the Example Studies

In Zeb et al. (2021), three out of four researchers were proficient in Urdu, Pashto, and English, while one researcher was proficient in Urdu and English. Three of the researchers grew up in Swat and were familiar with cultural and social practices and traditions. They had some understanding of the slang words and phrases and their apparent and implied meanings. The data analysis was completed by two researchers who grew up in Swat and one researcher from a different city, Rawalpindi. The researcher who did not understand the Pashto language worked with the lead researcher in reading the raw data and choosing Pashto and Urdu words and phrases. This step in the coding served two purposes. First, educate the members of the research team about the contextual differences in language and codes and their potential negative impact on interpretation. Second, to ensure that all the researchers have a thorough understanding of participants' experiences and data and can work together to extract the essence of participants' experiences in a meaningful and authentic manner. Two of these researchers were also data collectors, having a greater understanding of the context and the community care of patients with COPD. These researchers had also worked as nurses in the community settings and had firsthand experiences caring for patients with COPD. During reading, the researchers spent more time understanding the superficial and inferred meaning of each participants' words and statements. For example, they chose Urdu and Pashto language words and phrases about the use of green, herbal, and ginger teas as a treatment modality to manage worsening symptoms of COPD. Some examples of the culturally specific words and phrases were (Table 2):

Table 2
Culturally Specific Words and Phrases from Zeb et al., (2021)

ادرک کی چائے تھوک کو کم کرتی ہے	("ginger tea reduces sputum"),
میں یہ خصوصی جڑی بوٹیوں والی چائے تیار کرتا ہوں جس نے مجھے بلغم اور سانس لینے کے مسائل پر قابو پانے میں کسی حد تک مدد کی	("I prepare this special herbal tea that helped me in overcoming my mucus and breathing issues to some extent"), and
جب میں دودھ کے بغیر گرم مائع پیتا ہوں تو مجھے لگتا ہے کہ میری سانسیں بہتر ہو جاتی ہیں۔ دودھ کے بغیر مائعات پینے سے بلغم کی پیداوار کم ہوتی ہے	("When I drink warm liquids without milk, I feel that my breathing gets better. Drinking

	liquids without milk, resulted in less production of mucus")

Durante et al. (2022) coded the data from each country in teams of three researchers. Each team comprised one researcher from Italy, one from the Netherlands, and one from Spain. The lead author (AD) was part of each of the small team involved in data analysis from Spain, Netherlands, and Italy and guided the coding approach. The teams read the interview transcripts independently several times in their native languages and underlined meaningful passages that reflected unique cultural, social, and contextual phenomena, as well as beliefs and perspectives. The researchers highlighted unique words and phrases in the qualitative software NVivo and took notes in their reflective journals. For example, significant words and phrases about the perceived role of nurses in the caregiving process and the impact of cultural lifestyle on caregiving were selected. Examples of these words and phrases included *Ley de Dependencia* (Dependency Law), *Recibir apoyo económico* (Receive economic support), *Nessuno stato* (No government), *Solo 'Io e Te* (Alone, me and you).

Sub-Stage 1.2: Developing and Defining Preliminary Codes in the Local Language

At this sub-stage, researchers' observations and notes from data collection are compiled and compared with the words and phrases generated in the previous sub-stage. The purpose of this sub-stage is to examine the initial understanding of the social and cultural connotations and meanings. The comparison focuses on identifying the linkages between field notes and observations and choosing the words and phrases that were more consistent with the researchers' observations and field notes. For example, Zeb et al. (2021) interviewed patients with COPD, during the interview one of the participants requested ginger tea with some cardamon when he began coughing. The researcher noted this observation in the personal journal. Later, this observation was found to be consistent with words and phrases used to describe the importance of herbal and other teas to manage symptoms. Similarly, one of the field observations was: "arrival of one of the patient's relatives during the interview to inform that patient about the upcoming appointment with a faith healer." This observation was consistent with another contextual code namely, "visiting traditional and faith healers." As a result of this process, the preliminary codes are refined. Put simply, the code refining process entailed ongoing discussion among the research team, comparison of field notes with raw data and written cultural and social interpretations of observations, and organization of codes based on weight. The weight of each code was assessed with the extent of agreement with researchers notes, code frequency in the data, and the emphasis placed by the patients during conversation. For instance, in Zeb et al. (2021), despite no available research evidence many patients demonstrated confidence when talking about the benefits of herbal tea for managing symptoms.

At this stage, it is essential that the coding is completed on the raw data in the original language. Multiple researchers can work on the data from their language and then discuss the underlying meanings. If some researchers are not familiar with the native language of interviewees, more teamwork is warranted to develop relevant preliminary codes. The preliminary codes are defined in unrefined descriptions that are later refined in the concluding coding stage. These descriptions should be in the local language if the researchers plan to do member checking with the participants and cross-check with other team members.

Application in the Exemplar Studies

In Zeb et al. (2021), we assigned a preliminary code علامات کو کم کرنے کے لیے جڑی بوٹیوں اور الائچی کی چائے کا گھونٹ پینا (Sipping green and cardamom tea to reduce symptoms) that

captured participants' views about the essential role of tea in their self-management. This code captured a broader social and cultural phenomenon concerning Pakistani people's perceptions about the detrimental effect of milk and milk-containing products on respiratory tract and breathing problems. It also directed the researchers' attention to the broader emphasis on herbal and complementary medicine and faith healing. These somewhat intertwined phenomena were captured in other contextual codes. For example, another contextual code captured participants' perspectives concerning the significance of regular prayer for divine healing and emotional strength. The patients discussed that prayer is a weapon to defeat the ailment. If they pray consistently, Allah Almighty can provide them emotional strength to combat the disease (Table 3).

Table 3

Examples of Contextual Codes from Interpretive Phenomenology (Zeb et al., 2021)

Raw data in local language	Preliminary code in original language	Social/cultural query	Answers from bilingual discussion	Final code
مجھے عام طور پر کبھی کبھی دوائیں چھوڑنی پڑتی ہیں۔ میں اب بھی دوسری چیزیں کرنے کی کوشش کرتا ہوں جیسے پینا اور کھانا باقاعدگی سے۔ میں سبز اور ہربل چائے لیتا ہوں۔ میں نے سنا ہے کہ وہ آپ کے گلے کو صاف کرنے اور تھوک کو جمع ہونے سے بچانے میں مدد کرتے ہیں۔ جب میں بہت زیادہ کھانسی کرتا ہوں تو سبز چائے بعض اوقات مددگار ثابت ہوتی ہے۔

"I usually have to skip medications sometimes. I still try to do other things like drink and eat regularly. I do take green and herbal tea. I have heard they help in clearing your throat and get the sputum from accumulating. When I cough too much, green tea is sometimes helpful".

شروع میں سبز چائے پی لی، ادرک کے ساتھ، جو میرے ساتھیوں نے مجھے تجویز کی تھی۔

"Initially took green tea, with ADRAK, recommended to me by my colleagues". | علامات کو کم کرنے کے لیے جڑی بوٹیوں اور الائچی کی چائے کا گھونٹ پینا | • Unlike the common belief that teas could help with stress management, why did patients with COPD used tea for symptom management? | **Answer Query:** In Pakistan, there is a common belief that milk-containing products can lead to greater production of sputum and may clog airway for people with respiratory issues. Therefore, people with COPD used green and herbal teas to minimize the sputum production from milk tea and to get soothing effect on their airways. | **Code:** Utilising herbal and green teas for symptom management **Code Description**: Traditional cultural belief about the detrimental effects of milk tea strengthened patients' view that herbal and green tea can provide symptomatic relief. |
| یں اپنی دعائیں باقاعدگی سے کہتا ہوں، کیونکہ مجھے لگتا ہے کہ اللہ ہمیشہ مدد کے لیے حاضر ہے۔ وہ مجھے معمول کے معمول پر واپس آنے کی طاقت اور روحانی پرورش | تناؤ اور شفا کے لیے باقاعدہ دعائیں | Globally, many people believe in God for miracles. But, why people with COPD have prioritized divine healing over | **Answer Query:** Most of these people belong to very poor families and they cannot afford medications and other medical expenses. | **Code:** Prayers for divine healing and emotional strength |

دیتا ہے۔ دعا ہمیشہ سے اس بیماری کے خلاف میرا حتمی ہتھیار رہی ہے۔ "I say my prayers regularly, because I feel Allah is always here to help. He gives me the power and spiritual nourishment to get back to a normal routine. Prayer has always been my ultimate weapon against this disease." ب میں اللہ سے باقاعدگی سے دعا کرتا ہوں تو اندر سے الٰہی شفا آتی ہے۔ دعاؤں اور اللہ کے فضل کے بغیر دوائیں بے کار ہیں "Divine healing comes from inside when I pray to Allah regularly. Without prayers and Allah's blessing, the medications are useless"	medications in this region?	However, these people also want to continuously work to meet their familial expenses. Believing in God gives them hope and internal emotional strength to continue working in spite of disease related complications. Faith healing offers them a somewhat placebo effect.	**Code Description:** These people with COPD have strong faith on Allah and his blessings. Their strong Islamic beliefs and culture of prayer prompts them to rely more on prayer as a weapon for divine healing.

In Durante et al. (2022), participants' interviews were conducted in Italian, Spanish, and Dutch. Consequentially, the preliminary codes were developed and defined in the participants' language. For example, the preliminary code assigned for perceived nurses' role in the Italian context was *Pregiudizio verso gli infermieri* (Social prejudice on nurses). The different perceptions about the nurses' role are illustrated with the following quotes. Caregivers in Spain and Italy perceived the nurses' role as supportive an educational, and Dutch caregivers perceived the nurses' role as more technical. While developing the preliminary codes, each researcher involved in the reading and analysis chose these passages that adequately captured the social prejudice against and perceived role of nurses in their countries (Table 4). Another example is linked to how the caregivers showed the assistance perceived for their condition. The preliminary code for this phenomenon in the Spanish interview was *Ayudas Públicas* (Government helps). From the Italian interviews it emerged that caregivers were satisfied by the help received by the family and that they mainly relied on family members if they needed support. Meanwhile Spanish caregivers felt abandoned by institutions.

Table 4
Examples of Contextual Coding from Mixed Methods Study (Durante et al., 2022)

Raw data in local language	Preliminary code in original language	Social/cultural query	Answers from bilingual discussion	Final code
"Ho visto cose (riferite agli infermieri) che non rispettano la categoria, ma poi non so se puoi metterlo, perché magari arrivano di fretta non fanno attenzione alle manovre sono sempre di fretta…"	Pregiudizio verso gli infermieri -Social prejudice on nurses. -	• Like Spain and Italy, are nurses perceived as a support figure in other countries? • What makes nurses support figure in Spanish/Italian	**Answer Query 1:** In Spain and Italy, caregivers considered nurses as support figure offering emotional support through effective communication. However, in the Netherlands, nurses were primarily devoted	**Code:** Nurses' social image determines their perceived role **Code Description:** Engrained stereotypical or perceived social beliefs about the nursing profession informs caregivers perception of nurses.

"I've seen things (referring to nurses) that don't respect the category, but then I don't know if you can put it, because maybe they come in a hurry, they don't pay attention to manoeuvres they are always in a hurry…" (Italian male caregiver, 60 age)		context and technical assistants in the Netherlands?	to technical activities and caregivers perceived that nurses did not engage in quality communication with caregivers and their relatives with heart failure. **Answer Query 2:** The perceived social image of nurses and their role results in different perceptions of caregivers in the Spanish, Italian, and Dutch context.	
"A ver, yo creo que... cuando te metes en una situación como la de mi padre, debes tener un pequeño refuerzo para la persona que te está ayudando. O sea, la "Ley de la Dependencia" dice, vas a buscar a una persona que, por ejemplo, le vas a ayudar un par de horas, y... vas a recibir un apoyo económico... pero es muy difícil aplicarlo a uno mismo, es muy difícil" "Let's see, I think that... when you get into a situation like my father's, you have to have a little reinforcement for the person who is helping you. I mean, the "Dependency Law" says, you are going to look for a person who, for example, you are going to help him for a couple of hours, and... you are going to receive economic support... but it is very difficult to apply it to oneself, it is very difficult" (Spanish woman caregiver, 56 years old).	Ayudas Públicas Government helps	• What is the go-to source of support for caregivers during the time of crisis in the Netherlands in comparison to other contexts? • What could be the underlying contextual factors affecting caregivers' choice of support system?	**Answer Query 1:** Dutch caregivers relied mainly on state subsidies and grants. When they did not receive or were able to obtain benefits, they felt abandoned and abused by the state. However, Italian caregivers turned exclusively to the family when they needed help and did not rely on state subsidies. **Answer Query 2:** The type of lifestyle such as family centered, or supportive or independent lifestyle determines the go-to source for any kind of caregiving support.	**Code:** Cultural lifestyle (Family-based vs Independent) affects caregiver support **Code Description:** Italians and Spanish usually rely on their families for emotional, material, and moral support. Dependency on family is not perceived as negative. While the Dutch seems prefer relying on self to meet emotional and material needs. Dependency on siblings and distant relatives is often looked down upon. Independent lifestyle is considered a strength. These cultural ideologies affected caregivers go to support system during crisis. Despite all the interviewed caregivers complained about the lack of support by the government, the tone used by Dutch caregivers was more resentful due to their cultural perspective of welfare ensured by the government.

Stage 2: Concluding Coding Stage

The concluding coding stage focuses on initializing the finalization of preliminary codes into refined codes so that they can be subject to detailed analysis for exploration of social and cultural meanings. The researchers can work in a team to finalize the list of preliminary

codes to be entered into the next stage of analysis. This stage is further divided into three sub-stages.

Sub-stage 2.1: Creating Social and Cultural Query List of the Preliminary Codes

At this sub-stage, the refined and finalized preliminary codes are arranged in a matrix in order of their weight, or similarities and differences, resulting in the development of a social and cultural query list to understand the meanings of these codes. The connected codes could be merged to form one code. A social and cultural query list is defined as the organization of codes into groups that tap into different cultural and social beliefs, perspectives, and phenomena. For example, a group of preliminary codes could discuss how caregiving is perceived in a specific context. The query list related to these codes could include: How self-care behaviors of male patients differ from female patients? What are the inherent cultural beliefs which influence self-care behaviors of patients? Who performs the caregiving role in one setting compared to another setting? Which gender is more involved in caregiving? Why is one gender more involved in caregiving than its counterparts? Is caregiving an individualistic or family-centered process in different contexts?

Developing a cultural and social query list of the refined preliminary codes is essential to ensure that the underlying sociocultural mechanisms and processes are adequately understood, thereby allowing researchers to unravel the complexity of seemingly concrete social and cultural phenomena. This sub-stage also enables researchers to reduce the number of preliminary codes that are genuinely representative of the data and essential to capture the social and cultural context of participants' experiences and views.

Application in the Exemplar Studies

Zeb et al. (2021) generated several contextual codes for various themes. However, one query each was listed for each of the contextual codes. For example, the queries for the two above illustrated codes (i.e., Utilising herbal and green teas for symptom management and regular prayers for divine healing and emotional strength) were: (a) Unlike the common belief that teas could help with stress management, why did patients with COPD used tea for symptom management? and (b) globally, many people believe in God for miracles. But, why people with COPD have prioritized divine healing over medications in this region?

Durante et al. (2022) made up three different codebooks, informed by the theory "A Situation-Specific Theory of Caregiver Contributions to Heart Failure Self-care" (Vellone et al., 2019) and by the content of transcriptions of participants from each country. To develop a greater understating of the preliminary codes within sociocultural context, a cultural and social query list was generated. The query list for the code, "social prejudice on nurses," included the following questions: (a) Like Spain and Italy, are nurses perceived as a support figure in other countries? and (b) What makes nurses support figure in Spanish/Italian context and technical assistants in the Netherlands? Social and cultural queries generated at this stage could also be explored further in additional research studies. However, since our social and cultural queries were relevant to our research aims, we resolved them through discussion in the subsequent stage of contextual coding.

Sub-Stage 2.2: Generating Answers through Discussion with Multilingual Researchers or the Participants

Once the query list is developed and refined, the researchers should seek answers to those queries. This can be done in two ways. First, suppose the team includes multiple

researchers from different settings where the study was conducted. In such case, the query list should be forwarded to those researchers who are more familiar with the context. Second, if the team does not include multilingual researchers, the query list can be sent to the participants to seek more insights into the explored phenomena. There are two challenges associated with this second approach. First, it assumes that member checking will always be possible. However, sometimes the research participants may not be available to answer the questions. Therefore, to address this issue, the researchers should conduct further research on the settings or use exiting literature to generate answers to the query list. Second, if both multilingual researchers and the participants are approached to generate answers to the query list, there is a possibility that discrepancies may arise in the responses. Therefore, the principal investigator should discuss and find support in the literature to resolve such conflicts. On the other hand, if the multilingual researchers and the participants provide similar answers to the query list, this would add rigor to the codes and the coding process. The generated answers are then combined with the refined codes.

Application in the Exemplar Studies

Zeb et al. (2021) conducted two meetings on Zoom and WhatsApp to discuss answers to the sociocultural query. One of these researchers also communicated with the faith healers and religious scholars in the community to discuss the potential reasons for such descriptions. The gained insights were discussed among the researchers to generate the most plausible answer for the contextual codes. For example, upon learning from the data that patients with COPD preferred visiting faith healers compared to doctors and nurses for advice, one of the researchers briefly talked to a faith healer to learn about the number of people with respiratory problems who visited him in the last year. The faith healer did not provide a discrete count but noted that many people with different respiratory problems visit him weekly. The named respiratory problems were asthma, pneumonia, COPD, and whopping cough. When reasons were explored for such visitations, the faith healer noted several reasons: (a) sometimes their family members bring them to his house because they would have more trust in my herbal treatment, (b) sometimes the patients would have heard from my other patients, (c) some patients had bad experiences with the doctors and they lost trust in them, and (d) some of these patients do not have the money to afford medicines so they use my herbal remedies which are cheap and effective. These reasons were compared with the raw data, researchers' observations and knowledge of the social and cultural context, and other codes tapping into similar issues. Other codes captured poverty and its impact on self-care and the belief in God and divine intervention and these were also consistent with the raw data and social cultural context. Therefore, the most relevant answer to the query was:

> Most of these people belong to very poor families and they cannot afford medications and other medical expenses. However, these people also want to continuously work to meet their familial expenses. Believing in God gives them hope and internal emotional strength to continue working despite disease related complications. Faith healing offers them a somewhat placebo effect. (Table 4)

Durante et al. (2022) sought answers to their social and cultural queries through separate team discussions. The members of each team drew upon their personal experiences working throughout Europe to discern the nuanced cultural differences relevant to the preliminary contextual codes. For example, in response to the question "What is the go-to source of support for caregivers during the time of crisis in the Netherlands in comparison to

other contexts?" the team determined that the Dutch population relied mainly on state subsidies and grants. Specifically, individuals felt abandoned and abused by the state when they were denied or unable to obtain benefits. In contrast, when Italian caregivers needed assistance, they relied solely on family and not on state subsidies.

Sub-stage 2.3: Finding a Common Language to Finalize the Contextual Codes

In the last sub-stage, the refined codes are converted into contextual codes which adequately capture the social and cultural meanings and connotations of the participants' voices and experiences. The process of converting refined codes into contextual codes entailed: (a) referring to the chosen words and phrases in the native language and finding specific words which could be used for naming the code (e.g., the words for tea, herbal, green tea, and symptom management were chosen) and (b) using direct English translation to capture the essence and meaning. The contextual codes should be refined and renamed after finding a common language across the dataset. Finding common language requires focus on the context and social aspect as well as the global meaning of the chosen words which can be easily interpreted by the non-Native language readers. Discussions among researchers and/or member checking can be useful to develop a common language. For example, two or more different sets of refined codes could emerge from each set of participants in distinct settings. Therefore, the researchers should discuss among the team and the participants (if possible) and develop a common language or vocabulary to name and define those codes.

Application in the Exemplar Studies

Zeb et al. (2021) named their final contextual codes: "utilising herbal and green teas for symptom management" and "prayers for divine healing and emotional strength." For the first code, three implied meanings emerged from the data: First, green and herbal teas were used to relieve anxiety associated with the disease and its impact on personal and family. Second, the teas served as a replacement for expensive medicines because patients could not afford medicine. Third, community friends and acquaintances shared cultural evidence that tea works which promoted participants to use tea for symptom management. These three meanings were combined under one code, which reflected the idea that despite the underlying reasons herbal and green teas were used for symptom management.

Durante et al. (2022) assigned the final code, "nurses' social image determines their perceived role," to describe the nurses' roles, which was elaborated with a detailed description. This final code was described as: "engrained stereotypical or perceived social beliefs about the nursing profession informs caregivers perception of nurses." The finalized contextual codes are then entered into the stage of theme or sub-theme or theory development in accordance with the type of qualitative methodology.

Finally, once the two-step process of contextual coding is completed and the contextual codes are considered to capture the essence of participants' experiences, researchers can translate the codes and the data into English for generating themes and sub-themes in line with the process of data analysis employed.

Discussion

Context is always an essential and meaningful entity in qualitative research, and elaborative discussion of context enables researchers to place the findings within the broader social and cultural phenomena (Corbin & Strauss, 2015; Richards, 2020). Therefore, it is critical that the social and cultural context is highlighted at the preliminary stages of data

analysis. In this article, we propose the contextual coding approach, which can enable researchers to think about the contextual meaning of their data at an early stage of analysis, rather than waiting at the later stage of theme development to contextualize the findings.

The contextual coding approach can improve the comprehension and coherence of the coding process as it guides the researchers in coding data from different native languages and sociocultural contexts and sub contexts. The primary advantage of this technique is that it aims to find a way to code in a common language while retaining concepts expressed by participants from different contexts. For example, in the phenomenological inquiry (Zeb et al., 2021) a simple difference across the use of tea for symptom management was the kind of teas used. Participants noted several different teas such as honey, local green, Asian green, opium, ginger, and garlic tea. Despite noting different kind of tea, the social meaning emerging from the data was that milk and milk containing products are considered harmful for people with respiratory problems. However, herbal, and green tea can be useful to reduce the amount of phlegm produced, thereby helping manage the symptoms. This broader social phenomenon also brings into the attention how participants understood their disease and the purpose of mucus in the airways. The contextual coding at an early stage enabled in unraveling the intricated phenomenon of tea use for COPD in Pakistani culture. In Durante et al. (2022), the critical differences across three European countries were noted in terms of the nature of caregiving, the image and role of nurses, the influence of community infrastructure on caregiving, the influence of family centered and person-centered environment, and the influence of governmental policies on the caregiving process and informal caregivers. It can be argued that if any other kind of coding would have been used, a deeper inquiry of this code might not have been possible. The focus on capturing the socially and culturally specific phenomenon was valuable in capturing the nuanced meaning.

Despite the potential advantages of contextual coding, there are several challenges with its implementation. The first challenge is selecting participants' quotes that are truly representative of the sociocultural phenomena captured at the reading stage, and then selecting words, phrases, and statements that reflect the phenomena. The best possible way to tackle this challenge is reading interviews transcripts several times and being well informed about the own social and cultural context. For example, an Italian researcher identifying the social and cultural phenomena and associated words and phrases should have a deeper understanding of diverse Italian cultures. The researchers can also use memo writing during data collection and analysis to generate query list before actual coding of the data. Zeb et al. (2021) and Durante et al. (2022) wrote personal observations and memos during data collection and analysis and used them when comparing the codes and interpreting the experiences of participants. The second challenge is coining a common language. This issue can be resolved during the discussion among the researchers, which can elicit new impressions and viewpoints about the content of the interviews. The wide range of experiences influenced by sociocultural backgrounds of research team can be beneficial to explore various dimensions of the qualitative data, underlying meanings of generated contextual codes, and the explanations for the sociocultural queries. After discussion, distinct words or phrases can be tried to examine the fit with the captured phenomenon. One critical aspect of coining common language is the necessity to choose words which capture the essence of participant experience but are also comprehendible across cultures. Therefore, researchers can create new broad codes, refine them, and then contextualize those in accordance with the cultural nuances of the phenomenon reported by the participants.

Despite its many advantages, there are some possible limitations to the contextual coding technique we offer. First, our technique was only tested and used in two studies in Pakistan and Europe. Further use and application of this technique can result in its refinement and revision to meet the needs of each unique research context. Second, the underlying

assumption of contextual coding is that the data must be collected in non-English language and coded in the native language, which may limit the transferability of codes and final themes to contexts that are highly similar. Further refinements of this approach could be useful to increase its applicability to multilingual research. Finally, it is possible that this coding technique could be misused to code data based on social and cultural stereotypes. Therefore, researchers should be cautious of this misuse and apply the technique to code actual participant experiences and its essence.

Data coding is integral to qualitative analysis. Effective coding is a prerequisite to generate a comprehensive understanding of experiences and perspectives of individuals in the form of themes, sub-themes, and substantive theories. Phenomena and processes explored in qualitative studies are culturally and socially complex which are better understood through unraveling the superficial as well as implied meanings of participants words, phrases, and native slangs. Inability to capture the nuances of socially and culturally bound phenomena in qualitative research can affect the rigor of data analysis. Contextual coding technique is proposed as an approach for capturing the underlying social and cultural meanings of qualitative data for qualitative research involving participants with diverse social and cultural backgrounds.

References

Adu, P. (2019). *A step-by-step guide to qualitative data coding*. Routledge.

Angel, R. J. (2013). After Babel: Language and the fundamental challenges of comparative aging research. *Journal of Cross-Cultural Gerontology, 28*(3), 223-238. https://doi.org/10.1007/s10823-013-9197-2

Austin, Z., & Sutton, J. (2014). Qualitative research: Getting started. *The Canadian Journal of Hospital Pharmacy, 67*(6), 436–440. https://doi.org/10.4212/cjhp.v67i6.1406

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Choi, J., Kushner, K. E., Mill, J., & Lai, D. W. L. (2012). Understanding the language, the culture, and the experience: Translation in cross-cultural research. *International Journal of Qualitative Methods, 11*(5), 652-665. https://doi.org/10.1177/160940691201100508

Corbin, J., & Strauss, A. (2015). *Basics of qualitative research* (4th ed.). Sage.

Creswell, J. (2015). *30 essential skills for the qualitative researcher*. Sage.

Daher, M., Carré, D., Jaramillo, A., Olivares, H., & Tomicic, A. (2017). Experience and meaning in qualitative research: A conceptual review and a methodological device proposal. *Qualitative Social Research, 18*(3). https://doi.org/10.17169/fqs-18.3.2696.

Deschler, D. G., Walsh, K. A., Friedman, S., & Hayden, R. E. (1999). Quality of life assessment in patients undergoing head and neck surgery as evaluated by lay caregivers. *The Laryngoscope, 109*(1), 42–46. https://doi.org/10.1097/00005537-199901000-00009

Durante, A., Ahtisham, Y., Cuoco, A., Boyne, J., Brawner, B., Juarez-Vela, R., & Vellone, E. (2022). Informal caregivers of people with heart failure and resilience: A convergent mixed methods study. *Journal of Advanced Nursing*, *78*(1), 264–275. https://doi.org/10.1111/jan.15078

Eatough, V., & Smith, J. A. (2008). Interpretative phenomenological analysis. In C. Willig & W. Stainton-Rogers (Eds.), *The SAGE handbook of qualitative research in psychology* (pp. 179-194). Sage.

Elliott, V. (2018). Thinking about the coding process in qualitative data analysis. *The Qualitative Report, 23*(11), 2850-2861. https://doi.org/10.46743/2160-3715/2018.3560

Feldermann, S. K., & Hiebl, M. R. (2019). Using quotations from non-English interviews in

accounting research. *Qualitative Research in Accounting & Management, 17*(2), 229-262. https://doi.org/10.1108/QRAM-08-2018-0059

Gibbs, G. R. (2018). *Analyzing qualitative data*. Sage.

Graneheim, U. H., Lindgren, B. M., & Lundman, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today, 56*, 29-34. https://doi.org/10.1016/j.nedt.2017.06.002

Helmich, E., Cristancho, S., Diachun, L., & Lingard, L. (2017). How would you call this in English? *Perspectives on Medical Education, 6*(2), 127-132. https://doi.org/10.1007/s40037-017-0329-1

Larkin, P. J., de Casterlé, B. D., & Schotsmans, P. (2007). Multilingual translation issues in qualitative research: Reflections on a metaphorical process. *Qualitative Health Research, 17*(4), 468-476. https://doi.org/10.1177/1049732307299258

Lester, J. N., Cho, Y., & Lochmiller, C. R. (2020). Learning to do qualitative data analysis: A starting point. *Human Resource Development Review, 19*(1), 94-106. https://doi.org/10.1177/1534484320903890

Lichtenstein, M., & Rucks-Ahidiana, Z. (2021). Contextual text coding: A mixed-methods approach for large-scale textual data. *Sociological Methods & Research,* https://doi.org/10.11772F0049124120986191

Linneberg, M. S., & Korsgaard, S. (2019). Coding qualitative data: A synthesis guiding the novice. *Qualitative Research Journal, 19*(3), 259-270. https://doi.org/10.1108/QRJ-12-2018-0012

Mayring, P. (2014). *Qualitative content analysis: Theoretical foundation, basic procedures and software solution*. Sage. https://nbn-resolving.org/urn:nbn:de:0168-ssoar-395173

Nasri, N. M., Nasri, N., & Abd Talib, M. A. (2020). Cross-language qualitative research studies dilemmas: A research review. *Qualitative Research Journal, 21*(1), 15-28. https://doi.org/10.1108/QRJ-12-2019-0093

Richards, L. (2020). *Handling qualitative data: A practical guide*. Sage.

Ricoeur, P. (1976). *Interpretation theory: Discourse and the surplus of meaning*. Christian University Press.

Saldaña, J. (2021). *The coding manual for qualitative researchers* (4th ed.). Sage.

Santos, H. P., Black, A. M., & Sandelowski, M. (2015). Timing of translation in cross-language qualitative research. *Qualitative Health Research, 25*(1), 134-144. https://doi.org/10.1177/1049732314549603

Smith, H. J., Chen, J., & Liu, X. (2008). Language and rigour in qualitative research: Problems and principles in analyzing data collected in Mandarin. *BMC Medical Research Methodology, 8*(1), 1-8. https://doi.org/10.1186/1471-2288-8-44

Tan, H., Wilson, A., & Olver, I. (2009). Ricoeur's theory of interpretation: An instrument for data interpretation in hermeneutic phenomenology. *International Journal of Qualitative Methods, 8*(4), 1–15. https:// doi.org/10.1177/160940690900800401

Teherani, A., Martimianakis, T., Stenfors-Hayes, T., Wadhwa, A., & Varpio, L. (2015). Choosing a qualitative research approach. *Journal of Graduate Medical Education, 7*(4), 669–670. https://doi.org/10.4300/JGME-D-15-00414.1

Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. In C. Willig & W. Stainton-Rogers (Eds.), *The SAGE handbook of qualitative research in psychology* (2nd ed., pp. 17-37). Sage.

Timmermans, S., & Tavory, I. (2022). *Data analysis in qualitative research: Theorizing with abductive analysis*. University of Chicago Press.

Vellone, E., Riegel, B., & Alvaro, R. (2019). A situation-specific theory of caregiver contributions to heart failure self-care. *The Journal of Cardiovascular Nursing*, *34*(2), 166–173. https://doi.org/10.1097/JCN.0000000000000549

Vogt, W. P., Gardner, D. C., Haeffele, L. M., & Vogt, E. R. (2014). *Selecting the right analyses for your data: Quantitative, qualitative, and mixed methods*. Guilford Publications.

Willis, D. G., Sullivan-Bolyai, S., Knafl, K., & Cohen, M. Z. (2016). Distinguishing features and similarities between descriptive phenomenological and qualitative description research. *Western Journal of Nursing Research, 38*(9), 1185-1204. https://doi.org/10.1177/0193945916645499

Younas, A., Fàbregues, S., Durante, A., & Ali, P. (2022). Providing English and native language quotes in qualitative research: A call to action. *Nursing Open*, *9*(1), 168–174. https://doi.org/10.1002/nop2.1115

Zeb, H., Younas, A., Ahmed, I., & Ali, A. (2021). Self-care experiences of Pakistani patients with COPD and the role of family in self-care: A phenomenological inquiry. *Health & Social Care in the Community*, *29*(5), e174–e183. https://doi.org/10.1111/hsc.13264

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