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Using thematic analysis in qualitative research

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ABSTRACT

Thematic analysis (TA) is one of the most widely utilized methods for analyzing qualitative data, offering a structured yet flexible framework for identifying, analyzing, and interpreting patterns of meaning within datasets. This paper provides a comprehensive overview of Braun and Clarke's six-phase thematic analysis framework, which includes (1) familiarization with data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) writing the report. Additionally, it presents a 16-item checklist to ensure adherence to the established steps of thematic analysis, enhancing the rigor and reliability of the study. Each phase is explored in-depth, highlighting its purpose, key activities, reflexive considerations, challenges, and significance. Emphasis is placed on the iterative and reflexive nature of TA, where researchers actively engage with data and acknowledge their theoretical positioning and biases throughout the process. Challenges such as data overwhelm, coding inconsistencies, and balancing thematic depth and breadth are addressed, alongside practical strategies for overcoming these obstacles. The importance of transparency, reflexivity, and methodological rigor is underscored as central to producing trustworthy and insightful qualitative research. This article serves as both an academic reference and a practical guide for researchers aiming to apply thematic analysis effectively, ensuring that their findings are presented in a coherent, compelling, and analytically sound manner.

Dear Editors,

Thematic analysis (TA) is one of the most widely used methods for analyzing qualitative data, offering a structured yet flexible approach to identifying, analyzing, and reporting patterns or themes within a dataset [1,2]. Since its inception, the Braun and Clarke six-phase framework has been extensively adopted across disciplines, including health research, education, and social sciences [3]. The method emphasizes researcher reflexivity and the importance of theoretical transparency to ensure rigor and credibility in qualitative research [4].

Thematic analysis is not bound to any specific theoretical framework, making it a versatile tool suitable for both inductive and deductive approaches to data analysis [5]. Despite its strengths, there remains confusion surrounding its application, particularly with respect to reflexive thematic analysis, where researcher subjectivity is embraced rather than minimized [6]. Furthermore, inconsistencies in reporting thematic analysis have been noted in various fields, highlighting the need for clearer methodological guidance [7]. Additionally, researchers may present themes as "emerging" from the data without acknowledging their role in constructing them, which risks obscuring the interpretative process. Unlike more structured methods such as framework analysis or grounded theory, TA lacks formal procedures for sampling, comparison, and saturation, which can challenge its reproducibility and analytic depth [8–10]. Furthermore, novice researchers often conflate TA with simple coding, missing the conceptual depth that can be achieved when reflexivity, transparency, and theoretical alignment are prioritized. Thus, to ensure credible and meaningful findings, thematic analysis must be conducted systematically, with careful documentation of interpretive decisions and engagement with the data beyond surface-level description.

To better understand the positioning of thematic analysis within qualitative research, it is important to contrast it with other commonly used methodologies such as grounded theory, interpretative phenomenological analysis (IPA), and content analysis (Table 1). Thematic analysis offers a theoretically flexible and accessible approach, ideal for researchers aiming to identify patterns of meaning without being constrained by specific epistemological commitments. In contrast, grounded theory is primarily designed to generate new theory from data through a structured coding and constant comparison process [11]. IPA, rooted in phenomenology and hermeneutics, focuses on deeply exploring personal lived experiences within small, homogeneous samples. Meanwhile, content analysis emphasizes systematic coding and quantification of textual content, making it more aligned with positivist or mixed-method frameworks. Unlike these more rigid methods, TA emphasizes interpretive depth and researcher reflexivity, allowing for both descriptive and rich conceptual analysis across diverse topics [3,6,9].

Braun and Clarke's six-phase framework—familiarization with data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and writing the report—remains the cornerstone for conducting robust thematic analysis [8]. Each phase contributes systematically to the development of meaningful insights while allowing the researcher to remain actively engaged with the data throughout the process [1,2,12] (Fig. 1). Therefore, this article aims to provide a detailed description of the six steps involved in thematic analysis for qualitative research. Additionally, it presents a 16-item checklist to ensure adherence to the established steps of thematic analysis, enhancing the rigor and reliability of the study. By critically examining each phase and discussing its practical application, this paper seeks to serve as both an academic reference and a practical guide for

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Table 1
Comparison of thematic analysis with other common qualitative approaches.

Feature/Method	Thematic Analysis (TA)	Grounded Theory (GT)	Interpretative Phenomenological Analysis (IPA)	Content Analysis (CA)
Main goal	Identify and interpret patterns/ themes in data	Generate theory grounded in data	Understand how individuals make sense of experiences	Quantify and categorize textual content
Philosophical foundation	Theoretically flexible (realist or constructivist)	Constructivist or pragmatist	Phenomenological, hermeneutic	Positivist or realist
Focus of analysis	Meaning, context, and interpretation	Conceptual abstraction and constant comparison	Lived experience and idiographic depth	Frequency and categorization of manifest content
Sample size	Flexible	Moderate to large	Small and homogeneous	Large
Researcher Role	Active and reflexive	Iterative, comparative theorist	Interpretive phenomenologist	Objective coder
Theory development	Not necessary or central	Essential (theory-building)	Rare or case-specific	Not required
Use of coding	Codes evolve into themes	Codes support theory development	Case-by-case interpretive coding	Codes remain mostly descriptive
Flexibility of application	High – across disciplines and paradigms	Moderate – requires theoretical grounding	Low – bound to specific philosophical stance	High – adaptable in mixed-method studies
Depth of interpretation	Moderate to high (depends on reflexivity)	High (conceptual abstraction)	Very high (deep personal insights)	Low to moderate
Tools Used	Manual or CAQDAS (e.g., NVivo)	Coding software, memos, diagrams	Manual, detailed case narratives	Coding sheets, Excel, NVivo5

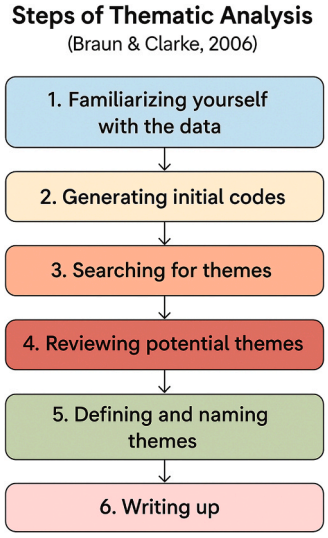

Fig. 1. Six phases in thematic analysis [1].

qualitative researchers seeking methodological clarity (Fig. 1, Table 2 and Table 3).

Phase 1: familiarization with the data

Familiarization with the data represents the foundational stage in thematic analysis, where researchers immerse themselves deeply in their dataset to build an initial understanding of the data's breadth, depth, and patterns. According to Braun and Clarke, this phase is critical for establishing a researcher's intimate relationship with the data, as meaningful insights cannot emerge without such engagement [8]. Researchers often begin this phase by transcribing data if collected via interviews or focus groups, ensuring verbatim accuracy and capturing not only spoken words but also non-verbal cues such as pauses, laughter, or tone changes. Transcription itself becomes an act of analysis as it demands attention to the nuances of the data [3].

Once transcription is complete, the researcher begins actively reading and re-reading the data. Unlike casual reading, this stage requires what Braun and Clarke term *immersive reading*, where researchers fully engage with the content, noting initial impressions and recurring patterns while being conscious of their reflexive position [4]. Reflexivity in this phase involves acknowledging personal assumptions, biases, and preconceptions and recording them in a reflexive journal. These

Table 2
Practical applications of Braun and Clarke's thematic analysis steps [1].

Thematic analysis steps	Practical application for researchers
1. Familiarization with the data	Researchers immerse themselves in the raw data (e.g., transcripts, notes) by reading and rereading. They actively engage with the material, noting initial ideas and potential patterns. Transcription by the researcher can enhance familiarity, and reflective memos can support early insights.
2. Generating initial codes	Systematically work through the data to identify meaningful features. Codes summarize data segments and can be semantic or latent. Researchers may use software like NVivo, but manual coding is also valid. The aim is comprehensive and inclusive coding.
3. Searching for themes	Researchers begin grouping codes into broader patterns or themes. A theme reflects meaningful data patterns related to the research question. Tools like mind maps or thematic maps assist in organizing themes. This stage involves interpretive thinking.
4. Reviewing themes	Candidate themes are reviewed for coherence within and distinction between themes. Researchers return to the data to ensure accurate representation. This recursive process may lead to merging, splitting, or discarding themes.
5. Defining and naming themes	Researchers refine the essence of each theme and describe how it relates to the research question. Effective naming should be concise and reflective. Supporting quotations and detailed descriptions are developed to enhance clarity.
6. Writing the report	Researchers present findings through a coherent narrative. The report includes a detailed account of themes, data extracts, and analytic commentary. The write-up should interpret the data meaningfully and link findings to the literature, ensuring methodological transparency.

reflections allow researchers to critically engage with their interpretive lens throughout the thematic analysis process [7]. Furthermore, initial note-taking plays an essential role during this phase. These notes often include preliminary observations, striking phrases, repeated ideas, or even emotional reactions to certain excerpts [6]. Importantly, familiarization is not a linear phase; rather, it is iterative. Researchers may return to earlier transcripts, revisit reflexive journals, and refine their understanding repeatedly. This phase demands time, patience, and dedication, as surface-level engagement risks superficial analysis and a failure to capture latent meanings within the data [12]. The significance of familiarization lies in its ability to prepare researchers for the subsequent coding phase. Without a firm grasp of the dataset's nuances, coding becomes fragmented and disconnected from the dataset's

Table 3
Overview of the six phases of thematic analysis.

Phase	Purpose	Key Activities	Reflexivity	Challenges	Significance
Phase 1: Familiarization with the data	To immerse deeply in the dataset, identifying initial ideas, patterns, and meanings.	Active reading and re-reading, transcription, initial note-taking, and reflective observations.	Recognize and document biases, assumptions, and theoretical positioning.	Data overwhelm, time constraints, difficulty balancing detail and overview.	Establishes a foundational understanding, enabling robust subsequent analysis.
Phase 2: Generating initial codes	To systematically identify and label meaningful features across the dataset.	Systematic line-by-line coding, iterative refinement, reflexive journaling, and data management.	Document reflexive decisions influencing the coding process and researcher bias.	Risk of overcoding, inconsistency across codes, difficulty maintaining focus.	Forms the building blocks for meaningful theme development and analysis.
Phase 3: Searching for themes	To identify broader patterns by grouping related codes into meaningful themes.	Clustering similar codes, identifying relationships, creating thematic maps, iterative refinement.	Reflect on how theoretical assumptions influence theme identification.	Distinguishing between themes and sub-themes, avoiding fragmented or overly broad themes.	Provides a structured foundation for deeper thematic refinement and coherence.
Phase 4: Reviewing themes	To ensure each theme is coherent, consistent, and distinct across the dataset.	Revisiting coded data extracts, refining boundaries, creating and analyzing thematic maps.	Reflect on decisions made during refinement and their alignment with research objectives.	Balancing over-refinement and premature theme finalization, risk of overlooking nuances.	Ensures analytical rigor, clarity, and alignment with the research question.
Phase 5: Defining and naming themes	To finalize and refine each theme's definition and assign clear, meaningful names.	Detailed thematic analysis, writing theme descriptions, selecting supporting extracts.	Reflect on researcher influence in naming and interpreting themes.	Balancing thematic depth with clarity, avoiding overly vague or overly narrow definitions.	Creates a clear analytical structure for the final narrative presentation.
Phase 6: Writing the report	To produce a coherent, compelling, and transparent narrative presenting the analysis.	Synthesizing themes, integrating illustrative quotes, writing interpretive commentary.	Acknowledge researcher influence on the narrative and analysis outcomes.	Balancing depth and clarity, managing word limits, avoiding redundancy.	Delivers a transparent, engaging, and methodologically sound final analysis.

overarching context. Researchers who invest adequate time and effort in this stage are better equipped to identify recurring patterns, construct meaningful themes, and ensure a richer, more nuanced analysis [5].

Phase 2: generating initial codes

The second phase of thematic analysis, *generating initial codes*, marks the transition from familiarization with the dataset to the systematic identification of meaningful data segments. In this phase, researchers meticulously examine the dataset to produce initial codes—labels that capture significant features of the data in relation to the research question [1]. Coding is both a technical and interpretative act, requiring researchers to approach the data iteratively and reflexively. While codes may initially appear fragmented and abundant, their purpose is to distill complex datasets into analyzable chunks that can later inform theme development [3].

The primary aim of this phase is to reduce the complexity of qualitative data by breaking it into meaningful, analyzable units. Codes act as descriptive or interpretive markers that highlight key features or recurring patterns. Descriptive codes summarize explicit content, while interpretive codes delve into underlying meanings and connections [6]. For example, in a dataset exploring healthcare professionals' burnout, a descriptive code might be *"long working hours,"* while an interpretive code could be *"emotional exhaustion as a barrier to effective care"*. Reflexivity plays a pivotal role here; researchers must remain aware of their own biases and theoretical stances, as these influence coding decisions [13]. Coding is an iterative, systematic, and meticulous process. Researchers often rely on both manual methods and qualitative data analysis software such as NVivo, ATLAS.ti, or MAXQDA. Each data extract is reviewed systematically, with relevant segments assigned concise codes [11]. Coding is rarely linear; researchers revisit and refine codes, merging similar ones and creating sub-codes where necessary [13]. Additionally, maintaining a reflexive journal is encouraged to document coding decisions and provide transparency for the analytic process [4]. These journals are essential for tracking thought processes and decisions made during coding, helping maintain consistency and alignment with the research question [12]. Reflexivity remains central to generating initial codes, as researchers' perspectives, theoretical orientations, and positionalities influence how they interpret the data [14]. Reflexive engagement ensures that the researcher remains cognizant of how their assumptions and biases shape the analytic lens. For instance, a researcher with a social justice perspective may emphasize systemic barriers in healthcare, while another may focus on individual coping strategies [15]. Maintaining reflexive memos throughout this phase provides transparency and enhances the reliability of the findings.

Despite its critical importance, generating initial codes comes with several challenges. Overcoding—where too many codes are created—can fragment the analysis and obscure overarching patterns [13]. Conversely, undercoding risks superficial analysis, missing key insights hidden in the nuances of the data. Inconsistent coding across different parts of the dataset can further complicate theme development. Balancing breadth and depth during coding requires both methodological rigor and researcher reflexivity [6]. The success of thematic analysis hinges on the robustness of the initial coding phase. Well-defined codes act as the foundation for constructing themes, enabling researchers to identify patterns and relationships across the dataset [3]. Transparent and consistent coding practices ensure that the analysis remains credible and reproducible. This phase also ensures a smooth transition into subsequent phases, where themes are refined and reported [15]. In essence, generating initial codes is not just a technical process but an intellectual and interpretative exercise. Researchers must balance systematic rigor, reflexivity, and creativity to ensure that the dataset's richness is preserved and represented in the final analysis.

Phase 3: searching for themes

The third phase of thematic analysis, *searching for themes*, marks a pivotal transition from generating initial codes to identifying broader patterns or themes within the dataset. Themes represent recurring, meaningful patterns of significance derived from the codes and are closely aligned with the research question [1]. During this phase, the researcher begins grouping similar codes together, exploring how they interact, overlap, or contrast with one another. This phase demands both creativity and analytical rigor, as it involves a process of sense-making where codes are elevated into potential themes based on their significance and relationship to the research focus [12]. At its core, searching for themes requires moving beyond the surface-level meanings captured by individual codes to uncover deeper, underlying patterns that tell a coherent story about the dataset. Codes are collated and visually mapped, often using thematic maps or conceptual diagrams, to illustrate how different codes cluster together and how they relate to one another. This mapping process helps researchers evaluate whether the emerging

themes are internally coherent and externally distinct [5]. Additionally, Braun and Clarke emphasize that themes are not merely summaries of codes but are interpretative constructs that capture something meaningful about the data [8]. This phase involves a dynamic, iterative process of trial and error. Researchers must be prepared to revise, collapse, or split themes as they interrogate the initial thematic structure. For example, initial clusters of codes might suggest multiple themes, but closer inspection may reveal that they are better represented as sub-themes or merged into a single theme [16]. Reflexivity remains crucial during this phase, as researchers' theoretical lens and preconceptions may subtly influence how codes are grouped and interpreted [7]. Researchers are encouraged to maintain reflexive journals to document their decision-making processes and to ensure transparency in their thematic reasoning [3].

A critical challenge in this phase lies in balancing flexibility with methodological rigor. While the process of theme development is inherently creative, it must also remain grounded in the data rather than driven by pre-existing assumptions or theoretical biases [13]. Researchers may also encounter difficulties when distinguishing between themes, sub-themes, and overarching categories. Clear operational definitions and consistent documentation are essential for maintaining clarity and coherence throughout this phase. Visual representation tools, such as thematic maps, serve as valuable aids during this stage. These tools enable researchers to visualize the relationships between themes and sub-themes, ensuring that the thematic structure aligns logically with the dataset and research questions [16]. Conceptual diagrams also play an important role in refining and clarifying thematic relationships, reducing ambiguity in the interpretation process [12]. The significance of this phase cannot be overstated. It serves as the bridge between the raw, coded dataset and the refined, interpretable themes that will form the core of the final analysis. Searching for themes is not merely about identifying patterns but about constructing a coherent narrative that answers the research question and provides meaningful insights [15]. Themes must be reviewed with care, ensuring that they are not only consistent with the data but also contribute to the broader understanding of the phenomenon being studied [17].

Phase 4: reviewing themes

The fourth phase of thematic analysis, *reviewing themes*, involves a critical and iterative evaluation of the potential themes identified in the previous phase. At this stage, researchers assess whether the candidate themes work in relation to the coded data extracts and the entire dataset. This phase is not simply about refining or modifying themes but about ensuring that they accurately represent the data and tell a coherent, meaningful story about the research question [1].

During this phase, researchers first revisit the coded data extracts for each theme and assess their internal coherence, consistency, and distinctiveness. A theme should have internal homogeneity, meaning that the data extracts within it should fit together logically, and external heterogeneity, meaning that themes should be clearly distinct from one another [12]. This is often done through iterative cycles of reading and re-reading data extracts, refining theme boundaries, and occasionally merging, splitting, or discarding themes that do not serve the research objectives [10]. A key part of this phase is the creation of a *thematic map*, a visual representation that illustrates how the identified themes relate to each other and to the overall research question. Thematic maps are valuable tools for clarifying relationships between themes and sub-themes and ensuring that the overall narrative flows logically. Researchers must critically question whether each theme is backed by sufficient data and whether it captures a meaningful aspect of the phenomenon being studied [10,16]. Reflexivity remains a central principle in this phase. Researchers must actively reflect on their role in shaping the thematic structure and acknowledge any biases or assumptions that may influence their decisions [3,14]. Reflexive journaling helps to document the rationale behind theme refinements, ensuring transparency and methodological rigor [13].

A critical challenge in this phase is determining when to stop refining themes. Researchers may become overly attached to initial themes or excessively cautious, leading to either premature acceptance of weak themes or endless revisions. Clear criteria for defining themes—such as their relevance to the research question and their ability to convey meaningful insights—can help researchers navigate this uncertainty [8]. Additionally, researchers must ensure that themes align with the overall theoretical and epistemological framework of the study. Braun and Clarke caution against treating themes as pre-existing entities that merely "emerge" from the data, emphasizing instead that themes are actively constructed by researchers through a reflexive and interpretative process [12]. The final output of this phase is a refined set of themes, accompanied by a clear explanation of their scope, boundaries, and interrelationships. These themes should not only represent key insights from the data but also collectively form a coherent narrative that aligns with the research aims. Researchers should feel confident at this stage that their thematic framework captures the richness and complexity of the dataset while remaining analytically sounds [10].

Phase 5: defining and naming themes

The fifth phase of thematic analysis, *defining and naming themes*, focuses on refining and finalizing the themes identified in the previous phase to ensure they accurately represent the dataset and effectively address the research question. This phase emphasizes creating clear, distinctive, and compelling definitions for each theme, accompanied by meaningful names that capture their essence [1]. Each theme should tell a coherent story, supported by relevant data extracts, while contributing to the overall narrative of the analysis.

At this stage, researchers engage in a deeper analysis of each theme, considering not only what the theme represents but also how it interacts with other themes and contributes to answering the research question. This involves writing detailed thematic summaries that describe the essence of each theme, supported by illustrative data extracts [16]. These summaries should move beyond surface-level descriptions and delve into the interpretative dimensions of the theme. The goal is to ensure that each theme is internally consistent, externally distinctive, and contributes meaningfully to the overall analysis [12]. Naming themes is a creative yet analytical process. Theme names should be concise, evocative, and reflective of the central organizing concept of the theme. Braun and Clarke recommend avoiding overly vague or overly technical names, instead opting for labels that capture the core essence of the theme [13]. Researchers should also avoid using direct quotations as theme names, as this can obscure the interpretative work involved in theme development Reflexivity remains central in this phase, as researchers must remain transparent about their decision-making processes and theoretical assumptions. Reflexive journaling helps document how theme definitions and names evolved, offering insight into the rationale behind each choice [3]. This reflexivity ensures that themes are not imposed arbitrarily but are instead grounded in a deep engagement with the dataset. One significant challenge in this phase is balancing depth and breadth. Researchers must ensure that themes are rich enough to capture meaningful insights but not so broad that they become overly generic. Conversely, overly narrow themes risk fragmenting the analysis and obscuring overarching patterns [9]. Another challenge lies in ensuring that theme definitions remain aligned with the overall research objectives and theoretical framework of the study [12]. The significance of this phase lies in its contribution to the coherence and transparency of the final thematic analysis. Well-defined and appropriately named themes serve as the foundation for the final report, ensuring that the analysis remains intelligible and compelling to its intended audience [8].

Phase 6: writing the report

The sixth and final phase of thematic analysis, *writing the report*, focuses on translating the refined themes into a coherent, compelling, and transparent narrative. At this stage, researchers synthesize their findings into a structured document that clearly communicates the thematic analysis results to their intended audience [1]. The aim is to present the themes in a way that both aligns with the research question and captures the richness and complexity of the dataset [12].

This phase requires researchers to weave together themes, supporting data extracts, and analytical insights into a meaningful narrative. The report should provide a clear rationale for how the themes were developed, supported by direct quotes or extracts from the data to illustrate key points. The goal is not just to describe the themes but to interpret them in a way that answers the research question and contributes to the broader academic or practical field [8]. Reflexivity continues to play a crucial role in this phase. Researchers must be transparent about their role in shaping the analysis and acknowledge how their theoretical framework, assumptions, and decisions influenced the final narrative [3]. Reflexive thematic analysis emphasizes that the final report should not give the impression of themes "emerging" naturally from the data but rather as the result of a thoughtful, interpretive process [18]. A key element of the report is the integration of illustrative quotes. These data extracts provide evidence for each theme and ground the analysis in the voices of participants [13]. Researchers must carefully select extracts that are representative and insightful, avoiding overly lengthy or repetitive quotes. The extracts should be accompanied by interpretative commentary, demonstrating how they align with the identified theme and research objectives [16]. The structure of the report typically includes an introduction, a methods section, a results section (presenting the themes), and a discussion section. The introduction situates the study within the existing literature and outlines the research aims. The methods section provides transparency about the thematic analysis process, including reflexivity, coding strategies, and theme development. The results section presents each theme systematically, supported by data extracts and interpretative insights [8]. The discussion section ties the findings back to the research question, theoretical framework, and broader literature. Challenges in this phase often include balancing depth and clarity in presenting themes, managing word limits, and maintaining reader engagement while avoiding unnecessary repetition. Researchers may also struggle with determining how much detail to include in their methods and results sections without overwhelming the reader [12]. Additionally, the pressure to present a "neat" narrative can sometimes lead researchers to oversimplify complex or contradictory data patterns [9]. The significance of this phase lies in its role as the culmination of the entire thematic analysis process. A well-written report does not merely document the findings but offers a persuasive, reflective, and theoretically grounded interpretation of the data. It ensures that the analysis contributes meaningfully to academic knowledge, policy, or practice [8].

Table 4 presents a checklist that serves as a practical tool for verifying the adherence to all essential phases of thematic analysis, thereby ensuring a comprehensive and rigorous approach. By systematically following these guidelines, researchers can enhance the credibility of their analysis, generate meaningful insights that accurately reflect the data, and contribute to the depth and reliability of qualitative research.

Table 4
16-item checklist for ensuring complete thematic analysis in qualitative research.

No of phases	Six phases in thematic analysis	16-items checklist for ensuring rigor	Yes	No
Phase 1	Familiarization with the data	(a) Have you thoroughly read and re-read the data to immerse yourself in it? (b) Have you noted initial ideas and potential patterns during the reading process?		
Phase 2	Generating initial codes	(a) Have you systematically coded meaningful features in the data? (b) Have you ensured that all relevant data items are coded comprehensively? (c) Have you used software or manual methods to organize the codes effectively?		
Phase 3	Searching for themes	(a) Have you reviewed the codes to identify broader themes? (b) Have you grouped related codes into potential themes?		
Phase 4	Reviewing themes	(a) Have you refined and adjusted themes to ensure coherence and relevance? (b) Have you verified that themes are supported by multiple data excerpts? (c) Have you ensured that no key aspects of the data were overlooked?		
Phase 5	Defining and naming themes	(a) Have you clearly defined each theme and its scope? (b) Have you named the themes in a way that captures their essence? (c) Have you ensured that themes provide meaningful insight into the research question?		
Phase 6	Writing the report	(a) Have you provided clear explanations of each theme? (b) Have you supported themes with direct quotes from the data? (c) Have you ensured that your analysis provides depth and insight rather than just describing the data?		

Conclusion

The six-phase framework of thematic analysis provides a structured yet flexible approach for analyzing qualitative data, offering researchers a robust method for generating meaningful insights. Beginning with familiarization, researchers develop an intimate understanding of their data, laying the groundwork for systematic coding in the second phase. The transition to searching for themes enables the identification of recurring patterns, while the review phase ensures that these themes are internally coherent and externally distinct. Defining and naming themes refines their focus and clarity, ensuring that each captures an essential aspect of the data. Finally, the reporting phase weaves these refined themes into a compelling narrative that addresses the research question with depth and precision. Reflexivity serves as a cornerstone throughout this process, safeguarding transparency and rigor by documenting the researcher's influence on analytical decisions. Collectively, these phases ensure that thematic analysis is not merely a descriptive exercise but an interpretative endeavor that captures the richness, complexity, and depth of qualitative data. The methodological clarity provided by this approach strengthens the credibility of findings, making thematic analysis an invaluable tool for qualitative research across diverse disciplines.

Authors contribution

SKA conceived and designed this paper. **SKA** wrote the manuscript. **SKA, RAM, AJN, RHI, AQA, BMMA,** and **RMK** revised the manuscript. The author(s) read and approved the final manuscript.

Ethical approval

The ethical approval was not required, as the study conducted did

not involve any ethical concerns or issues.

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Declaration of Competing Interest

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