Theory Development in Thematic Analysis: Procedure and Practice

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ARTICLE DETAILS

ABSTRACT

Thematic analysis has widely been used in qualitative data analysis for theory development. This paper illustrates step-by-step procedure of qualitative data analysis through thematic analysis. Thematic analysis was performed on ten in-depth interviews which were transcribed for analysis. Coding in qualitative research is a systematic process through which the collected data were condensed into smaller analyzable units, called as codes, which were further categorized and developed into themes. Coding process eventually helped researchers to build a general theoretical concept about the qualitative evidence. Major themes that emerged in this analysis include (i) the management issues and (ii) employees’ apprehensions. Findings were interpreted and their implications were discussed in detail in the section of conclusion.

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1. Introduction

In recent times, qualitative research has attained remarkably growing interest and significance in social sciences and related fields. Linneberg & Korsgaard, (2019); Clarke and Braun, (2020) state that qualitative research paradigm has received quite a considerable attention in social sciences, arts and management fields. As stated by Miles, et al. (2014) qualitative research allows researchers to develop codes, compare similar and dissimilar categories, identify themes, formulate relationships and build theory. As mentioned by Gibbs (2007) and Braun & Clarke (2006) thematic analysis is one of the most important and prominent qualitative data analysis strategies. While doing qualitative analysis, researchers are required to be capable enough to learn and practice various stages in thematic analysis strategy such as familiarising with data, coding, categorising, comparing and developing themes from categories and theory building i.e. figure 2 (Gibbs, 2007; Braun & Clarke, 2006; Linneberg&Korsgaard, 2019; Charmaz, 2006; Coffey & Atkinson, 1996). Lately, many studies have also observed that researchers have to undergo extensive process and training required
to perform analysis of qualitative data in order to build theory (Sharma, Sengupta & Panja, 2019; Mays & Pope, 2019).

The quality of research depends mainly on the ability and excellence of knowing well the coding process (Strauss, 1987:27). Likewise, Gibson & Brown (2009) suggest that the appropriate analysis of data and generating valid knowledge causes any research effort successful. The basic function of coding is mainly, data reduction, organization, and a substantive process of data exploration, analysis and theory building. In every research procedure, there are various stages from designing research questions to the writing of and presenting research findings and each stage requires an analytic engagement with the data.

According to Marshall & Rossman (2006:154) qualitative data analysis (QDA) is a process in which themes and relationships are established by identifying statements or phrases. Similarly, Taylor & Gibbs (2010) confirmed that QDA is a thorough process of discovering truth and establishing theoretical knowledge about people, situations and phenomenon. It is a basic aspect of qualitative research and the analytical process of breaking down the data to generate themes. It is basically a science of interpretive philosophy. The need for doing QDA is plain, that is to analyze and observe the meaningful and symbolic content of the data (Seldana, 2009; Peel, 2020). And so, coding is done because, “Text data are dense data, and it takes a long time to go through them and make sense of them” (Creswell, 2015, p. 152). The researcher is required to make central decisions while engaging rigorously in qualitative data coding in order to improve the quality of analysis and findings. There are several analytical strategies in QDA namely, phenomenological description, grounded theory, narrative analysis, qualitative content analysis, discourse analysis, thematic analysis and so forth. While, this article deals with numerous stages of thematic analysis strategy such as generating codes and categories, developing themes and theory from qualitative data i.e. KII.

2. Data Preparation and Coding Process in QDA

In every research, there is a stage of collecting the required information, called data. The qualitative data consists of words, documents, pictures and observations which are mostly non-numerical in nature. The next stage after data collection is data processing, which is to decode, analyze and interpret the collected data in order to answer the research question(s) and achieve objective(s) of the study. The next stage called data editing requires the data to be cleaned, and the researcher has to make sure that it is free from inconsistencies, incompleteness and gaps. Coding is the next stage after data is edited. As stated by Gibbs (2007), in the data analysis process, huge quantity of data has to go through coding step first in order to condense it into meaningful words, phrases or expressions. Coding is basically an analytical technique, in which data is arranged and categorized so that its interpretation could be manageable and comprehensible. Likewise, Sharon (2004) describes coding as a systematic process in which researchers try to condense vast datasets into smaller analyzable units, creating categories and concepts obtained from the data. Similarly, Creswell (2015, p. 156) defined Coding as “the process of analyzing qualitative text data by taking them apart to see what they yield before putting the data back together in a meaningful way”. Precisely, coding is an analytical procedure of generating short labels such as, words or phrases that clean, categorize and analyze the data so that its essential properties are not destroyed. One of the prime purposes of coding is to find the recurring patterns of action and inconsistencies in human affairs as depicted in the data and then apply for the codes (Sharon, 2004; Seldana, 2013). Hence, in coding process, the data is analyzed and segregated into fragments, which are labelled as ‘codes’,
frequently known as words or short phrases that symbolically represent collective, prominent, essence-capturing, and/or suggestive characteristics for a segment of the data.

Qualitative data is descriptive and conceptual, there are several types of qualitative data, such as, textual or descriptive information collected through interviews, participant observation, field notes, documents, journals, literature, photographs, video clips or any social media posts e.g. twitter, facebook, whatsapp (Saldana, 2009). Such textual and descriptive information collected is further transformed into codes. Coding is not an exact science, but an analytical procedure of interpreting the qualitative data to discover truth (Saldana, 2009). Coding enables researcher to analyse the data, transform it into variables and categories of variables which eventually facilitate the researcher to report the research findings. Coding is “how you define what the data you are analysing is about” (Gibbs, 2007). Moreover, the frequently occurring codes are noted, similarities and dissimilarities between them are observed across descriptive text and finally compared to identify themes. As suggested by Crabtree & Miller (1999), coding enables researcher to handle huge amount of data to interpret and organize. Briefly, coding categorizes and analyses data to facilitate analysis.

3. Significance of coding in theory building

The fundamental purpose of coding to a great extent is data reduction, organization, and essentially data exploration, analysis and theory building. Theron (2015) affirms that coding is one of the basic and essential segments of data analysis in qualitative empirical research. It is a key analytical stage, where data is rigorously read and transcribed before dividing it into distinctive and meaningful analytical components. Coding plays a vital role in qualitative data analysis by allowing the researcher to develop fragments of the data into symbols, descriptive words, or categories. It enables the researcher to decode and analyse the collected data. Sharon (2004) referred to coding as a process of observing and interpreting the data in order to build a general theory. Coding generates an analytic chain that connects, conforms and integrates the key themes from the analyzed data and answers the research questions (Smith and Davies, 2010; White, et al. 2003; Charmaz, 2006). To put in brief, coding is primarily a hermeneutic (or interpretive) act that represents the transitional process between data collection and more extensive data analysis (Saldana, 2009, p. 4).

4. Research Method

Qualitative data analysis is a complex process which requires researchers to understand each stage in detail. This is a repetitive and tedious activity with an interesting outcome in the end i.e. theory building (Braun & Clarke, 2006). In most of the qualitative analysis strategies coding, and themes are important stages which lead researchers to build theory (Saldana, 2009). During coding process researchers began realizing a number of similar and dissimilar codes appear which need to be clusters and categorized for further refinement and sub-categorizing. Figure 1 illustrated various stages of qualitative data analysis (Saldana, 2013). Previous researcher also noted that coding and categories are important stages which usher researcher to decide about themes (Richards, 2007). Themes naturally give birth to theory (Corbin, 2008). In qualitative data analysis one of the most popular analysis strategy is thematic analysis (Bauern& Clarke, 2020).
5. Procedure of Thematic Analysis

In order to perform analysis and interpretation of qualitative dataset, we obtained 10 in-depth interviews. We transcribed all the interviews and prepared them to be analysed in thematic analysis strategy (Braun & Clarke, 2020; Braun, et al. 2006; Butcher, et al. 2001). Figure 2 illustrates various phases in qualitative data analysis through thematic analysis. In phase 1, requires researchers to familiarize himself or herself with transcriptions with repetitive reading. This is very crucial stage that enables researchers to read the text between the lines so that codes or meaningful patterns can be located which can be potential codes. In phase 2, after familiarizing with transcriptions, researchers prepare initial codes. At this stage, researchers carefully attend to codes, labels and categorise for further process (Gibbs, 2007; Braun & Clarke, 2006; Peel, 2020 Braun & Clarke, 2020).

Figure 2: Phases of Coding in Thematic Analysis

In phase 3 researchers prepare for identifying themes. This is critical stage where correct decision takes researcher to build theoretical framework adequately. Phase 4 provides researchers
with an opportunity to revisit their initial thematic scheme. At this stage, researchers could review their earlier codes and categories and move to final decision. In phase 5, researchers name their themes they constructed from codes and categories. Last phase 6, researcher interpret and prepare report or thesis and justify their theory building.

6. Discussion of findings in thematic analysis

We followed Gibbs (2007) thematic analysis procedure step by step illustrated in figure 2. Creswell (2009) observed that qualitative data analysis is a repetitive process where analysts has to read and reread several time same interview transcripts to identify similar and dissimilar codes, patterns and categories of codes (figure 1). For current study, researchers performed thematic analysis of 10 in-depth interviews. Appendix A presents one of the transcripts of 10 interviews utilized for analysis for this study. In the first stage, we began process of analysis by reading and rereading toget familiarized with the text. We attempted to locate important phrases, words or patterns and identified them with codes (stage 1 in figure 3). In the second stage, researchers categorized various similar and dissimilar categories of the codes (stage 2 in figure 3). In stage 3, researcher searched for potential themes from the similar and dissimilar categories. Researchers, reviewed themes identified from categories and also gave another reading to the dataset to ensure nothing important is left behind. The review and revised analysis of the themes enabled researchers to come up with unified theme (stage 4 in figure 3). In the next stage, themes were given appropriate names and in the last stage a tentative theory was developed. Figure 3 illustrates researchers’ thematic analysis performed based on 10 in-depth interview transcriptions.

6.1 Stage 1: Preparing Codes

After detailed familiarization with all interview transcripts, researchers developed a list of relevant codes and meaningful patterns. Stage 1 in figures 3 illustrates a number of codes developed from extensive reading of the text of 10 interviews. First stage in qualitative data analysis is performed very carefully and with ample readings of the transcripts to ensure every important and meaningful pattern is captured or underlined. In present dataset, a number of common meaningful patterns that frequently appeared were highlighted. While answering employees they spoke about loopholes in management of the organization system and absence of proper written job descriptions as result employees could ‘evade responsibilities’ which also shows lack management interest in the organizational affairs. Employees also mentioned absence of HRM department and training of employees for enhancing employees’ skills, knowledge and capabilities. There was lack of motivation, incentives, rewards, career progression and promotion mechanism defined.

6.2 Stage 2: Categories of Codes

From the list of codes from figure 3, authors prepared categories of similar and dissimilar codes. Separating similar and dissimilar categories is undertaken to reduce the redundancy and repetition in the coding scheme and end up with nuance and clear categories that will help develop themes. Codes explicitly convey message that there are management issues that employees identified with reference to responsibilities, training, motivation, promotions and skills and capabilities. In addition, management issues highlight there is lack of resources which overall create employees’ dissatisfaction with limited career prospects in the organization.

6.3 Stage 3 and 4 Reviewing and Naming Themes

This stage allows researchers to review codes, categories and developed themes and adequately assign them with a title. Figure 3 illustrates two themes emerged from the interview
transcripts with interpretation.

6.4 Theme 1: Poor Management

Figure 3 reveals number of codes (i.e., stage 1) that was prepared from the detailed analysis of 10 transcriptions. After coding the dataset, similar and dissimilar codes were separated into categories (i.e., stage 2) so that themes could be developed in (i.e., stage 3), ‘Poor management’ is a major theme that has emerged from categorizing the codes. In codes, it has been identified that employees shares their experiences and feelings at work. Most of the common and frequently terms that appeared in interview were evading responsibilities; disinterest and limited opportunity of training and skills development initiatives, lack of motivation at work. After separating similar and dissimilar themes one category was developed e.g. poor management. This category is not just one term but it tells the whole story which is depicted in codes and categories. This category also leads to the next stage to decide about theory.

6.5 Theme 2: Employee Burnout

We followed the same procedure of that was done in development of theme 1. Employee burnout is an expression of employees’ experiences and feeling that show dissatisfaction and maybe withdrawal or intent to quit due to prevailing circumstances in the organization. Codes and categories also illustrate limited future prospects and career growth in terms of promotion and financial benefits. Management seems not interested in the affairs of organization which develops apathy in the organization and employees feel burnout which may lead them to decide about their future by searching for new jobs and quitting the organization.

6.6 Stage 5: Theory building

Based on coding scheme, similar and dissimilar categories and themes researchers attempt to theorize about the phenomenon under investigating (Creswell, 2009; Mackieson, et al. 2018; Vaismoradi & Snelgrove, 2019; Clarke & Braun, 2020). In current study, we adapted Braun & Clarke (2006) approach in explaining theoretical underpinning of the themes emerged from the data analysis. We theorized that poor management causes employees’ dissatisfaction and intent to quit’. This theory is extensively grounded in the themes, categories and data codes. Theory building thematic analysis starts from general reading of the text and identifying the important terms and phrases which convey some hidden meaning and researchers consider them codes. This process continues from one interview transcript to the next and goes on and on until all the transcripts are not coded. Researchers give multiple reading to the text of all transcripts to identify codes. From codes similar and dissimilar codes are separated so that redundancy could be avoided which leads to decide about themes. In the end, based on themes a theory is coined.

7. Conclusion

This study attempted to highlight significance of theory development in qualitative research which has long been ignored in the literature. For researchers who are interested in qualitative methods in the field of Arts, Management and Social Sciences study showed various decision-stages in QDA with reference to thematic analysis. We tried to elaborate the complete process of thematic analysis step by step with practical example so that readers have a closer reflection of the analysis process. Yet, interested qualitative researchers need to understand their project phenomena, research question(s) and research objective(s) and choose accordingly the qualitative analytical strategy to fill the research gap and to answer adequately the academic and research question(s) raised in their respective research study. Thematic analysis strategy is one of the many strategies
such as CDA, grounded theory, qualitative content analysis, narrative analysis, analytic induction and many more. We hope, the current study framework i.e., figure 3 which illustrates various stages of analysis process will prompt closer reflection on how the coding process was carried out and what decisions were made in terms of what are the codes, categories and themes. For the beginners, this study sets an excellent example of guidelines, yet, there is need to read more and more to get exact idea how to perform thematic analysis or one that fits well to their circumstances.

**Figure 3: Framework of Thematic Analysis from Coding to Theory Building**

<table>
<thead>
<tr>
<th>Codes (stage 1)</th>
<th>Categories (stage 2)</th>
<th>Themes (stage 3 and 4)</th>
<th>Theory (stage 5)</th>
</tr>
</thead>
</table>
| Evading
responsible |
| Lack of management interest |
| Lack of organisational ownership |
| No training programmes |
| Need motivating managers |
| No motivation and incentives |
| No hope for promotions |
| Unclear goals and poor skills |
| No capability building |
| Management issues |
| Poor Management |
| Poor management causes employees dissatisfaction and intent to quit |
| Employee Dissatisfaction |
| Employee Burnout |
| No Future Prospects |

<table>
<thead>
<tr>
<th>General</th>
<th>Particular</th>
</tr>
</thead>
</table>

**Reference**


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Appendix A: Interview Transcript

Designation of participant with gender, age, experience and organisational affiliation

<table>
<thead>
<tr>
<th>Admin Manager (Male, 10 year experience, age 35+)</th>
<th>Educational Institution</th>
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**How do you see your organisation enhances capabilities of employees at work?**

**Admin Manager Reply:** Basically, this is a private limited company owned and managed by a family. Current top management inherited from their forefathers and this would remain same to coming generations. We do not have full-fledged human resource department. HR functions are performed by marketing manager and finance manager also help in carrying HR responsibilities. More recently, our general manager has come back from Germany and arranged a meeting with key staff members I was also there. He emphasized the importance of HRM, employees’ participation, motivation, satisfaction, commitment, training and so much about modern HR concepts. So there is very small focus on employees training.

1.1 **Would that mean that until HRM department has not been established there will be no employees’ capability programme?**

Well, I would say that I asked top management in meeting a relevant question about whether our company is going to have independent HR department and with focus on training and development. He replied: very soon. I hope someday we might realise the importance of employees’ capabilities as core variable for company success. In present scenario, it remains elusive concept and there is no enhancement of employees’ capabilities.

**How would your company ensure the capability building imparted through training has been successful and employees attained the skills and attributes they were aimed in training?**

**Admin Manager Reply:** You could imagine a company that has just realised to have HRM department what evaluation mechanism it should have for employees’ capability assessment. We are a sales oriented company and assess our task and targets periodically. Nevertheless, there is annual evaluation of employees too. There are number of pending issues that management is always trying to sweep them under the carpet. At many occasions managers hide information and excuse for not having adequate resources and revenues. Managers are lying with workers so often. Training is considered as expenditure rather it is for capacity building of employees. I have spent large time in this organisation with limited opportunity of training and development which is very frustrating.

**Would you please illustrate how your organisation is attempting to create the ‘right’ environment to allow individual skills and talents to bloom?**

**Admin Manager Reply:** I am a business graduate and it is my belief that this is a competitive age and those companies which invest in human factor and create conducive working atmosphere could survive and succeed. But, frankly speaking, private companies hardly realise the importance of human
factor in cut-throat competitive world. Private companies operations and business are limited and they do business for profit earnings only.

2.1 It appears as if your company, though it is not small company, is more likely to earn profit rather than having HRM department, T&D and create conducive work environment. So what is the main reason of all that?
Management is mediocre with mundane and traditional approaches. As there is saying that “old habits die hard”. It’s very old company with only focus on profit making. Since our GM has returned from Germany it seems he is serious to bring about change in the company. He has issued directives in this regard too. But, we have yet long way to go. In current circumstances, I do not see it is right working environment here.

4 What do (a) younger and (b) older workers view fairness at work?
Admin Manager Reply: I would say that this is a private company and fairness and equality are at the discretion of our owner-manager. It is an ideal concept which is not practicable here.

5 Do you think that the ‘younger generation’ is drawn to ‘fairer’ work environments?
Admin Manager Reply: I think majority of people here is older and they have spent over ten years of service. Permanent recruitment is limited and only temporary workers are here.

6 Would you please comment on how your company promotes equality, diversity and inclusion (EDI)?
Admin Manager Reply: I do not know how to respond to this question. Private companies are run by their owners with their likes and dislikes.

6.1 It seems that you are not happy so are you searching some jobs.
Admin Manager reply: I have tried to quit this company but since I have joined this company on the terms and conditions that I would remain here for five years. Now I have started searching and would leave this company sooner.

7 Do you recruit women in your organisation?
Admin Manager Reply: Yes, there are some women working in marketing, manufacturing and finance sections.

8 What are the specific challenges and opportunities that they face?
Admin Manager Reply: I do not think so they have any problems here since they have spent long time here.

9 Whether the concerns of those seeking inclusion are being 'heard' or not, and the extent and the manner in which voices are 'heard' or 'silenced'.
Admin Manager Reply: We are at the discretion of our owner. Normally, in small and medium private companies people have very limited opportunity to raise their voice as they do not have support from their fellow workers. And, in case someone speaks of rights such as salary, bonus, promotions, balance in work shifts then he would be isolated and sacked immediately. So everyone is interested to save the job rather speak about the rights. It has been very frustrating and feels burning at work. People find it wise to be silent rather speak.

10 If staff feel that they have been treated unfairly, what formal procedures could they pursue?
Admin Manager Reply: I have no information about this.

11 Why might staff be reluctant to pursue grievances?
Admin Manager Reply: People are very scared of management/owner. Because, owners are sitting in the same building and nobody would dare to talk against them. It is highly unlikely that we employees can disagree.

12. You have good formal HRM policies in place, but more informally, what would improve people’s well-being at work?

Admin Manager Reply: I do not know at all about this.

13. How is composition of your workforce in terms of ethnic or provincial affiliations? [Are there some employees from disadvantaged areas of the country such as Balochistan, federally administered tribal areas (FATA). The extent to which specific groups (especially those that have been traditionally disadvantaged) are being ‘included’ in work organisations (and the degree to which this is an improving or deteriorating situation)].

Admin Manager Reply: I think we do not have any employees either from Balochistan or FATA

14. Are there any reasons/challenges that mean that you are unable to recruit more staff from these groups?

Admin Manager Re