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Alex C. Michalos
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Thematic Analysis

Virginia Braun[1] and Victoria Clarke[2]

(1) School of Psychology, The University of Auckland, Auckland, New Zealand

(2) School of Social Sciences, University of the West of England, Bristol, UK

Victoria Clarke (Corresponding author)
Email: Victoria.Clarke@uwe.ac.uk

Virginia Braun
Email: v.braun@auckland.ac.nz

Without Abstract

Definition

Thematic analysis (TA) is a set of methods for identifying and interpreting patterns of meaning across qualitative data.

Description

In the social and health sciences, TA has been extensively used for analyzing qualitative data, but until the last decade or so, there had been little discussion of TA as a method or guidance provided for its use (Aronson, *1994*; Boyatzis, *1998*; Patton, *1990*, provide early exceptions). In 2006, Braun and Clarke (*2006*) proposed a "systematic" and "sophisticated" (Howitt & Cramer, *2008*, p. 341) approach to TA, which has subsequently been widely adopted. Although TA is often used merely to describe or summarize key patterns in data, for Braun and Clarke, a good TA involves more than simply reporting what is in the data; it involves telling an interpretative story about the data in relation to a research question.

TA is often referred to as if it is one homogenous entity, with one set of underlying assumptions and analytic procedures (Terry, Hayfield, Clarke & Braun, 2017). But it is not. Braun and Clarke (2019) now label their approach reflexive TA and distinguish it from other approaches to TA – ones that involve the use of a structured codebook and coding reliability measures. There is considerable variation in the assumptions and procedures between broadly-different clusters of approaches to TA, which need to acknowledged in doing (good) TA. Beyond "reflexive" TA, Braun and Clarke refer to the other clusters as "coding reliability" or "codebook" TA.

Distinguishing coding reliability, reflexive and codebook thematic analysis

They key distinguishing aspect of *coding reliability* TA is the use of a structured codebook, alongside multiple independent coders, to ensure that coding is 'reliable' (Boyatzis, 1998, Guest, MacQueen & Namey, 2012, Joffe, 2012). Coding reliability is assessed via a calculation of inter-coder agreement or 'inter-rater reliability' (IRR). Typically calculated using Cohen's Kappa, a score of .80 or above is taken to demonstrate reliable coding. Coding reliability TA is often deductive, but inductive approaches are possible. Themes are developed *early* in the analytic process, either in advance of analysis, and informed by prior theory or the data collection questions, or following data familiarisation. Coding *follows* theme development, and is conceptualised as a process of searching for evidence of the (prior developed) themes.

The structured codebook usually consists of a list of (early- or pre-developed) codes. Each code includes a label, a definition, instructions on how to identify the code/theme, details of any exclusions, and examples. This approach effectively conceptualises codes as an analytic 'input' – as the tools the researcher uses to generate analytic outcomes. Two or more researchers – working independently – *apply* the codebook to either a portion of the data or the data in its entirety, and IRR is then calculated. Any differences in the application of the codebook is then resolved by the researchers. This approach to coding can be characterised as 'consensus' driven, and the logic of this approach is manifestly positivist (or 'post-positivist', given that few quantitative researchers would claim to be unreconstructed positivists), driven by correctly identifying the evidence in the data. Some coding reliability proponents have viewed their approach to TA as 'bridging the divide' between qualitative (interpretivist) and quantitative (positivist) approaches (Boyatzis, 1998). The divide is effectively bridged by using qualitative *techniques* within a (post-)positivist *paradigm*, there the values of (post-)positivism prevail (Kidder & Fine, 1987), and especially reliance on (post-)positivist conceptualisations of reliability.

Reflexive approaches – exemplified by Braun and Clarke's approach (e.g. Braun & Clarke, 2006; Terry et al., 2017) – offer a fully qualitative approach to TA. Such approaches are *reflexive* because they emphasise the researcher's *active* role in the analytic process, with researcher subjectivity conceptualised as an analytic resource, rather than a source of 'bias' to be managed through the use of coding reliability measures. The theoretical flexibility of reflexive TA is not limited by theoretical assumptions imported from (post-)positivism. However, although it *is* used in realist research, reflexive TA is thoroughly and unapologetically located within a 'Big Q' (Kidder & Fine, 1987) qualitative paradigm. Reflexive TA is intended for use across the Big Q qualitative spectrum: from experiential (critical realist, contextualist) qualitative research 'giving voice' to participants' lived experiences and sense-making to critical (constructionist, poststructuralist) qualitative research interrogating taken-for-granted assumptions and cultural commonplaces (Braun & Clarke, 2013).

In reflexive TA, the researcher is conceptualised as a *producer* rather than an excavator of patterns of meaning, a sculptor rather than an archaeologist (see Braun & Clarke 2013). Analysis is produced at the intersection of the data with the researcher's tools, experiences and knowledges, not *found* within data. The researcher brings disciplinary knowledge, prior research training and experience, particular theoretical standpoints (both avowed and implicit) and their own subjective experiences around the topic, to the data, and through a systematic process of engagement, works to determine and develop their analysis.

Within this approach to TA, coding is conceptualised as an inescapably subjective and interpretive process. There is no aspiration to positivist notions of 'coding reliability' so it is entirely legitimate,

and indeed typical, for just one researcher to code and analyse their data. Of course, an experienced thematic analyst – such as a supervisor or mentor – can help a novice researcher refine their coding and develop a more nuanced and complex 'take' on their data. Developing the coding of a dataset (whether alone, or with input from other coders or supervisors) is not about moving to more 'accurate' coding, but to richer, or more precise, or more nuanced, and hence *stronger* coding. Within reflexive TA, coding is conceptualised as stronger and weaker, not in/accurate or un/reliable.

Coding is viewed as an organic and recursive process. Coding is thought to strengthen – become more nuanced and complex, and move beyond obvious, surface meanings – through depth of engagement with the data. A set of codes is the *output* of the coding process, the 'endpoint' of the phase(s) of coding. This is very different from the analytic process recommended by coding reliability proponents, where codes are more an 'input', identified and applied from the start of the coding phase. Another key difference between coding reliability and reflexive approaches is that in reflexive TA, themes *follow on* from coding: themes are developed *from* codes; ongoing deep and reflexive analytic engagement is crucial to theme development.

A third group of approaches of TA – *codebook* TA – sit somewhere between coding reliability and reflexive TA. This orientation is exemplified by template analysis (Brooks, McCluskey, Turley & King, 2015; 2014), the framework approach (Ritchie & Spencer, 1994; Smith & Firth, 2012) and the matrix approach (Miles & Huberman, 1994; Nadin & Cassell, 2014). Like reflexive TA, these approaches are located within a qualitative paradigm; similar to coding reliability TA, they also use a structured approach to coding and theme development. But where they depart from coding reliability TA is that coding is understood as fundamentally subjective and interpretive, and positivist conceptions of coding reliability are not generally advocated. Like coding reliability approaches, themes are primarily an analytic input (rather than an output); initial themes are often drawn from prior research and theory, and from data collection questions, but can also be developed inductively. Similarly, coding is often conceptualised as a process of searching for evidence for themes. Some argue that this more structured approach to coding and theme development is useful for novice qualitative researchers, who can feel at sea without some structure to guide them (King, 2014).

Thematic analysis as applied research method

Quality of life research intersects with applied (TA) research. Applied research, traditionally conceptualised as distinct from 'basic' or 'theoretical' research, has been described as having particular characteristics, including principally the generation of actionable outcomes or outcomes that have high 'utilisation value' for practitioners and others (Ritchie & Spencer, 1994; Sandelowski & Leeman, 2012). Applied research is often conceived of as meeting specific, pre-identified information needs and its aims and objectives are often are highly focused (and fixed) (Ritchie & Spencer, 1994; Smith & Firth, 2011). As applied research often includes involvement of multiple researchers, some of whom may have little prior experience of qualitative research (Ritchie & Spencer, 1994), methods need to be efficient and accessible for both team-research and qualitative novices, as well as transparent and accessible to practitioners involved in implementing the outcomes (Ritchie & Spencer, 1994; Sandelowski & Leeman, 2012). For some, such constraints mean that applied qualitative research necessarily involves some compromise of qualitative principles, where the open, exploratory, and (sometimes) inductive elements (Kidder & Fine, 1987) pose a challenge. Authors of coding reliability or codebook approaches to TA argue that the use of (at least some) apriori themes (and codes), and a structured codebook: accelerate coding, making research less time consuming; facilitate team work, and the inclusion of qualitative novices who

often need some kind of framework to guide their first attempts at coding; and ensures transparency and accessibility (King, 2012; Smith & Firth, 2012).

Several applied researchers (e.g. Connelly & Peltzer, 2016; Sandelowski & Leeman, 2012) have, however, highlighted problems in applied TA, of under-developed themes and findings that do not move beyond a "superficial reporting of what the participants have said" (Connelly & Peltzer, 2016: 51). Under-developed themes can result from importing disciplinary concepts (e.g. self-esteem, social support) into the analysis without any evident reflection on whether that has produced a deeper analysis, offering new understandings. Theoretically-bound concepts – like these – can be imported into the analysis, but unacknowledged, meaning applied TA often appears to have been conducted in a theoretical vacuum, with analysis not explicitly theoretically located, and/or any relationship between themes presented and a stated theoretical framework not discussed. Critics have argued such under-development has consequent limits to the practical utility of applied TA.

Indeed, within TA research, there are quite different conceptualisation of what a 'theme' is, ranging from shared meaning-based themes to summaries of data topics or 'domains' (Clarke & Braun, 2018; Connelly & Peltzer, 2016). Shared meaning-based themes capture and report patterned meaning, united around a central concept or idea. Such themes evidence the following properties: patterns of recurrent meaning actively developed by the researcher, from smaller meaning units (codes), which unite often disparate data, cohering around a central concept or meaning (DeSantis & Ugarriza, 2000). Domains, in contrast, are *areas* of data where quite disparate ideas might be expressed. Domain 'themes' often consist of a summary of 'everything the participants said about X'; they can usually be labelled with one or two words such as 'gender' or 'satisfaction'. Themes and domains are fundamentally different: the crucial difference is that domains capture a shared *topic* but do not unify meaning, while themes are organised around a shared *meaning* and often cut across multiple domains.

The use of domains-as-themes has been critiqued as part of a wider problem of analytic foreclosure in applied TA research, where analysis is 'under cooked' (Connelly & Peltzer, 2016). Some codebook and coding reliability proponents argue that analytic foreclosure – through reporting domains, the importing of pre-existing disciplinary concepts to make sense of the data, and the development of 'themes' from data collection questions – is a *necessary* feature of applied TA for reasons noted above. Others maintain that this is *not* necessary, it is just poor analytic practice and undermines usefulness (Sandelowski & Leeman, 2012). For findings to be accessible to, and actionable by, practitioners, they must be organised into thematic statements (Sandelowski & Leeman, 2012). Reflexive TA can produce the sorts of thematic statements that can be translated into actionable outcomes for practice and policy that several applied scholars have argued for.

Doing reflexive thematic analysis

Reflexive TA is flexible in how it can be used to analyse and theorize data. Although reflexive TA is a Big Q qualitative approach, within the bounds of a qualitative paradigm, it is not tied to a particular theoretical framework, so it can be used within an experiential framework, where language is treated as a window on reality or people's experiences, perspectives and practices (Hall, *1997*), or a constructionist or critical framework, where language is treated as constructing and creating the meanings and "reality" evident in the data (Burr, *2003*). In terms of analysis, reflexive TA can be used inductively, where the analysis is driven by the content of the data, by the participants' language and concepts, or deductively, where the data are analysed through the lens of preexisting theories and concepts. Reflexive TA is often used to summarize and provide a rich *description* of a dataset, identifying key themes and patterns of meaning at the surface (semantic) level of the data; it

can also be used to interrogate the "hidden" or latent meanings in a dataset, the assumptions underpinning, and the implications of, particular patterns of meaning, and to provide an interpretative and conceptual analysis of a dataset (Braun & Clarke, *2006*).

Cutting across such variety, Braun and Clarke (*2006*, *2012*) describe a (recursive) six-phase process to highlight the analytic concepts and *process* for doing good *reflexive* TA:

1.
Familiarizing yourself with the data and identifying items of potential interest

2.
Generating initial codes

3.
Generating initial themes

4.
Reviewing potential themes

5.
Defining and naming themes

6.
Producing the report

The first phase of reflexive TA, something common across different forms of qualitative analysis, is *familiarization* with the data. This involves the researcher immersing themselves in their dataset by reading and rereading each and every data item (and listening to any audio data at least once), to learn the content of the dataset "inside out." Familiarization also involves starting to identify, and record, potentially interesting features of the data, relevant to the research question.

Familiarization is followed by the process of systematically coding the data to *generate initial codes*. A code is a pithy label that captures something interesting about the data (codes in reflexive TA are very similar to initial codes in grounded theory; see Charmaz, *2006*), and the aim here is to identify potentially meaningful bits of the data, at the smallest level. Codes either summarize the (surface) meaning of the data (called semantic codes, similar to grounded theory's "in vivo" codes (Charmaz, *2006*) and interpretative phenomenological analysis's (IPA) "descriptive comments" (Smith, Flowers, & Larkin, *2009*)) or dig deeper into the data to identify "hidden meanings" (called latent codes), such as assumptions underpinning the semantic content. Latent codes prioritize the researcher's analytic framework; they are sometimes deductive, and the data are examined through existing theoretical lenses. Semantic codes are more inductive and grounded in the data and prioritize the meanings provided in the data. This phase ends with the compilation of a list of the codes and collation of all the data relevant to each code.

In the phase Braun and Clarke now call *generating initial themes*, the analysis shifts to a wider focus. As previously noted, a theme identifies shared meaning patterned across the dataset, underpinned by a central concept, which is important for illuminating the research question (Braun & Clarke, *2006*). It should not be assumed that themes are hidden in the data waiting to be discovered by the intrepid researcher, or that if the researcher is patient enough, themes will simply "emerge" from the coded data fully formed (Braun & Clarke, 2016, Ely et al., *1997*). The process of theme development is an active one (Taylor & Ussher, *2001*)! Theme development involves looking for broader patterns of meaning across the coded data; coded data can be organized into a theme by "promoting" a particularly large and complex code to a theme (Charmaz, *2006*) or clustering similar codes together. There is no one (ideal) way to do this; researchers rely on their own analytic judgment about what is *meaningful* and *important* for answering the research question. A good theme is stand-alone and distinctive, yet themes need to work *together* to form a coherent whole – an analytic *story*. Some codes (and themes) will inevitably be discarded, because they do not fit the developing analytic focus and narrative. This phase ends with a set of *candidate themes*; some sense

of the relationship between themes (perhaps figuratively represented in the form of a thematic map (see Braun & Clarke, *2006*, *2013*, for examples)) and the collation of the coded data relevant to each theme.

There are two levels of *reviewing potential themes*: (1) checking that the themes "work" in relation to the coded data (do they capture the most important features of the coded data relevant to the research question?) and (2) checking that they work in relation to the whole dataset (which involves a final read through of the whole dataset to check). Throughout the reviewing process, the researcher checks that each theme is coherent and substantial, with clear boundaries and a distinct central organizing concept (Braun & Clarke, *2013*). The process of reviewing potential themes is especially important for novice qualitative researchers and when working with larger datasets. The researcher ends this process with a likely final set of themes.

The process of *defining and naming* is the phase where the most substantive, interpretive analytic work is done, and where the researcher produces detailed and complex definitions of each theme, which capture its shape and texture and how it relates to other themes. In this phase, the researcher selects the data extracts that will be used in the final report, and develops and builds the analysis into its final form, with each theme (and the analysis overall) clearly addressing the research question. Ideally, as noted above, the analysis must go beyond simply summarizing or paraphrasing the data, to tell a rich, nuanced, conceptually-informed interpretative story about the meanings embedded in and beyond the surface of the data (see Braun & Clarke, *2006*, for a checklist of quality criteria for TA). Another seemingly trivial but important part of this stage is naming each theme. Good theme names are informative and engaging (short data quotes that capture the "essence" of a theme can be used).

Producing the report is the last phase of a Braun and Clarke's (*2006*) reflexive version of TA. However, as in all other qualitative analytic approaches, writing is integral to the analytic process, so the analysis will usually be close to fully drafted *before* this phase. This phase provides the final opportunity for refining the analysis, such as through the integration of literature, or determining the best order in which to present the themes. The researcher's goal is to tell the rich and complex story of their analysis, situated within the relevant field of scholarship, in a way that convinces the reader of the validity of their interpretations.

In many ways, the procedures and principles of *reflexive* TA are similar to other forms of pattern-based qualitative analytic methods, such as IPA (Smith et al., *2009*) and grounded theory (Charmaz, *2006*). However, unlike these approaches, it is not tied to a particular theoretically framework and provides something closer to a method, rather than a methodology (a theoretically informed framework), for qualitative research. This gives it unique flexibility and the potential for researchers to use it in a range of different ways. It is highly flexible in relation to the types of research questions and appropriate forms of data. So, it can be used to answer a wide variety of research questions: about experiences or perspectives, practices and behaviors, influencing factors, or the representation or construction of particular social objects or processes. It can also be used with almost any type of qualitative data: data generated through a researcher interacting with participants (e.g., face-to-face or virtual interviews or focus groups), data generated by participants writing responses to questions or prompts (e.g., qualitative surveys, story completion tasks, vignettes, researcher-directed diaries), or secondary sources of data (e.g., women's magazines, TV talk shows, parliamentary proceedings). And it can be used for both smaller and larger datasets.

Summary

Overall, reflexive TA provides an accessible, flexible, foundational method for qualitative data analysis, with clear *guidelines* (not rigid *rules*) for conducting analysis. It offers a comparatively

easy entry into qualitative research and can be used to answer many different types of research questions.

References

Aronson, J. (1994). A pragmatic view of thematic analysis. *The Qualitative Report*. http://www.nova.edu/ssss/QR/BackIssues/QR2-1/aronson.html.

Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks, CA: Sage.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101.

Braun, V., & Clarke, V. (2012) Thematic analysis. In H. Cooper (Ed.), *Handbook of research methods in psychology*. (Vol. 2: Research Designs, pp. 57–71). Washington, DC: APA Books.

Braun, V. & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners*. London: Sage.

Braun, V., & Clarke, V. (2016). (Mis)conceptualising themes, thematic analysis, and other problems with Fugard and Potts' (2015) sample-size tool for thematic analysis. *International Journal of Social Research Methodology*, *19*(6), 739-743.

Braun, V. & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise & Health*, *11*(4), 589-597.

Brooks, J., McCluskey, S., Turley, E. & King, N. (2015). The utility of template analysis in qualitative psychological research. *Qualitative Research in Psychology*, *12*(2), 202-222.

Burr, V. (2003). *Social constructionism* (2nd ed.). London: Psychology Press.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: Sage.

Clarke, V. & Braun, V. (2018). Using thematic analysis in counselling and psychotherapy research: A critical reflection. *Counselling and Psychotherapy Research Journal*, *18*(2), 107-110.

Connelly, L. M. & Peltzer, J. N. (2016). Underdeveloped themes in qualitative research: Relationships with interviews and analysis. *Clinical Nurse Specialist*, January/February, 51-57.

Ely, M., Vinz, R., Downing, M., & Anzul, M. (1997). *On writing qualitative research: Living by words*. London: Routledge/Falmer.

Guest, G., MacQueen, K. M. & Namey, E. E. (2012). *Applied thematic analysis*. Thousand Oaks, CA: Sage.

Hall, S. (1997). *Representation: Cultural representations and signifying practices* (pp. 223–279). London: Sage.

Howitt, D., & Cramer, D. (2008). *Introduction to research methods in psychology* (2nd ed.). Harlow, UK: Prentice Hall.

Joffe, H. (2012). Thematic analysis. In D. Harper & A. R. Thompson (Eds), *Qualitative methods in mental health and psychotherapy: A guide for students and practitioners* (pp. 209-223). Chichester: Wiley.

Kidder, L. H., & Fine, M. (1987). Qualitative and quantitative methods: when stories converge. In M. M. Mark & L. Shotland (Eds.), *New Directions in Program Evaluation* (pp. 57-75). San Francisco: Jossey-Bass.

King, N. (2012). Doing template analysis. In G. Symon & C. Cassell (Eds.), *Qualitative organisational research: Core methods and current challenges* (pp. 426-450). London: Sage.

King, N. (2014). Using templates in the thematic analysis of text. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organisational research* (pp. 256-270). London: Sage.

Miles, M. B. & Huberman, A. M. (1994*). Qualitative data analysis: An expanded sourcebook*, 2nd ed. Thousand Oaks, CA: Sage.

Nadin, S. & Cassell, C. (2014). Using data matrices. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organisational research* (pp. 271-287). London: Sage.

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.

Ritchie, J. & Spencer, L. (1994). Qualitative data analysis for applied policy research. In A. Bryman & R. G. Burgess (Ed.), *Analysing qualitative data* (pp. 173-194). London: Taylor & Francis.

Sandleowski, M. & Leeman, J. (2012). Writing usable qualitative health research findings. Qualitative Health Research, 22(10), 1404-1413.

Smith, J. & Firth, J. (2011). Qualitative data approaches: The framework approach. *Nurse Researcher*, *18*(2), 52-62.

Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. London: Sage.

Taylor, G. W., & Ussher, J. M. (2001). Making sense of S&M: A discourse analytic account. *Sexualities, 4*(3), 293–314.

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