Theoretical Data Collection and Data Analysis with Gerunds in a Constructivist Grounded Theory Study

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Abstract: A constructivist grounded theory study into the experiences of coached executives was undertaken to develop theory about the coaching process. The analysis reported in this paper was undertaken in parallel with the analysis to resolve the main concern of the study; that of theorising the coaching process. The purpose of this complementary analysis was to capture adaptations of the standard processes used for data collection and data analysis that facilitated the theoretical direction taken in the research.

The starting point of the process is the careful, well-researched and purposive selection of the “right” first participant, and the end point is theoretical saturation of thematic categories with all variations within the category elucidated.

Selection of the first, key respondent was enabled through networking, and the interview data were in-vivo coded before being converted to gerunds using an additional intervening step in Saldana’s (2016) analytic process. This mechanism converted static descriptive codes to active process codes, enabling the extraction of implicit meanings which facilitated the emergence of theoretical propositions and linkages between codes and categories. Subsequent respondents were selected on a theoretical basis.

The role of the literature in achieving theoretical saturation was facilitated by adopting a reflexive stance and incorporating sensitising consultation of scholarly sources as part of the analytic process applied to each interview transcript in turn during the theoretical sampling process. The inclusion of the literature in this way facilitated the coding of the dimensions of and variations within each category.

Keywords: qualitative, methodology, saturation, sampling, interview, coding, gerund, data analysis, constructivist grounded theory

1. Introduction

A constructivist grounded theory (Charmaz, 2014) study into the experiences of coached executives was conducted to develop theory about the coaching process from the perspectives of the executives themselves. The analysis reported in this paper was undertaken in parallel with the analysis to resolve the main concern of the study; that of theorising the coaching process. The purpose of this complementary analysis was to obtain methodological insights into an area of research rich in debate; that of grounded theory. Coaching was described as a relatively young field as recently as 2014 (Cox, Bachkirova, & Clutterbuck, 2014), and is also considered one of the fastest growing human resource development techniques, both within organisations and in the field of consulting (Ciporen, 2015), which lends itself to grounded theory study.

2. Literature review

This section critiques the normative recommendations in the literature regarding the specific data collection strategies of theoretical sampling and analysis techniques using coding within the broader context of qualitative research and general principles of grounded theory.

2.1 What is theory?

A useful place to start is to examine some definitions of theory, and articulate the connection between data and theory, since those are essentially the building blocks of research. There are many definitions of theory, but some of the more relevant ones are as follows:

- “For our purposes we use a simple, general definition: theory is a statement of concepts and their interrelationships that shows how and/or why a phenomenon occurs” (Corley & Gioia, 2011 p.12).
“A theory is a coherent and systematic ordering of ideas, concepts and models, with a purpose of constructing meaning to explain, to interpret, to shape practice” (Garrison, 2000 p.3).

“A theory is a particular kind of representation of some phenomena . . . it comprises constructs, relationships among constructs, and a boundary within which the relationships among constructs hold” (Weber, 2003 p.vii).

A common theme amongst the definitions is that of concepts and/or constructs, and relationships between the concepts or constructs in order to provide an explanation of a phenomenon. It should be noted that it is “an” explanation, not “the” explanation. This is important because, much as quantitative researchers like to believe in an unequivocal reality (Creswell, 2013b), seldom is there 100% proof of this, and results are typically presented in terms of probabilities rather than absolutes; well illustrated by paraphrasing Mitchell (2009)’s explanation that, “you cannot predict events; you can only predict probabilities of events” (p.130). However, the concept of multiple realities sits more comfortably with qualitative researchers (Tracy, 2010), and theories proposed in qualitative research are presented as propositions, awaiting quantitative verification.

The fourth definition above includes the concept of a boundary within which the relationships can be explained. This boundary can be equated to context and the limits of variation within each concept or construct.

Kearney (2007), reinforced by Apramian, Cristancho, Watling, and Lingard (2017) however, cautions us that, “our postmodern awareness that the complexity of life can never fully be captured in any theory” (p.578). This statement subtly reinforces that knowledge is contextual, which is very much in line with the principles of grounded theory, and reminds us to account for context when investigating the variation within constructs.

As far as the relationship between data and theory is concerned, it worth recalling the words of Kant, cited in Gregor and Timmermann (2012), that, “theory without data is empty, and data without theory is sterile”. The connection between the two is clear and unambiguous, and an integral part of the grounded theory process. The earlier three statements by Handfield and Melnyk (1998) still stand firm; “without theory, it is impossible to make meaningful sense of empirically-generated data”, “without theory, empirical research merely becomes ‘data-dredging’ and, “empirical research is the most severe test of theory” (all on p.21).

Thus, as will be seen in the following sections, the process of taking segments of interview data and coding them through a progressive set of steps, results in explanations, theoretical propositions or assertions.

2.2 Sampling; theoretical and otherwise

Sampling in qualitative research is generally done non-randomly and often purposively (Boddy, 2016), meaning that individuals are selected because they are ‘fit for the purpose’ of answering questions about the particular field of study, ie they are “experts” in one way or another. Morse (2010 p238) pointed out that “qualitative research must be a biased activity” (emphasis added), which Rudestam and Newton (2015) explain that this is because, “qualitative researchers deliberately seek knowledgeable respondents who can contribute significantly to enriching the understanding of a phenomenon” (p123). Thus sampling is done in this way to gain insights from the most appropriate minds possible with which to propose theory or at least suggest theoretical propositions. Because qualitative sampling is sourcing a concentration of focused minds rather than seeking to generalise, the sample is generally a lot smaller (Boddy, 2016) than for quantitative research.

The two principle differentiating factors of grounded theory first proposed by Glaser and Strauss (1967, 1998, 2017) are that data collection and analysis happen simultaneously and iteratively, and that constant comparison of new data with the previously collected data takes place throughout. These two criteria have remained key principles of the method (Charmaz, 2014). The researcher collects data initially with a small, even single (Boddy, 2016), purposively selected sample. The data from these initial encounters are iteratively compared and coded before more data are collected or generated; the emerging theoretical ideas from the early analysis guides the selection of the next respondents, and the cycle of data collection and analysis is repeated. This theoretically guided data collection follows the initial purposively selected sample analysis, which makes it quite different to the more traditional qualitative research designs in which the researcher initially collects and then subsequently analyses their data (Creswell, 2013a; Egan, 2002).
As regards sample sizes, Guest et al (2006, p. 61) found seven sources that provided guidelines for these. These vary from six participants in Morse (1994, p. 225) to 20 – 35 participants in Kuzel (1992, p. 41). Grounded theorists have taken a range of positions on sample sizes, with some emphasising saturating concepts (Bowen, 2008) and others the number of comparison groups (Glaser & Strauss, 1965). It is also argued (Charmaz, 2014) that a very small sample can produce a study of lasting significance and the factors that impact on this would be the quality of the interviews and the depth of the analysis. The literature suggests that factors affecting sample size include:

- Data saturation (Bowen, 2008; Glaser & Holton, 2007; Mason, 2010; Strauss & Corbin, 1998; Thomson, 2011).
- The experience and expertise of the researcher in both interviewing and their subject area are key components in reducing the size of the sample and for reaching saturation (Glaser & Holton, 2007; Hoare, Mills, & Francis, 2012; Lee, Saunders, & Goulding, 2005; Roulston, 2016).
- Appropriately selected participants (Bryant, 2003; Glaser, 1978; Glaser & Holton, 2007; Rudestam & Newton, 2015)
- Multiple interviews with the same participants (Bowen, 2008; Morse, Barrett, Mayan, Olson, & Spiers, 2002)
- Theoretical sampling, ie concurrent, iterative data collection and analysis (Bowen, 2008; Davoudi, Nayeri, Raiesifar, Poortaghi, & Ahmadian, 2016; Glaser, 1978; Glaser & Holton, 2007)

Qualitative samples must be large enough to uncover meaningful data, but not be so large that much data become redundant (Bowen, 2008; Charmaz, 2014; Mason, 2010). Recently, Saunders and Townsend (2016)’s thorough evaluation of 798 articles revealed a range of 15 to 60 participants per study. While there are other factors that affect sample size in qualitative studies, researchers generally use saturation as a guiding principle during their data collection (Mason, 2010). Theoretical saturation occurs when no new “properties, dimensions, or relationships emerge during analysis” (Strauss & Corbin, 1998 p.143). The process of achieving theoretical saturation described by Rowlands, Waddell, and McKenna (2016) is a little different in that they quantitatively analysed completed interviews for contextual meaning using ©Leximancer software until theoretical saturation (including all the variations embedded in the dimensions, attributes and relationships) was achieved. This process, however, lacked the iterative “collect data, analyse data, theorise data, collect more data” cycle typical of theoretical sampling.

Glaser and Strauss (1965) originally described theoretical sampling as the process of data collection for generating theory, in which the analyst jointly collects, codes and analyses the data and decides what data to collect next and where to find them in order to develop the theory as it emerges. Beyond the decisions concerning the initial collection of data, further collection cannot be planned in advance of the emerging theory. Only as the researcher discovers or generates codes and tries to saturate them by theoretical sampling in comparison groups do the successive requirements for data collection emerge, which includes the categories that need to be sampled further and where and from whom to collect the data. In this way, the analyst can continually adjust the control of data collection to ensure the data's relevance to the emerging theory. This process of theoretical sampling remains a cornerstone of the grounded theory method (Corbin & Strauss, 2015; Coyne, 1997; Davoudi et al., 2016; Glaser & Holton, 2007; McCrae & Purssell, 2016). In summary, there is little agreement in the literature about what the ideal sample size is for qualitative studies. However, it is of value to remember that the very nature of qualitative research embraces multiple realities, and that an answer of “it depends . . .” is not inappropriate, as long as the factors on what ‘it’ depends are articulated.

### 2.3 Coding and variation

Coding is the process of assigning an interpretive label to concepts, ideas, constructs or themes that arise from the data (Saldaña, 2016). Saldaña (2016) lists no less than 40 different approaches to or ways of coding (pp. 291-298), which clearly cannot all be implemented in the average study. However, there is nothing to say that a series of rounds of coding could not be implemented, seeking different layers of meaning in the data, although research using such an elaborate approach has not been located. Saldana’s list does, however, open analytical possibilities in triggering researcher awareness of possible theoretical approaches to analysing the data; less about what to look for and more about how to look.
For example, researchers typically start with ‘open’ or ‘initial’ coding, in which chunks of data are examined line-by-line and given a code consisting of a word or short phrase (Corbin & Strauss, 2015). They may employ the in vivo method of assigning codes using the respondents’ own words and language (Strauss, 1987). To add analytical depth, instead of merely using descriptive codes (or in addition to them), the researcher could apply a simple ‘what?’ ‘so what?’ ‘now what?’ reflection model (Carmichael, 2009) to the codes. In the first instance (what?), a descriptive code is fine for simply identifying ‘what’ is in the data. The next step is to ask ‘so what?’, seeking to code what the meaning of that data is, (within context), similar to what Saldana (2016, p.292) calls “concept coding”, then the third step is to answer ‘now what?’, considering the implications of the meaning of the data. This would result in multiple levels of coding, potentially adding nuance and analytical depth. Lipp (2007) had suggested that a micro-, meso-, macro- framework be used for reflection, focusing sequentially on the individual level, the organisational or project level and the societal level respectively. These are only two suggestions from many that would come to light through searching the academic literature using search terms such as “reflection models” or “analytical frameworks”.

Another analytical idea is to code with gerunds, very much favoured by Kathy Charmaz as she described in her conversation with Reiner Keller (Charmaz & Keller, 2016), explaining that the technique assisted the researcher to move forward analytically and identify actions and processes within the data. Saldana (2016) calls this “process coding”, and suggested that it include both observed action and conceptual action such as change, emergence and growth. Lewins, Taylor, and Gibbs (2010) add the notions of strategies, practices and adaptation to the inclusion of gerunds, so that the overall theme of process coding is one of passage through time.

Once initial coding is complete, focused coding (Saldana, 2016) is a typical next step, in which the researcher seeks to identify the codes that are related conceptually and those that are the most numerically frequent or dominant in some way. One of the criteria for Glaser’s core category is the repeated emergence of related theoretical codes (Glaser & Holton, 2007) from the data as the analysis proceeds, so it is logical to interpret that some counting is necessary, despite protestations that “qualitative researchers don’t count” (Morse, 2007 p.287). Focused coding does not consider the properties or attributes of codes, which is why the next step is often axial coding (Strauss & Corbin, 1990). In this process, relationships between the earlier codes are identified or postulated, so that categories can emerge (Draucker, Martsolf, Ross, & Rusk, 2007).

Constant comparison, one of the non-negotiables of grounded theory (Glaser & Holton, 2007; Shepherd & Suddaby, 2017) is operationalised during the process of coding, when each new item of empirical evidence, code or concept is compared to the already existing codes and concepts (Davoudi et al., 2016), looking for similarities, differences, patterns, relationships, refinements, definitions, dimensions, assumptions, and properties. It is then given the same code, a different code, or maybe a sub-code of an existing code, illustrating attributes, properties or magnitudes of that code.

Theoretical memo writing is undertaken as codes, concepts and constructs are identified and analysed (Charmaz, 2014; Corbin & Strauss, 1990), and takes place throughout the research process. Memos are a systematic way to capture theoretical ideas, implications, connections, new emerging questions and make the work concrete and manageable. The memos are the basis of the developing theory (Corbin & Strauss, 2015), and may contribute critically to the theorising, sampling, and subsequent phases of coding. Memos may also be written in relation to the literature, so that articles are treated in the same way as transcripts and coded along with the transcripts; i.e theoretical sampling of the literature (Charmaz, 2017). This is a recently recognised approach to doing a literature review, that has emerged with increasing use of Computer Assisted Qualitative Data Analysis (CAQDAS) tools (Friese, 2014), such as Atlas.ti. This would imply that the concept of theoretical sampling has three, not two components; respondents, the codes that emerge from the data, and integration of concepts from the literature. Part of the value of memo-writing is to develop awareness of the researcher’s prejudices and to be open to data that opposes the researcher’s biases (McGhee, Marland, & Atkinson, 2007), facilitating researcher reflexivity.

The essence of coding in this context requires theoretical and methodological sensitivity on the part of the researcher in order to maximise the richness and depth that can be extracted from the data to guide the theory-building process.
2.4 The role of the literature in guiding the research

In much qualitative research, the interview guide is based on the conceptual framework derived from the literature review (Kvale & Brinkmann, 2009). However, this is not necessarily the case with grounded theory interviews, which, according to Glaser and Strauss (1967, 1998, 2017) in the original article in which they reported the discovery of grounded theory, need to gather data from respondents that is “uncontaminated” by existing theory. The reason for this was given as the need to allow the theory to emerge from the data collected, rather than be guided by previous literature. Glaser, staunchly supported by Holton (2007) was (1992), and still is (2016), quite adamant that researchers bracket out all previous knowledge on the topic they are researching, something earlier derided by Clarke, (2005 pp.13) as the absurdity of trying to be a “theoretical virgin”. Strauss came to realise that people cannot do that easily (Charmaz, 2017). He and Glaser parted ways, and Strauss’ future ideas were elaborated in books co-authored with Juliet Corbin (1990; 1998), where they proposed that grounded theory studies should be more structured than Glaser was happy with, and rather preferred that some literature guide the data collection process in a flexible way. Charmaz’ (2014, 2017) constructivist view is that a literature review can be done first if one’s stance is critical, reflective and grounded in reflexivity.

Other thoughts on the role of the literature review in grounded theory studies come from Dunne (2011), (Thornberg, 2012) and Nelson (2016). Dunne (2011) provides a thorough analysis of the evolution of the debates on the matter in the light of his own doctoral degree, and concludes that the insistence on total abstinence of literature consultation prior to data collection is disproportionately punitive to the process and quality of the resultant theory. In citing Dunne, Thornberg (2012) agrees with the principle of consulting the literature up front, pointing out that such flexibility respects researchers’ abilities to maintain an open-minded stance, such that they avoid being Procrustean in their analyses. He cautions researchers to remain critical, aware of their own assumptions and biases, theoretically sensitive, and thoughtfully aware of the purity of the raw data being processed. Nelson (2016) tackles the issue of the literature from the perspective of what he calls “conceptual depth” (p.6) in order to address the problematic issue of achieving saturation. He describes that conceptual sufficiency comes from there being a range of evidence for each concept, there are complex linkages between concepts, subtle elements are surfaced and highlighted, concepts are broadly applicable, and they resonate with the literature. Reading between the lines of Nelson’s article, it seems clear that not only does he consult the literature throughout the proposal development stage; he also consults it during the analytical process.

Since interviewing is one of the most commonly accepted methods of gathering qualitative data (Seidman, 2013), and constructivist grounded theory requires “rich” data; the richer and more detailed the data, the greater the conceptual density (Draucker et al., 2007), and the more nuanced the resulting theory. The participants in the research need to be able to speak freely, tell their stories and to develop their ideas in a reflective way. Charmaz (2008 p.164) developed the terminology ‘Intensive Interview’ which allows for the ebb and flow of dialogue in a conversational way. A number of authors (Charmaz, 2017; Dunne, 2011; Thornberg, 2012), either by implication or overtly, encourage engagement with the literature during the analysis and theoretical sampling process. The aspect of continuous engagement with the literature is not specifically mentioned in much of the work on theoretical sampling, so it is not always clear what authors’ stance on the matter is.

3. Methodology

The context of the research was that of coached executives in South African businesses, with the aim of developing a theory of the coaching process. The analysis reported in this paper was undertaken in parallel with the analysis of data to resolve the main concern of the study; that of theorising the coaching process. The purpose of this complementary analysis was to capture adaptations of the standard processes used for data collection and data analysis that facilitated the theoretical direction taken in the research.

The inclusion of the coaching contextualisation helps to give the framework and background to the research, so has been included here; Saldana (2016) has proposed a coding category called “attribute coding” to take care of these contextual factors, which could be described as study meta-data. These meta-data may contain explanatory variables to consider during analysis, though they may not necessarily be obvious at the beginning of the research.
The methodology was built on the constructivist grounded theory approach of Charmaz (2014). Companies (via their HR Directors, learning and development managers or talent managers) offering coaching to their executives were identified purposively (Roulston, 2016) and contacted to obtain permission to approach executives who had already been coached within their organisations. The main selection criterion was that executives had experienced coaching (regardless of who the coach was and regardless of industry).

The insights obtained from the literature about the iterative sequence of respondent selection, immediate coding of the interview and consultation with the literature were utilised. So, initial respondent selection was purposive (Charmaz, 2014; Glaser & Strauss, 1967, 1998, 2017; Rowlands et al., 2016), the interview data were analysed after each interview, and the literature was consulted at the same time as the interview was being coded. Theoretical memos were written throughout the process. This analysis was not only to develop the theory, but to revise the next interview guide (Davoudi et al., 2016) and to select the next respondent.

Thus, although the role of the literature review in guiding grounded theory interviews has been widely debated, particularly in terms of the differences between the major authors in the field, viz. early Glaser and Strauss (1967, 1998, 2017), later Strauss and Corbin (1998), and most recently Charmaz (2014), a hybrid model was adopted here. So the literature was neither ignored, nor was a comprehensive review conducted until after the research was complete. In this way, recent recommendations about literature inclusion were respected, and the pre-existing knowledge of the authors was acknowledged in a critical and reflective way. Eleven executives from seven organisations were interviewed.

The first part of the interview was kept broad and open-ended, asking questions such as, “Please tell me about your experience of being coached”, “what was the context of the coaching intervention?” and “please describe the relational aspects between you and your coach”. Probes were along the lines of, “... and what happened next?” and “what kinds of things did you reflect on...?”. The questions became more focused as insights developed, but each interview was unique in terms of the actual questions asked.

4. Results and Discussion

It is clear that sampling, coding and theory integration are deeply intertwined, and shifts in any one aspect result from, and in, shifts in the others in a dynamic way. The following sections identify and discuss the insights obtained from the study, and elaborate on overlapping factors that link the three areas discussed in this study, namely, sampling, coding and integration of existing theory.

4.1 Factors influencing sampling and data collection

A variety of factors influencing sampling and data collection emerged from the analysis. These were, careful selection of appropriate respondents, a narrow focus of the research question driving the research, interviewer expertise, and prolific analytical memo-writing.

4.1.1 Selection of appropriate respondents

When selecting appropriate participants (Strauss & Corbin, 1998), it quickly became evident that it was important to have a relevant network prior to and throughout the research, so that a pool of potential future respondents would come to mind as theoretical concepts emerged from the data. After each analytic iteration, the criteria for identifying the next respondent were defined; in fact, theory development proceeded weblike from the beginning, since there were several theoretical possibilities from each construct. The participants in this study were certainly familiar with and involved in the process and environment related to the study, points raised by McCurdy, Spradley, and Shandy (2004) as being important for maximising the quantum of data per respondent. The respondents were relatively homogenous, which also helped to reduce sample size (Guest et al., 2006).

4.1.2 Narrow focus of the research question

The initial scope and research questions were narrowed down through insights gained from two pilot interviews. It was clear that a broader scope required considerably more data (and interviews) and would become impractical and unwieldy (Egan, 2002; Strauss & Corbin, 1998; Thomson, 2011). In addition, some possible variables were excluded from the study, eg the cost and return on investment to the organisation, the qualifications of the coaches, and the performance of the executives before and after the coaching. The focus was only on the experiences of the coached executives.
4.1.3 Interviewer expertise

Expertise in the research area helped to facilitate a smaller sample size (Jette, Grover, & Keck, 2003). However, this was delicate to manage because of needing to remain reflexive about the role of the literature and existing theory base in informing the interview questions. In this regard, being experienced and knowledgeable in the academic aspects of coaching was something of a double-edged sword; in the words of Birks and Mills (2015), “. . .in reading the literature, there may be a fine line between enhancing [theoretical] sensitivity to developing concepts in your data and forcing your data into an existing category” (p 241).

The data indicated that the following characteristics were important both for effective coaching, and for effective interviewing; asking indirect questions (Partington, 2001), clarifying, reframing negative ideas, challenging assumptions, personalising the conversation, creating a safe space (psychological safety), being non-judgemental, equity between coach and executive / interviewer and interviewee, seeking both process and substance (Seidman, 2013), coupling observation with interviews, and identifying and mirroring patterns and themes (Lopez & Whitehead, 2013; Parfitt, 1996; Roulston, 2016). These characteristics affirm that caring skills (McLeod, 2011) seem to assist with interviewing in qualitative research. These skills are congruent with a high level of emotional intelligence and emotional resilience (Grant & Kinman, 2014) in the coach/interviewer. An advantage of these caring skills is that the interviewer was well able to capture the body language observations during the interviews, which supplemented and enriched the content of the conversation.

4.1.4 Memos

Memos are naturally reflexive, which is why Charmaz (2014, 2017) is so in favour of them. For example, one of the key insights obtained from the pilot interviews was the realisation that the initial questions were too leading. For example, the question, “would you describe your coach as directive or non-directive?” led to an either/or answer, with the participant choosing one of the options. Instead, in the revised interview guide, the concepts of direction / non-direction were rephrased to, “please describe the process of sharing information with your coach – what helped you share?” This lead to answers such as, “the coach asked or challenged my assumptions in a direct but non-judgemental way”, which allowed for more complex answers to emerge and factors such as non-judgemental attitude could be linked to the concept of directiveness.

Memos were also used actively to raise focused codes in conceptual categories and to surface patterns as described by Charmaz (2014). Since both interviewer and interviewee were active participants within the research process, the interview was a living dialogue. While the initial open-ended questions were designed by the interviewer, the subsequent directions were led by the participant’s concerns and revelations as long as they were relevant to the research question. Thus, it was important to capture these orientations and record the insights gained; analytical memos were of great value in constructing the final theoretical propositions for the study. For example, the following three excerpts from the interview with Executive 6,

“...so reflection in preparing for the next action, or action taken and you will need to reflect. So I don’t know if it was 'now we are going to do a reflection exercise' or 'this is specifically going to take us into reflection', followed by "... but sometimes it is for more integral, sometimes it is actually a shared session, a debrief afterwards", then, “you have some like transcending or transforming sessions, where there is a huge amount of shift and if you happen to do that in three sessions I think it would give you the shift that you wanted and I think having a longer relationship helps embed that shift.”

Resulted in the following memo:

“Coaching is not a continuum, it is circular. An example is after action comes reflection and before reflection comes action. This person talks about deep levels of integration and how they were able to bring all of themselves into the coaching conversation. It seems that the magic in coaching lies in the transcendence and by this I mean the climbing beyond, the rising above.”

Which, in turn lead to the theoretical insight that people are complex, layered beings, and when they enter a growth process such as coaching, they bring with them all that complexity, which comes to bear on their holistic transformation.
4.2 The coding process

The first interview generated 56 codes, and there were no new codes after eight interviews (see Table 1). Participant eight was an experienced, trained coach as well as being an executive, and her contribution added 24 new codes. These initial codes were in vivo and descriptive.

Table 1: Number of new codes per transcript

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<tr>
<th>Transcript Number</th>
<th>New Codes Allocated</th>
<th>Cumulative Codes</th>
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<tr>
<td>1</td>
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<td>56</td>
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After the substantial input from respondent eight, all the previous transcripts were re-analysed to seek whether and how her insights had been overlooked in the previous transcripts. In fact, this activity of reanalysis each time a new code emerged proved fruitful and the additional richness and depth ultimately extracted from all of the transcripts added to the quality of the emergent theoretical propositions. This exercise extends previously published ideas of constant comparison, which seem to have mainly taken place in a forward direction only.

Initially, coding immediately with gerunds was attempted. These “-ing” words are constructed from verbs and used as nouns. Charmaz (2014, p. 111) prefers this method because it “moves beyond concrete statements by focusing on actions rather than themes”, curbing making premature conceptual leaps before sufficient analysis was done.

However, subsequent to this approach, it was decided to code sequentially, ie, first descriptively, then with gerunds (Davoudi et al., 2016; Saldaña, 2016), which yielded far richer results. This can be seen in the following two figures using Saldana’s (2016, p.14) original diagram entitled “Streamlined-codes-to-theory process” in Figure 1 as the basis for the analysis in Figure 2.
Figure 1: Saldana’s (2016, p.14) streamlined codes-to-theory model for qualitative enquiry

Figure 1 illustrates the step-by-step process from data (interview transcripts) being coded (with sub-codes as necessary), then the codes being combined into groups with similar attributes (called axial coding by Strauss and Corbin in 1998); these groups are called categories, which may also have sub-categories. The categories are combined into themes, which are then further abstracted into theories, assertions or theoretical propositions.

Using the development of the identification of client readiness, a key theoretical component of the study outcome, Figure 2 illustrates how the gerunds were incorporated into the Figure 1 process.
Figure 2: Incorporation of gerund coding into the analytic process based on the study data

Two transcript segments were selected for the illustration of the process described here, and these appear in the text boxes on the left side of Figure 2, which correspond to the left hand box in Figure 1. The initial, descriptive, in vivo codes were extracted from the interviews as illustrated in the text boxes to the right of the transcripts, under the column heading “codes” in Figure 2. At this point, the initial codes were converted to gerunds, under the heading “gerund codes” in Figure 2; this step was not part of Saldana’s (2016) process in Figure 1, and represents an additional analytical step not specifically articulated in the literature. The coloured arrows indicate how the gerund codes were grouped into categories, under the “categories” heading in Figure 2. Thus, using green arrows, the gerund codes of “reflecting”, “deciding”, “supporting” and “facilitating” were grouped into a category labelled “processing”. It seemed clear that sub-categories for “processing” could be “internal”, to include both “reflecting” and “deciding”, and “external” which would encompass “supporting” and “facilitating”. The internal processes are undertaken by the coachee executive, and the external processes by the coach. The sub-categories have not been included in Figure 2 for concern that the figure may become too crowded.

For completion of the explanation of Figure 2, the categories were combined into themes on the right hand side of the diagram, which were, “the whole complex integrated person”, “the journey” and “the higher person”. These fall into place as a theoretical proposition (Davoudi et al., 2016) suggesting that a coaching client as a whole complex person, begins the coaching journey and, through facilitated support, reflects and makes decisions, thereby crossing thresholds and transitions into a developed, more insightful “higher” person afterwards.

This pathway seen in Figure 2 also nicely illustrates the transition from empirical data to theoretical concepts. This stepwise process is not usually clear, and definitions of theory do not always make it easy to bridge the divide, although the examples given in the literature review do illustrate the broad idea of theory being an explanatory statement about the relationships between concepts or constructs.
It should be noted that at the gerund stage, the links to the original transcripts are broken, and categories are built from gerund codes from across different transcripts. It is by this mechanism that the attributes of and variations within the categories emerge (Corbin & Strauss, 1990); and when no new attributes emerge, saturation is considered to be present.

4.3 Saturation and variation

Theoretical propositions emerged through the coding process; as described in the previous section. Care was taken to extract detail from the transcriptions relating to the attributes of each concept, and identify explanatory relationships between those concepts. In addition, sufficient detail was incorporated into each category to make it more likely that it could “overcome changing situations” (da Silva, da Silva, Valadares, Silva, & Leite, 2015 cited in Davoudi (2016)), and demonstrate theoretical saturation, ie when theoretical density and conceptual consistency were stable with further analysis.

For example, in analysing the data leading to the identification of the core category of “client readiness” (Figure 3), the dimension of “time” emerged as important in relation to barriers and enablers of coaching. There were different aspects of time: finding the time, the timing being right, time duration of the sessions, the scheduling and frequency of the sessions. These aspects have been specified in the centre arrow of the diagrammatic representation in Figure 3.

![Diagram](image.png)

Figure 3: The path to client readiness developed from the data

In terms of finding the time for a coaching session; there appeared to be a challenge for many people. Executive 5 said that, “just finding the time to go to it was the main thing. An hour’s session is two hours because you have to make a plan to get there and get back...so it becomes a time constraint.” Executive 1 spoke about how challenging it was to find an appropriate time in the diary. Executive 12 shared the story of how one of her colleagues changed coaches as the first coach he had chosen was so busy that he could not find appropriate time slots, but the second coach understood his time constraints and met him at 7.00 am,
which enabled him to get the coaching into his diary. Rigidity in terms of timing was also an issue for one executive who preferred a fluid arrangement in terms of setting up coaching as needed, rather than prescribed set sessions. The flexibility of diary management was important.

For some respondents, it was more about it being the right time to have coaching; Executive 2 spoke about timing: “I found it very difficult in that period of time to try and take action. It just was not the right time ... There was so much pressure inside the organisation, my mind wasn’t allowing anything else to change.”

Others believed the timing was right for them; Executive 3 stated, “I think it came just at the right time, it was just what I needed to give me the jumpstart again.” Others agreed, with one describing how his coaching happened as he was promoted, and another as she was reflecting on her career goals. Executive 12 said, “I really think you get the best out of coaching when you have an issue, when there is something you really want to focus on.” While the comment about having an issue does not directly relate to timing, it appears to be relevant to the construct “right time for coaching”.

Transitions also seemed to be a key ‘right time’ for coaching. A transition could be a new job role, a promotion or a new project. Executive 6 said she had, “used coaching consciously or unconsciously at a transitional phase of my career”.

The other aspect of time that came through was that having the sessions over a period of time was helpful but simultaneously it was sometimes difficult to do any “homework” between sessions. Executive 4 stated, “I never did any of the exercises, I was useless with that. I would try for a week or whatever and it is just too time consuming, or we are just too busy or whatever.” Executive 3 said, “Because the process was continuing, because it was over a period of time it almost took a different shape in that it now supported me in my new environment, where I also had very different challenges again, so that was quite beneficial.”

The coaching location was also identified as a component of the time dimension, in that one of the respondents was grateful for the fact that she needed to travel to her coach, because, “I felt that I was not in the right frame of mind when I left to go to my coaching session. I had a gruelling and stressful day at the office, resulting in me staying longer than planned before setting out for my session. However, despite leaving the office ‘later’ I still had sufficient time to get to my appointment” and the travel time enabled her to reflect in preparation for her session.

5. Conclusion

The definitions of theory given in the introduction to this paper highlight the requirement for an explanation of a phenomenon in terms of the relationships between the concepts or constructs that make up the phenomenon, within contextual boundaries. The process for development of grounded theory aims to achieve exactly this, and the insights obtained in this study can facilitate such theory development. The link between data and theory is made explicit through the coding process, and the extension of Saldana’s (2016) model in Figure 1 with explicit inclusion of the gerund coding step, which facilitates moving beyond the rather static initial codes to active process codes, rendering categories and themes more visible, seen in Figure 2.

An additional step in the typical theoretical sampling process is suggested; that of reflexively consulting the literature within the constant comparison phase of analysis. This would mean analysing the first interview to extract initial codes, converting these to gerund codes, and then consulting the literature using the gerund codes as key terms. After that, propose possible relationships between the codes, moving iteratively between codes and categories. During this process, incorporate appropriate interview questions into the revised interview guide for the next carefully selected, theoretically-relevant respondent. With subsequent interviews, identification and fleshing out of the dimensions making up the categories is carried out.

Other factors influencing the data gathering process included having a narrowly-defined research question, being particularly careful in selecting the first participant, and the interviewing skills of the interviewer. Selection of the first participant needs to involve thorough research into the criteria for selection of the individual to ensure that they do indeed represent an expert source of knowledge about the substantive area of the study and can make a substantial contribution to the developing theory. Good interviewing skills, such
as those seen in the caring professions, enabled the extraction of richer, thicker data, and also reduced the size of the required sample.

This is the first time that we tried these techniques, and they certainly made the research process more interesting for us. We felt more engaged through the consultation of the literature in the way that we did it, although it did extend the time taken between interviews. This may reduce as we become more practiced in and refine the techniques. The gerund coding step simply seemed to make the categories pop out, and the themes illustrated in Figure 2 just fell into place; we do not believe this would have happened without the gerund coding step, and look forward to hearing further adaptations of the method.

References


Nelson, J., 2016. Using conceptual depth criteria: addressing the challenge of reaching saturation in qualitative research. *Qualitative research*, 0(0), pp. 1-17. doi:10.1177/1468794116679873


Seidman, I., 2013. *Interviewing as qualitative research: A guide for researchers in education and the social sciences*: Teachers college press.


