

The Role of Theory in Qualitative Research - From Metatheory to Local Theory

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ABSTRACT

Qualitative research is often viewed as an appropriate approach where little is known about the subject matter. As such, it is also often considered a predominantly inductive approach to knowledge generation, where no prior hypothesis is needed. Examining the issue further, qualitative research cannot be undertaken in a theoretical vacuum. The misconception of coming “clean” to the research field is perhaps rooted in the differences in how researchers define the theory. If it is narrowly defined, an a priori hypothesis or theory seems to be an option depending on the methodology adopted. However, if it is broadly defined, a metatheory or philosophical stance is needed for all qualitative research to provide a perspective to the study and, thus, guide analysis and interpretations. This paper attempts to describe different perspectives of this definition and position the roles of “theory” at different stages of qualitative work. Theory can be arbitrarily graded to four levels ranging from metatheories to local theories. Metatheories encompass the researcher’s worldview, while local theories may refer to frameworks or substantive theories directly relevant to the disciplines. Depending on the stages of a study, they provide justification of methodology and guidance to the substantive content of a study. They also delineate the boundaries of research, thus anchoring the interpretations and inferences from study findings. A shallow engagement with theory often results in thin analysis, lack of relevance and little insight into the issues being examined. On the whole, optimum use of theory justifies the generated knowledge and provides the needed depth to understand an issue.

INTRODUCTION

Research serves as a tool for knowledge generation, where empirical evidence is turned into generalizable theory and abstract concepts. This process of knowledge generation can take the form of inductive or deductive reasoning (Teddlie & Tashakkori 2009). Quantitative researchers employ deductive reasoning and make use of theory at the beginning in the form of hypotheses to be tested on empirical evidence. As the hypotheses are confirmed, they will form part of the knowledge corpus. Whereas, qualitative researchers predominantly use inductive reasoning to generate theory and abstract concepts from empirical evidence. They observe and analyse empirical evidence to form theory and abstract concepts that can be generalized. Thus, some qualitative researchers argue that preconceived theory is not necessary for inductive reasoning. The use of theory in research limits creativity (Mourad, 1997, Thomas, 1997). Conversely, other qualitative researchers argue for the definite necessity to use theory to drive research (Fawcett, 1978, Carter & Little, 2007, Collins & Stockton 2018).

The fundamental a priori theory is our assumptions of world views. Researchers cannot free themselves from this assumption. We can and should acknowledge this assumption in order for us to reflect, critique (Kezar, 2006) and justify (Carter & Little, 2007) our work accordingly. Being critical about these assumptions helps researchers to be aware of what can be known and the limitations, thus making appropriate claims on research findings. This adds to the rigor of our study. Theory serves as a valuable tool in facilitating the research process and to have a

qualitative research start in a theoretical vacuum is impossible. (Blaikie, 2010, Mason, 2002, Sandelowski, 1993, Braun & Clarke, 2006). Theory isolated from the research will end up becoming ‘excursions into the trivial (Fawcett, 1978), simplistic and impotence (Collins & Stockton 2018), which lack a strong anchoring point to claim valid knowledge. Thus, the role of theory in the quantitative approach is not disputed. However, the role is often contested in the qualitative approach. Adding to this complication, the definition of theory may differ among qualitative researchers (Kezar, 2006) and their roles are argued (Pope & May 2020). Nevertheless, proponents for definite engagement of theory are stronger. In our opinion, this engagement is necessary.

Regardless of how we want to define theory, researchers need to be clear about their relationships with theory and the roles of theory in their study. Notably, quantitative researchers formulate theoretical hypotheses at the beginning of a study through logical deduction from the number of theories being used. In contrast, the majority of qualitative researchers do not spell out the theory used clearly (Anfara & Mertz, 2006). This poses a risk of making qualitative research an incoherent endeavour (Bradbury-Jones, Taylor & Herber, 2014). Bradbury-Jones et al. (2014) have identified five levels of relationships between theory and research adopted by qualitative researchers. The first is ‘seemingly absent’ where theory is not articulated in a study. The second is ‘implied’ in which the theoretical orientation is mentioned in the study but lacks an explicit statement of how it has been used. The third is ‘partially applied’ where the researcher has obviously located the theory for their study but failed to interpret or relate in what context. The fourth is ‘retrospectively applied’ in which the theory is only explicitly applied at the end of the study. Finally, the fifth level is ‘consistently applied’ where theory was consistently applied and articulated explicitly throughout the entire research process. Nevertheless, Creswell (2007) claimed that no matter how we define theory, good researchers must explicitly make their stance on their assumptions and the role of theory in their research in order to allow readers to appraise the limits of the study and thus, making reasonable inferences from the study findings.

To date, consensus regarding the appropriate application of theory in qualitative studies is lacking and the understanding of theory in qualitative research differs (Sandelowski, 1993; Anfara & Mertz, 2006; Wu & Volker, 2009; Tavallaei & Abu Talib, 2010). These different views on the roles of theory in research are a result of variations in the definitions of theory (Kezar, 2006). Tavallaei & Abu Talib (2010) explained that some qualitative researchers often equate the role of theory to the methodological paradigm and the underlying epistemological assumptions while others see theory as a group of inter-connected coherent concepts which serve as a representation of knowledge to explain a phenomenon. (Kezar, 2006) Therefore, when to use theory, how to use theory, to use or not to use theory in qualitative research is a matter of not aligning the definition of theory with its roles in qualitative research. There has been much written on the roles of theory in qualitative research (Carter & Little, 2007, Collins & Stockton 2018), however, explicit discussion on the roles of theory in each conventional research process in a simpler format for novice researchers is lacking. Therefore, corresponding to the fifth level of Bradbury’s typology, the aim of this paper is to expound on how ‘theory’ could and should be ‘consistently applied’ in our research explicitly. But, first, our task is to clarify our definitions of theory before dictating its role in our study.

Definition of theory

Theory can be defined loosely in the dictionary or specifically in various disciplines of science. Correspondingly, loose definition casts wider roles and usage compared to discipline-specific tight definitions, where the roles in research are narrower. For example, the British Dictionary (Collins English Dictionary, 1979, 1986, 1998, 2000, 2003, 2005, 2006, 2007, 2009, 2012) defines theory as:

1. a system of rules, procedures, and assumptions used to produce a result
2. abstract knowledge or reasoning
3. a speculative or conjectural view or idea
4. an ideal or hypothetical situation
5. a set of hypotheses related by logical or mathematical arguments to explain and predict a wide variety of connected phenomena in general terms
6. a nontechnical name for hypothesis

On the other hand, a scientific theory can be defined as a well-substantiated explanation of some aspects of the natural world, with its aims for predictive power or explanatory force (Tavallaei & Talib, 2010), either tentatively or definitively. Ideas here are seen as organised concepts. Yet, each academic discipline would invariably have its own definition of theory. However, most will have some generic elements. The varying definition is because we often speak at different levels of theory. Acknowledging this will facilitate our communication and thus use it in our research process more systematically.

For practical purposes, we recommend the four-level classification of theories by Kezar (2006):

1. Metatheories usually refer to macro-level theory, or paradigms, such as positivism, interpretivism and critical theory. These are in line with their epistemological assumptions – a question of how do we come to know. Positivism is in line with epistemological objectivism and interpretivism is in line with epistemological constructionism. Figure 1 shows a brief definition of objectivism and constructionism.
2. Grand theories cover concepts that are more far-reaching than theories explaining specific phenomena of interest. Grand theory transcends the substantive content of a study. These theories can be discipline specifics, such as symbolic interactionism and critical theory in sociology, or transdisciplinary such as system theory. They carry abstract concepts and assumptions in explaining or predicting general human behaviours or phenomena.
3. Middle-range theories provide operational links between grand theory and observable events in human experience. Examples of middle-range theories are the five-stage theory of grief by Kubler-Ross and the theory of locus of control from psychology.
4. Low or local level theories, also referred to as practice theories, carry substantive content of a phenomenon and have the narrowest range of interest and are focused on specific phenomena. It relates to only one particular situation. One of the main characteristics is that it has explicit goals to address or explain one phenomenon. Examples of micro-level theories are the theory of adult learning explaining how adults learn and health belief models explaining the help-seeking behaviours in relation to vaccination.

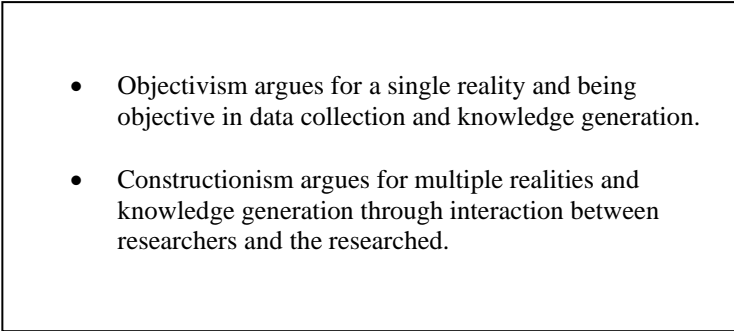
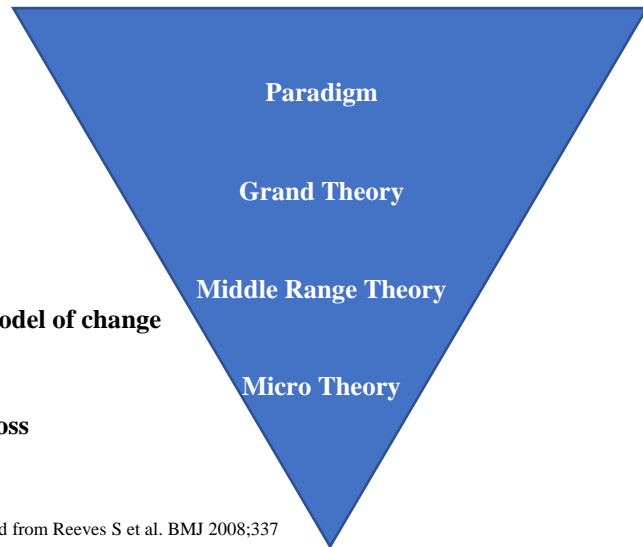
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- Objectivism argues for a single reality and being objective in data collection and knowledge generation.
 - Constructionism argues for multiple realities and knowledge generation through interaction between researchers and the researched.

Figure 1: Brief definition of objectivism and constructionism (Crotty 2003)

The distinction of this classification may not be clear, as Reeves, Albert, Kuper, and Hodges, (2008) have classified them into three levels: grand theories, middle-range theories and micro-level theories and some theories can be considered as middle range to local level theories, such as the theory of adult learning. One should view these as a continuum rather than rigid boundaries, as shown in Figure 2. The lower-level theories deal with concrete and relatively more technical concepts, and they are more amenable to empirical testing. Thus, rather than focusing on the “right” classification of theory, we should focus on the practical use of these theories, the definition and the relationships between their concepts.

Examples:

- **Objectivism/Interpretivism**
- **Pragmatism**
- **Phenomenology**
- **Symbolic interaction**
- **System theory**
- **Theory of Reason Action**
- **Prochaska’s trans-theoretical model of change**
- **Kolb’s experiential learning**
- **Health belief model**
- **Five stages of grief by Kubler Ross**



Concepts adapted from Reeves S et al. BMJ 2008;337

Figure 2. Continuum levels of theories

Roles of theory in the qualitative research process

We acknowledge the differences in theoretical underpinning for different qualitative study designs. Thus, Kezar (2006) has recommended two most important questions we need to consider the roles of theory before undertaking a study: 1) what are our paradigm assumptions, 2) what is the nature of the phenomena under study. The first relates to an overarching metatheory, i.e., world view or epistemological assumption. (Carter & Little, 2007, Crotty, 2003). It justifies the methodology and methods of a study, as illustrated in Figure 3. This is often implicit to readers and the audience. But, the conduct of the study often “demonstrates” the metatheory underpinning the study clearly. Figure 3, also shows how a grand theory influences the choice of methodology and methods, but not the substantive content of the study. When justifying methodology and methods, both metatheories and grand theories provide rationale and logic to the steps we are taking in executing a study. The second relates to the substantive content of a study. Here middle range and local theories provide sensitivity to data collection and analysis and position the new-found knowledge within the framework of the problems being studied.

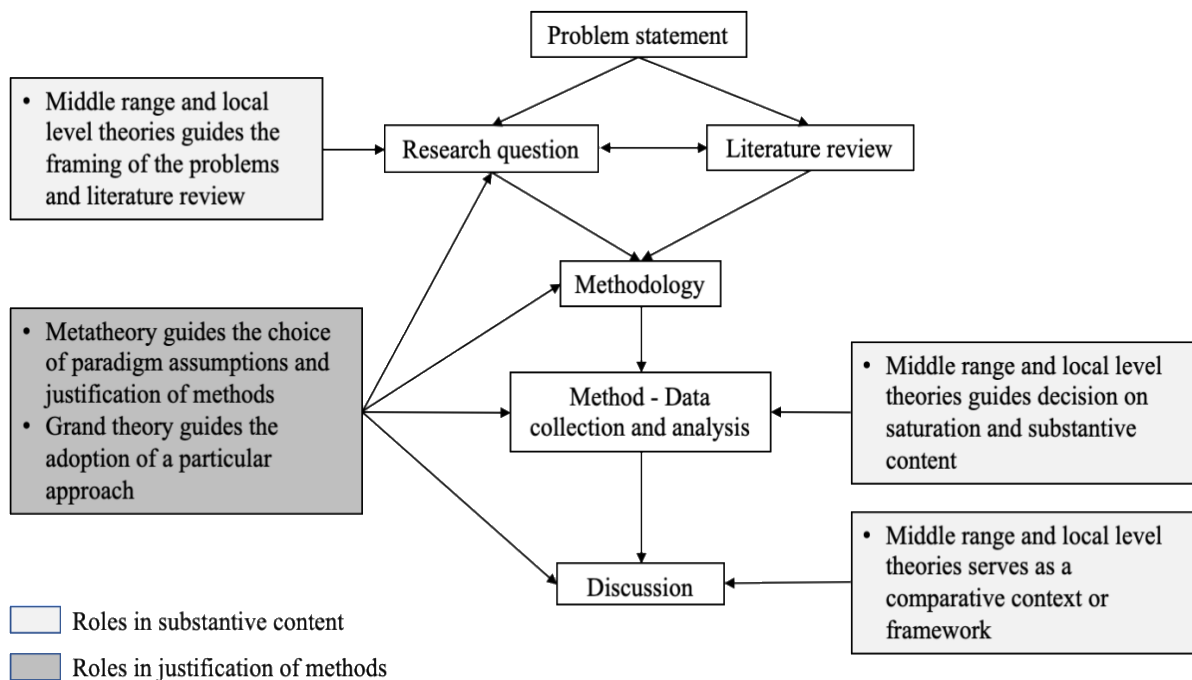


Figure 3: Roles and influence of theory at different phases of qualitative research

Influence of metatheories and grand theories in the choice of methodology and methods

Conventionally, a research journey starts with a problem statement describing the nature of the problem to be investigated. Once the gap or the problem has been identified, researchers start to grapple with different methodologies to answer the research questions. The choice of methodologies will depend on how researchers would assume how knowledge can be known and what approach is taken. Here, the choice is directly influenced by one's epistemological stance (Carter & Little, 2007, Pope & May 2020) and perspective on the problem. At this stage, the theory used is at the metatheory level – the epistemological stance on knowledge generation. Ignoring this would make the argument for methods and thus, the results less substantiated and misaligned. (Crotty, 1998) The influence goes as far as the design of methods, analysis and discussion (see Figure 3).

Objectivism would call for a quantitative approach or a qualitative approach that distances the relationship between researchers and research. (Carter & little, 2007) Quantitative approaches such as experimentations, control trials and surveys align well with objectivism. If qualitative approaches are used with an objectivism stance, subjective interpretation is not tolerated. "Bias" should be kept to a minimum, and validation becomes an important component. Data are viewed as an explicit representation of the empirical world. On the other hand, constructionism would embrace a wider choice of approaches and tap on the power of rapport between researchers and those researched in order to reach and represent the true experiences of the researched as much as possible. The choice of approaches would depend on the perspective or the angle to the problem that one would come from; it could be from a narrative inquiry, grounded theory, phenomenology or any of the qualitative approaches (including mixed-method).

There are also assumptions or theoretical basis to any of these approaches. For example, in exploring the health screening behaviour of the public, one would choose phenomenology if the perspective is to identify the essence of the meaning of health screening through subjective interpretation and abstraction. Implicit meanings are examined. The essence of meaning is assumed to be the basis for people's course of life. (Groenewald, 2004). Further, the details required for a phenomenological interview are unique although the interview is a data collection method shared by many approaches. Interviews are a typically in-depth exploration of participants lived experiences and reconstruction of contextualised experiences. Also, the analysis of interviews has to be in line with phenomenology, which often has its theoretical perspective of interpretivism. Whereas, if researchers are interested to look at health screening behaviours as forms of processes on how people construct meaning and thus their actions, they may want to adopt constructivist grounded theory (Charmaz, 2006); Grounded theory has its root in symbolic interactionism (Strauss & Glaser 1967, Charmaz, 2006), where the construction of meaning is a continuous process through a person's social interactions of symbols and his past experience. Symbols are defined as any object, person or artifact confronted by a person. Thus, the focus is then, on these social processes and the meaning construction process can be represented in a form of theory. As with constructionism, rapport and relationships are not avoided but tapped into to uncover the depth of data. On the other hand, if researchers want to describe the factors influencing health screening behaviour, they may choose interviews as a method of data collection and subsequently employ thematic analysis without committing to any of the traditional approaches. Nevertheless, they would still need to grapple with their epistemological stance, as this will justify their behaviour in data collection, and analysis later, and discuss the findings of the study.

Each method of data collection, which may range from the conventional forms of interviews, focus group discussion and observation to less conventional forms of photo-elicitation, video biography and creative arts (creative methodology reference), carries with them unique assumptions. Centre to the assumptions is how best we can come to know what we are inquiring about, which requires us to adopt certain paradigm positions. This is the first question to be answered before considering and justifying the methods (Quinn 2002, Crotty 2003, Kezar, 2006, Carter & little, 2007). We strive to get as close to the human experience and informants' perception of reality as possible. Thus, being critical of what is the most appropriate and optimal ways to sample this experience is crucial. What critical point here is how do we see "reality" and how it can be best known? This forces us to consider and decide between the two traditional paradigms (see Figure 1 earlier). The following illustrates how the adoption of either paradigm affects our data collection.

1. A constructivist is comfortable using any methods that can tap on the strength of interaction between researchers and the researched to bring out the best description of informants' perception of reality. On the other hand, an objectivist would want methods with minimal interaction between researchers and the researched in order to gain an objective reality of experience from informants. Thus, the former will ride on the benefit of having good rapport, networking and different methods of data collection that participants are comfortable with in portraying their reality. The latter would like to have some forms of a random selection of informants and keep a distance between them and informants in order to stay objective with their data collection. (Carter & little, 2007) If one is to

adopt constructionism, it does not mean they simply allow their interaction to influence their data, but they pay critical attention to such interaction because the interaction between researchers and the researched is unavoidable. The interaction can be dealt with but cannot be ignored. They see this interaction as an asset for obtaining detailed and in-depth data –the reality experienced by informants. As such, data collection methods can be as creative as possible including photo-elicitation, video biography, autobiography and so on. If one is to adopt objectivism, strictly, interviews need to be standardized as much as possible and interview guides need to be pretested or pilot tested for their relevance and validity before data collection. Because of this quest for objectivity, often an in-depth understanding is compromised. It limits dynamic interactions between researchers and the researched because such interactions create opportunities for variations and opportunities for researchers' influence on the information.

2. A constructivist is comfortable with multiple data types yielding different findings. Each type of data will invariably produce different findings because of the inherent differences in the interaction between researchers and the researched for different types of data collection methods. Thus, differences in the findings from focus group discussions and in-depth interviews are expected and analysed according to the respective settings. To a constructivist, discrepancies in the description of experience and perception of reality from informants are expected, celebrated and accepted because they are contextually constructed. The context of the data collection is considered during analysis to provide sense to the data. Triangulation of data collection methods is often used, not to validate the data but to corroborate our findings. Objectivist views multiple types of data with a sense of wanting to know different perspectives of a single reality, and there would be a notion of the best methods of data collection with the least biased views. Triangulation is used with the intention to validate the findings obtained from other data collection methods. Thus, they are uncomfortable with having different findings and sometimes contrasting findings.

The depth of analysis would also depend on what metatheoretical stance is adopted. A slant towards objectivism would make implicit interpretation to arrive at latent concepts inappropriate because this depth of analysis would tap into the subjective interpretation. The objectivist stance would only “permit” explicit interpretation of data and arriving at descriptive concepts. A slant towards constructivism would allow the depth of arriving at latent concepts (Braun & Clarke 2006). In objectivist views, text and transcripts are objective truth from informants and thus, they represent what they appear- as descriptive as possible.

In constructivist views, text and transcripts are results of interaction between researchers and the researched at the moment of data collection. Thus, descriptive codes are tentative. This should be done with complete acknowledgment and understanding of the context where data are generated, and thus are coded in context. Later, as the further depth of analysis, revising them to reflect a more appropriate code is sometime necessary as a researcher learning the issue being studied through the analysis. The constructivist epistemological stance justifies this interpretive depth of coding (Carter & little, 2007).

Influence on the middle range and local theories in process of a qualitative study

As stated, middle range and local theories connect grand theory to observable events in human experience. These theories often relate closely to the substantive content of the phenomena in our study. They help to provide direction to data collection and analysis of data (Carter & little, 2007). These theories provide lenses (Reeves, Albert, Kuper, & Hodges, 2008) through which a human experience is studied. Many studies claim they do not need to start off with any theory, but, reflecting more critically, invariably some assumptions are made by the researchers. Otherwise, there would not be any direction in even starting an inquiry. Nevertheless, researchers need to remain open and not be restricted by the adopted theory in data collection and analysis. The idea is to “sensitize” the researchers to different ideas and interrelate theoretical insights into the data. The sensitizing concepts provide the researcher with clues and suggestions about what to explore in the social world. (van den Hoonaard, 1997). Nevertheless, this theoretical sensitivity will be lost if the researcher sticks to one preconceived theory. Thus, staying open during these processes is important (Charmaz, 2014). In the following, we describe the roles of middle range and local theory in different stages of a “general” qualitative study.

1. Framing a more focused statement on research questions or problems.

Concerning the inception of ideas in research, the theory provides us with a tool or mechanism to identify what we come to know about certain phenomena based on existing studies and what the existing studies have done concerning such phenomena (van den Hoonaard, 1997). To start with, a statement that no one has ever done the study before or atheoretical research is rather naive. Some theories can be borrowed from other fields to enrich

the problem statement (Blaikie, 2010), thus rendering the researchers more sensitive to the subject. Middle-range and local level theories are helpful. They can give us a clue to addressing contemporary research problems by reflecting on the history of social thought, the original work and the development of the review and comment of the theory. Theory can serve as scaffolding in deciphering complex research problems, dividing them into key components, determining how they link to each other and reducing them to a researchable problem (Kezar, 2006).

This scaffold provides us direction to literature reviews and thus directs us from general theoretical ideas to a subject matter concerning what topic should be focused on and what kind of questions can be asked. It helps us to ask the research question by building on existing theory and provides us with a platform to challenge the existing theory. We can identify key concepts and state the relationship between these concepts and state the research question based on a previous theoretical framework (Mason, 2002). Using the same example of health screening, rather than exploring factors contributing to undertaking health screening, which is rather descriptive, we can frame it, utilising the theory of health-seeking behaviour or planned behaviour, to “how do people perceive benefits and harms of health screening?” Also, in line with symbolic interactionism, the construction of meaning by a person has a significant influence on his next action of whether to undertake health screening; the research question becomes “how does the public construct the meaning of health screening?”. Both questions offer depth to the phenomenon of interest.

2. Direction to the substantive content of data collection and sampling of informants –standing on the shoulder of giant

The design of data collection in qualitative studies is an active process where researchers literally, through purposive sampling, decide what to collect. Each of the steps taken in the design must be carefully thought through (Merriam, 2009) because invariably, it is based on some assumptions and a priori knowledge, which researchers might not acknowledge. Middle range and local theories guide us on what content to focus on. This is about the sampling of informants, designing initial questions in interviews or deciding what to observe in fieldwork. These groups of theories are often discipline-specific, especially local theories. (Reeves, Albert, Kuper, & Hodges, 2008) A good informant in any qualitative study should be able to provide rich data that fit the research question. Guided by the topic of research and phenomenon of interest, the informants selected need to provide sufficient breath in data to give an initial ground for analysis and direction of further data collection. Maximum variation is one of the commonly used strategies at this stage (Sandelowski M. 1995), but what “criteria” that researchers want to have the maximum variation? For example, is it about the largest variation in demographic pattern, the severity of illness, or intensity of experience in undertaking health checks? Arguably, sampling of men and women could be an initial strategy because men and women has been should a variation in their help-seeking behaviour. (Addis 2003, Tong 2012). Criteria for selection of informants may not just rely on “formal” theory, but prior knowledge and abstract concepts from past literature can be a resource. Thus, certain assumptions from ideas, abstract concepts and different levels of theories are often made in sampling.

In deciding what content of information to retrieve from our participants, we invariably bring along with us some of our experience and knowledge even if we claim to be unstructured in data collection. In unstructured interviews, we need to begin with some questions in our minds. In observation, we cannot simply record every single thing in the field. Invariably we are selective in our recording. In semi-structured interviews, we are even more guided by the questions we set before the interviews. It is impossible to come to data collection empty-headed. Instead, we should carry with us an open mind. At the outset of data collection, the researchers may use a few common and indistinct theoretical concepts to orientate themselves to the data collection. Initially, vague concepts may be used to describe the meaning. As data collection proceeds, the meaning of the concept is refined to be more relevant to the purpose of the study (Blaikie, 2010). Thus, being critical of what we have set to look for, we are more aware of our presumption, thus, more aware of other possibilities and unexpected findings, thus being open. Theories and assumptions provide us with this awareness of our directions. They set the initial step on which further data collection will build.

Because, the content of data collection is discipline-specific, a local-level theory is more relevant. Alternatively, at least we need to acknowledge prior knowledge and literature review. For example, in a project exploring reasons for vaccine refusal, we could begin with our semi-structured interviews by asking what informants understand about the vaccine and their beliefs about vaccination. This is informed by health belief models. We can then, trace how they conceive their knowledge and beliefs. Another example, in a project evaluating a particular teaching-learning method, we evaluate the engagement of students by observing their activities in the class that is not related to teaching-learning. We carry the assumption that such activities reflect their non-engagement. There is no formal theory but an assumption. Having our assumptions explicitly articulated, we are able to constantly be critical of them and make necessary changes led by ongoing data and findings. Otherwise, we have nothing to

critique and reflect on. While middle-range or local theories are helpful, we need to be aware of not being restricted by these theories.

3. The role of theory in guiding the substantive content of qualitative analysis

Researchers often face piles of data and the hardest question in the initial phase of analysis is “where do we begin?”. We begin with coding (or putting a label on a piece of text), but there are many unresolved questions. What label do we use in coding? What constitutes the significant piece of data to be coded? How do I know I code it correctly? Revisiting our main research objectives and questions provides some guidance, but the process is often vague and uncertain to novice researchers. Saldaña (2013, 2015) described different cycles of coding, denoting coding as not a unidirectional exercise, but an iterative one. Coding is often discipline-specific and depends on which perspective we come from. Coding is a heuristic – to discover (or problem solve) using reasoning and researchers’ past experience (Saldaña, 2013) Thus, coding is an assumption and theory-laden. The assumptions and theories guide us into data analysis. Creswell offers five qualitative approaches, and each carries its theoretical lens (or assumptions) (Creswell, 2007) to guide analysis, and readers may want to refer to the text specific to each approach. Even in thematic analysis, data are not coded free of theoretical and epistemological assumptions. (Braun & Clarke, 2006) It is a matter of whether the researchers choose to acknowledge them. Without acknowledging our assumptions, evaluating and critiquing our analysis are difficult, if not impossible (Braun & Clarke, 2006). Therefore, rigour in thematic analysis (and all other qualitative approaches) requires researchers to be transparent about their theoretical assumptions (Braun & Clarke, 2006).

In a practical sense during the first cycle of coding, we are encouraged to code the data close to what the data show (Saldaña, 2013). At this level, the codes are typically descriptive with minimal interpretation. They are the building blocks for further analysis. For an example, in a study of doctor’s experience in enquiring about sexual dysfunctions among male patients (Tong, 2011), one doctor said:

“One patient was very mad at me hahahah..... and scolded me because he, so call a religious teacher, em...and.....I was scolded by the patient because I bring up ‘the thing’, by asking you know about sexual problem”

Figure 4 shows the possibility of codes can range from “a difficult consultation” to “scolded for asking about sexual problems”.

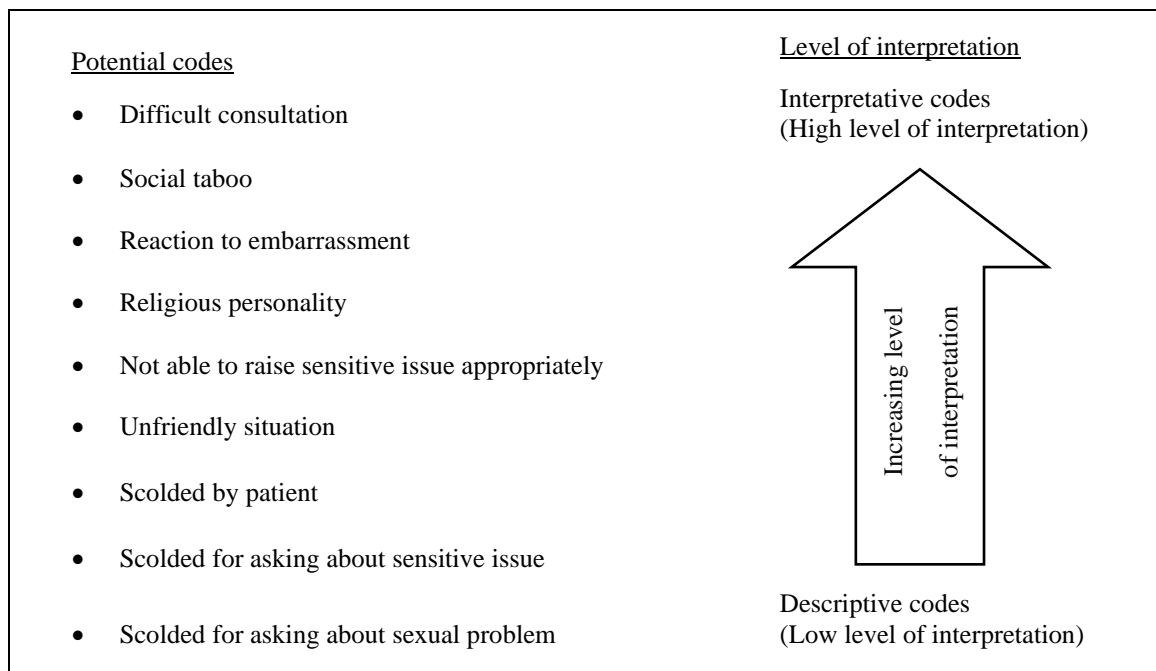


Figure 4: Range of possible codes and their corresponding depth of interpretation

Social taboo is a socio-cultural perspective to talking about sexual dysfunction. Thus, coding the conversation as taboo has added a layer to the assumption that social taboo could have been the underlying problem with such incidence. However, they could be other possibilities such as a challenge to the patient’s masculine image. The latter comes from the theory of masculinity (Connell, 2005). It might be too early to decide which the right one

is. Interpretative codes are not wrong in the initial cycle of coding, but at least researcher needs to be clear of their assumptions in order to critique their own analysis to justify their perspective.

In the later stage of analysis, themes are formed, and substantive interpretation may be done on descriptive codes in order to arrive at latent themes and abstraction. (Braun & Clarke, 2006, Saldaña, 2013) If researchers choose to stay at descriptive codes and organise their descriptive codes into themes, they are answering the question of “what is going on?”. They would choose to stay within what is explicitly told by informants and not go beyond what informants have said and what is observed. (Braun & Clarke, 2006). Often, the analysis is kept to a minimum and this approach often is insufficient to provide a good understanding of a phenomenon. Greater depth of understanding requires further interpretation and hence, identifying latent themes is encouraged. At this stage, analysis involves making sense of data, theorizing, recognizing relationships and patterns between codes. As in an analogy of creating models using building blocks, there are many ways these codes can be arranged. Analysis at this level involves the use of middle-range or local theories. Researchers have to grapple with literature and existing theory. They may just start off with some assumptions from literature and start making sense of their data.

Again, these assumptions have to be explicitly acknowledged (at least to the researcher themselves) in order to allow critical evaluation and reflection. They provide a scaffold for analysis and stimulus to ask questions of “why things happen the way they are”, “what contexts are relevant”, and “what other data seems to be missing”. Here, the theory is used to sensitize researchers with concepts and to ask questions and look for answers in the data to form emerging theoretical ideas. Charmaz (2014) advocated using theoretical sensitivity to provide one with added analytical precision. Nevertheless, the researchers must be ready to modify or change the scaffold as necessary when the analysis progresses to avoid forcing the data into an unfitting scaffold. For example, in the above study on doctors’ experience in enquiring about sexual dysfunctions among male patients, we can conceptualise the themes as a positive and negative experiences. The themes would be based on assumptions that there are two polar to that experience. This assumption takes the stance of a notion of good – the positive- and bad – the negative experience.

However, the alternative is to tap into the concept of receptivity, where there is a degree of the perceptual experience of the recipient discussing the sensitive issue during the consultation (Tong, 2011). This experience will then be coded as a low degree of receptivity in the context of the consultation. The next task is to ask “why” in the data. Theories and previous knowledge can also play the roles of triangulation, where they are used to challenge present findings. Theory triangulation at this stage prevents researchers from focusing on their preliminary assumption and enables them to explore alternative perspectives to develop a new explanation for the phenomenon under study (Denzin, 1970, Flick, 2007).

CONCLUSION

Some novice researchers might confuse in identifying a suitable theory for their study. Although the argument above has divided the roles of theories into two major groups: 1) metatheory and grand theories, 2) middle range and local level theories. In reality, the boundaries are less distinct. Nevertheless, the first is to justify the design and thus claim the rigour of the knowledge generated. The second slants towards contributing to the discipline-specific, framework and substantive content of the study, because they relate more closely (and less abstract) compared to grand theories to the issue being examined. Theories are a stepping stone to a study. We need to choose a particular stance in metatheory and perhaps a grand theory as an overarching anchor. However, choosing a middle range and local theory as a definite anchor is not encouraged. They can be used in combination and act as tentative sensitising concepts because we must be open to additional concepts to the original theories used.

Qualitative research that is completely detached from using theories in the research process is impossible. The use of theory in research is unavoidable and is an added complement to generating hypotheses or new theories. Theory assists us to explain a given social phenomenon. Researchers are required to critically analyse the theories they have chosen and to settle for a ‘best fit’ with the research purposes, questions, methods and analysis. The researchers must mention the limitations of the theories or theoretical frameworks they have used to enable future researchers to test their research findings and become the basis for a new theory. Although there is no single, agreed-upon set of methods for applying theory in qualitative research, the above steps provide a foundation upon which qualitative researchers can explore ways to integrate theory in their qualitative research journey.

REFERENCES

- Anfara, V., Mertz, N.T., 2006. *Theoretical Frameworks in Qualitative Research*. Sage Publications Inc., Thousand Oaks.
- Addis, M. E., & Mahalik, J. R. (2003). *Men, masculinity, and the context of help-seeking*. *American psychologist*, 58(1), 5.
- Blaikie, N. (2010). *Designing social research: The logic of anticipation* (2nd ed.). Cambridge: Polity.
- Bradbury-Jones, C. Taylor, J. Herber, O. (2014). How theory is used and articulated in qualitative research: Development of a new typology. *Social Science & Medicine*. 120,135-141. <http://dx.doi.org/10.1016/j.socscimed.2014.09.014>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Carter, S. M., & Little, M. (2007). Justifying knowledge, justifying method, taking action: Epistemologies, methodologies, and methods in qualitative research. *Qualitative health research*, 17(10), 1316-1328.
- Charmaz, K. (2006, 1st edition, 2014, 2nd edition.). *Constructing grounded theory*. London: SAGE. chiChinn P.L. & Kramer M.K. (2008) *Integrated Theory and Knowledge Development in Nursing*, 7th edn. Elsevier Mosby, St Louis, MO.
- Collins English Dictionary - *Complete & Unabridged (2012) Digital Edition* © William Collins Sons & Co. Ltd. 1979, 1986 © HarperCollins, Publishers 1998, 2000, 2003, 2005, 2006, 2007, 2009, 2012)
- Collins, C. S., & Stockton, C. M. (2018). The central role of theory in qualitative research. *International Journal of Qualitative Methods*, 17(1), 1609406918797475.
- Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity-Rethinking the concept. *Gender & Society*, 19(6), 829-859. doi:Doi 10.1177/0891243205278639
- Creswell, J.W. (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, (2nd ed.). Sage Publication, Thousand Oaks.
- Crotty, M. (1998). *The foundation of social research*. London: Sage.
- Crotty, M. (2003). *The foundation of Social Research: Meaning and Perspective in the Research Perspective*. London: Sage.
- Denzin, N.K. (1970). *The research act*. Chicago: Aldine.
- Flick, U. (2009). *Managing quality in qualitative research*. London: SAGE.
- Fawcett, J., 1978. The relationship between theory and research: a double helix. *Advances in Nursing Science*. 1 (1), 49e62
- Groenewald, T. (2004). A phenomenological research design illustrated. *International journal of qualitative methods*, 3(1), 42-55.
- Kezar, A. (2006). To use or not to use theory: is that the question?. In J. C., Smart (Eds.), *Higher Education: Handbook of Theory and Research*, 21, (pp 283-344). Springer Netherlands: Springer. DOI 10.1007/1-4020-4512-3_6
- Low, L. L., Tong, S. F., & Low, W. Y. (2016). *Selection of treatment strategies among patients with type 2 diabetes mellitus in Malaysia: a grounded theory approach*. *PloS one*, 11(1), e0147127.
- Mason, J. (2002). *Qualitative Researching* (2nd ed.). London: Sage.
- Merriam, S. B. (2009). *Qualitative Research in Practice*. San Francisco: Jossey-Bass.
- Mourad, R.P., Jr. (1997). *Postmodern Philosophical Critique and the Pursuit of Knowledge in Higher Education*. Westport, Connecticut: Bergin & Garvey.
- Pope, C., & Mays, N. (2020). The role of theory in qualitative research. *Qualitative research in health care*, 15-26.
- Quinn, P. M. (2002). *Qualitative research and evaluation methods*. California EU: Sage Publications Inc.
- Reeves, S., Albert, M., Kuper, A., & Hodges, B. D. (2008). Why use theories in qualitative research. *British Medical Journal*, 337(7670), 631-634.
- Sandelowski, M., 1993. Theory unmasked: the uses and guises of theory in qualitative research. *Research in Nursing & Health*, 16, 213-218.
- Saldaña, J. (, 2013, 2015). *The coding manual for qualitative researchers*. London, Sage.
- Tavallaie, M., Abu Talib, M., 2010. A general perspective role of theory in qualitative research. *Journal of International Social Research*, 3 (11), 570e577.
- Thomas, G. (1997). *Problem solving, theory, education*. *Harvard Educational Review* 67(1): 75-105.
- Tong, S.F., Low, W.Y., Ismail, S.B., Trevena, L. and Willcock, S., 2011. Physician's intention to initiate health check-up discussions with men: a qualitative study. *Family practice*, 28(3), pp.307-316.
- Tong, S. F., & Low, W. Y. (2012). Public health strategies to address Asian men's health needs. *Asia Pacific Journal of Public Health*, 24(4), 543-555.
- van den Hoonaard, W. C. (1997). *Working with sensitizing concepts: Analytical field research*. Thousand Oaks, CA: Sage.

Wu, H.-L. and Volker, D. L. (2009), The use of theory in qualitative approaches to research: application in end-of-life studies. *Journal of Advanced Nursing*, 65: 2719–2732.
doi: 10.1111/j.1365-2648.2009.05157.x