

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/265860758>

How theory is used and articulated in qualitative research: Development of a new typology

Article in *Social Science & Medicine* · September 2014

DOI: 10.1016/j.socscimed.2014.09.014 · Source: PubMed

CITATIONS

11

READS

242

3 authors:



[Caroline Bradbury-Jones](#)

University of Birmingham

69 PUBLICATIONS 548 CITATIONS

[SEE PROFILE](#)



[Julie Taylor](#)

University of Birmingham

144 PUBLICATIONS 763 CITATIONS

[SEE PROFILE](#)



[Oliver Rudolf Herber](#)

University of Dundee

18 PUBLICATIONS 216 CITATIONS

[SEE PROFILE](#)



How theory is used and articulated in qualitative research: Development of a new typology



Caroline Bradbury-Jones ^{a,*}, Julie Taylor ^b, Oliver Herber ^c

^a University of Manchester, England, UK

^b University of Edinburgh, Scotland, UK

^c Heinrich-Heine-University, Düsseldorf, Germany

ARTICLE INFO

Article history:

Received 17 April 2014

Received in revised form

27 August 2014

Accepted 4 September 2014

Available online 6 September 2014

Keywords:

Research design

Research

Qualitative

Social science

Theory

Typology

ABSTRACT

There is a long tradition within qualitative research of theory being central and of critical importance. Qualitative research theory often equates with the methodologies used but this is a complex relationship, plagued by lack of consensus among scholars regarding how theory and methodology are related. This article furthers the debates on how theories are used in qualitative research, how they might influence a study and how they are articulated in publications. The aim is to provide a framework through which the relationship between theory and qualitative research can be understood. We propose a five-point typology on the levels of theoretical visibility, testing this against a range of published research from five key international health, medicine and social science journals. The typology captures a range of visibility – from seemingly absent through to highly visible and applied throughout. There was a clear gradient in this assessment – only a minority appeared to use theory consistently throughout a study. We outline several challenges to consistently applying theory in qualitative research and suggest potential solutions. This article is based on the argument that lack of theory in qualitative research undermines its quality. The typology is offered to assist researchers in applying theory in their own research and critiquing its use in the work of others.

© 2014 Elsevier Ltd. All rights reserved.

1. Background

Historically, qualitative research methods have had their roots primarily in the disciplines of social sciences and humanities (Lockyer, 2008). However, in the mid-1990s prominent medical journals such as the *Annals of Internal Medicine* and the *British Medical Journal* started to publish editorials that advocated for more qualitative research as a way to investigate peoples' attitudes, beliefs and preferences (Inui, 1996; Jones, 1995). Since then, qualitative research has become more prominent in medicine and healthcare, because it addresses research questions that cannot be answered solely by traditional experimental designs (Poses and Isen, 1998). In the contemporary world of research within social sciences and healthcare disciplines, qualitative inquiry enjoys a place of equal prominence in relation to other approaches. However, Creswell (2007) observed that the landscape of qualitative research has changed and the qualitative enterprise has become

more fragmented. He argued that qualitative researchers are far more aware of the designs they are using than they were in the 1990s and that they face a baffling number of choices of methods.

2. Qualitative research and theory: a complex relationship

The relationship between qualitative research and theory is both complex and contentious and numerous scholars have alluded to lack of consensus and poor understandings that reflect this troubled marriage (Sandelowski, 1993; Anfara and Mertz, 2006; Wu and Volker, 2009; Tavallaei and Abu Talib, 2010). The problem seems to be that theory in qualitative research is variable and can be used in different ways. Additionally, varying definitions of theory exist and researchers tend to use the same words to mean different things (Wu and Volker, 2009). It is likely that these issues combine to exacerbate the confusion.

The problem with contention, lack of consensus and fragmentation is the risk of qualitative research being regarded as an incoherent endeavour. It exposes it to charges of lack of theoretical robustness and maturity. Correspondingly, Anfara and Mertz (2006) highlighted the criticisms levied against qualitative research for its tendency to lack theory in its development or

* Corresponding author. School of Nursing, Midwifery and Social Work, University of Manchester, Jean McFarlane Building, Oxford Road, M13 9PL Manchester, England, UK.

E-mail address: caroline.bradbury-jones@manchester.ac.uk (C. Bradbury-Jones).

conduct. Their review of theoretical frameworks in qualitative research found little uniformity regarding the role of theory and it was often non-existent. This is important because when theory and research are isolated activities, they become 'excursions into the trivial' (Fawcett, 1978, p. 49). We take a stance that integration of theory and research is essential: theory is crucial and without it, the quality of qualitative research is diminished.

3. Definitions of theory

There are numerous definitions of theory, for example, Meleis (2007, p. 37) defines it as:

"An organized, coherent, and systematic articulation of a set of statements related to significant questions in a discipline that are communicated in a meaningful whole. It is a symbolic depiction of aspects of reality that are discovered or invented for describing, explaining, predicting, or prescribing responses, events, situations, conditions, or relationships. Theories have concepts that are related to the discipline's phenomena. These concepts are related to each other to form theoretical statements."

In this definition, the disciplinary nature of theory is captured. But theory in qualitative research seems to operate at two different levels and although Tavallaei and Abu Talib (2010) state that in qualitative research, theory often equates with the methodologies used, we attempt to disentangle what we mean by theory. Firstly, there are substantive or discipline-based theories that are specific to the topic at hand – such as Orem's self-care deficit nursing theory (Orem, 2001) or Rizzo Parse's theory of human becoming (Parse, 2007). These align with the definition of Meleis cited earlier.

Secondly however, there are theories that operate more at a methodological level and encompass for example, grounded theory or phenomenology. Attempting to separate theory from methodology in qualitative enquiry is likely to fail because as Denzin and Lincoln (2005, p. 30–32) observed, the researcher:

"Approaches the world with a set of ideas, a framework (theory, ontology) that specifies a set of questions (epistemology) that he/she examines in specific ways (methodology, analysis)".

Moreover, Watling and Lingard (2012) refer to Glaser and Strauss' distinction between substantive and formal theories. They propose that substantive theories are based on empirical areas of enquiry within a particular domain, generated from a researcher's own data – such as the case with grounded theory. Formal theories are more conceptual and are unlikely to arise from a researcher's own data (unless generated from large numbers of studies in a variety of substantive areas). What these perspectives illustrate is the strong link between theories and methodologies; they are not clear cut and nor are they discrete entities. The inextricable linkage between the two needs to be considered when reading this article.

4. Dealing with theory from different methodological positions

Theory is used variously in research and is influenced considerably by ontological and epistemological positioning. In qualitative research, theory is associated with the methodologies used (Denzin and Lincoln, 2005; Anfara and Mertz, 2006; Creswell, 2007; Tavallaei and Abu Talib, 2010) and different approaches to inquiry specify different roles for theory. Sandelowski (1993) identifies four uses and manifestations of theory in relation to its source,

centrality, temporal placement and functions: (1) the source of theory in qualitative research comes from the researcher itself (e.g. in grounded theory it is the researcher who constructs theory from the interview) or theory enters from the outside (e.g. researchers draw on extant theory or they approach research with the general perspectives, assumptions or theoretical formulations of their own disciplines). It is therefore important to distinguish between theory at the substantive and paradigm level; (2) theory may be central or only peripheral to the target phenomena under study; (3) although theory is always present in qualitative research, it is not always clear when or under what circumstances it actually entered or left a study; and (4) theory in qualitative research has numerous functions. For example, it can provide rationalization or justification for the methodological approach used, it can offer a comparative context or an organizational framework for the interpretation and representation of data or it can serve as a scheme for representing findings.

Our understanding of theory as explored in this article aligns with Sandelowski's notion of theory 'entering from the outside'. That is, the extant theories that researchers draw upon to inform and underpin their qualitative inquiries; what Meyer and Ward (2014) refer to as 'theory-driven'. But given the heterogeneity of approaches within the qualitative paradigm, there are different ways that qualitative researchers deal with theory and particularly in grounded theory and phenomenological studies. Researchers who embrace grounded theory with its inductive analysis as the principal technique, often use sensitizing concepts to guide their analysis (Bowen, 2006). Sensitizing concepts is a term first described by the American sociologist Blumer (1954). He contrasted definitive concepts with sensitizing concepts. While the former provide precise prescriptions of what to see, the latter suggest directions along which to look and thus might be used as a starting point for data analysis. Charmaz (2003) suggests to utilize "sensitizing concepts only as a point of departure from which to study the data" (p. 259). However, it is important to note that although sensitizing concepts might alert researchers to important aspects of research situations, they might also block the view of other important aspects (Bowen, 2006).

Bracketing is another issue that requires exploration in this context. Originated from within the phenomenology tradition, bracketing refers to the process of mitigating potentially deleterious effects of preconceived beliefs and opinions about the phenomenon under study (Tufford and Newman, 2010). Richards and Morse (2007) emphasise that bracketing – of one's theories, prior knowledge and experiences with the phenomenon – is intended to allow the researcher to encounter the phenomenon "freshly and describe it precisely as it is perceived" (Giorgi, 1997, p. 237). Gearing (2004) identified six forms of bracketing apparent across several traditions in qualitative research including phenomenology, ethnography and grounded theory. This might surprise some researchers who would associate bracketing solely with phenomenology, thus illustrating the complexity of qualitative research. In summary, the role of theory in qualitative research is variable and it is for this very reason that it needs to be made visible; because if "theories remain implicit their power to clarify or to confuse, and to reveal or obscure new insights, can work unnoticed" (Alderson, 1998, p. 1007).

5. The articulation of theory

Wu and Volker (2009) proposed that qualitative researchers do not consistently articulate how theory has been applied. Similarly, in a recent paper, Meyer and Ward (2014) have highlighted the challenges not only in using theory, but also in the subsequent articulation of theory in theses and publications. This is the nub of

the issue. The problem becomes not so much lack of theory *per se*, but rather lack of identification and *articulation* of the theory. Good research however, involves making this explicit (Creswell, 2007). There is a need for qualitative researchers to 'unmask theory: to recognize it in its many guises and disguises' (Sandelowski, 1993, p. 217). It is not unreasonable to ask: why is this so important? Several years ago, Alderson (1998) explained that theory is at the heart of practice, planning and research and all thinking involves theories. Because theories powerfully influence how evidence is collected, analysed, understood and used, Alderson argued that it is both 'practical and scientific' to examine them. More recently, Meyer and Ward (2014) have argued that the role of theory in qualitative health research is paramount for translation into practice and policy. They suggest this is because it moves beyond pure description of data and allows interpretation of the social processes underpinning findings. With these issues in mind, the purpose of this article is to support other qualitative researchers in achieving the type of articulation as advocated. Specifically we propose a typology that may assist in locating qualitative studies theoretically. We hope it will assist researchers in critiquing the level of theoretical visibility in their own qualitative studies and those of others'. Importantly, the typology might prompt us all to consider not only how theory is applied in qualitative research, but also how it is articulated in publications arising from such studies.

We are not the first to explore the place of theory in qualitative research. There have been several previous critiques (Mitchell and Cody, 1993; Creswell, 2007; Tavallaei and Abu Talib, 2010; Meyer and Ward, 2014). Anfara and Mertz (2006) provide a comprehensive text on the issue and provide concrete examples of how researchers have used theoretical frameworks and their influence on various aspects of their research. Such texts offer a rich resource to support our understanding of the relationship between theory and qualitative research. Our typology however, identifies the differing levels of theoretical visibility and the implications that these may have on a qualitative research study (see Table 1). Using examples of challenges encountered in one of our own qualitative studies, we suggest that the strongest allegiance between theory and qualitative research is when theory drives an entire study and is applied consistently throughout. Moreover we argue that theory needs to be clearly visible and articulated to others, particularly during publication. Given the above, it is only correct to lay out our own conceptualisation of theory. We will expand on the complexities of this as the article progresses, but our conceptual and operational definition of theory aligns with a substantive view, that is, theories that have arisen from a number of disciplines such as psychology, sociology and philosophy. However, as we will discuss, these are not always readily separated from methodological interpretations of theory.

6. Aim of the article

The aim of this article is to provide a framework – a typology – through which the relationship between theory and qualitative research can be understood. Furthermore, the intention is to show how this might be used in making assessments about levels of theoretical visibility in qualitative research; how it is both used and articulated.

7. Development of a new typology

This article stems from our experience as qualitative researchers and the observations that we have made – of ourselves and others – regarding the use of theory in qualitative research. From our respective countries we have observed consistent patterns of use on which the typology is based. In 2012, two of the authors (JT and

Table 1
Levels of theoretical visibility typology.

Level of theoretical visibility	Descriptor
Level 1: Seemingly absent	Theory is not mentioned at all.
Level 2: Implied	Theory is may be mentioned or discussed in some detail (mainly in the background and/or introduction sections) and reference might be made to theorists in the field, but no explicit statement is made about the influence of these on the study.
Level 3: Partially applied	Researchers explicitly locate their study within a particular theory but then seem to abandon efforts to link, apply or interpret their findings in that context. Theory is used only partially throughout the research process in relation to the research aims, interview questions or data analysis.
Level 4: Retrospectively applied	Theory is considered at the end of a study as a means of making sense of research findings. Theory may be introduced as an afterthought.
Level 5: Consistently applied	Theory is consistently applied throughout the entire research process. Theory guides and directs the various phases of the research process and can be tracked throughout a published article.

CB-J) used the opportunity of an international nursing research conference to test out our emerging conceptualisation of the typology (Taylor and Bradbury-Jones, 2012). We presented the typology and invited comment and critique from the conference delegates regarding its perceived usefulness. They appreciated the way the typology allowed for varying uses of theory in qualitative research, and commented on its potential to be developed into a robust framework. To refine the typology we undertook a scoping exercise of empirical, qualitative research articles published during the first quarter of 2013 in five different journals: Health and Social Care in the Community (HSCC), International Journal of Nursing Studies (IJNS), Qualitative Health Research (QHR), Social Science & Medicine (SS&M) and BMJ (Table 2). This was a scoping exercise, rather than a systematic review, which is why we included a limited number of journals and a restricted time period. Our aim was to produce a 'snap-shot picture' to assist the development of the typology, rather than to undertake a comprehensive search. We chose these particular journals for their breadth in coverage regarding nursing, medicine and health and social care, and for their likelihood to publish qualitative articles. Within each journal we scrutinised the list of contents in each issue in search of original research that utilized qualitative methodology. In total, 55 articles applying qualitative research methodologies were published in these journals during this period.

Full texts of relevant articles were scrutinised for their reporting of the use of theory; or in other words, its visibility. We made

Table 2
Use of theory in qualitative research: Levels of visibility typology.

Level of theoretical visibility	BMJ	HSCC	IJNS	QHR	SS&M	Total articles at each level
Total articles in each journal	1	7	9	28	10	55
Level 1: Seemingly absent	0	4	3	12	1	20
Level 2: Implied	1	2	1	7	0	11
Level 3: Partially applied	0	1	4	6	4	15
Level 4: Retrospectively applied	0	0	0	0	0	0
Level 5: Consistently applied	0	0	1	3	5	9

critical judgements based on the information provided in each article regarding how theory had been used and subsequently mapped this to our typology. This process led us to make minor revisions to the original typology to ensure that it captured and reflected what is actually being published. Thus, the typology presented here arises from a maturation of our thoughts and a sustained critique of the literature in the field. It has also been subject to modification as part of the review process for publication in this journal. Most notably, it has been reduced from its original six levels, to five as presented here (Table 1). These capture what we call 'the levels of visibility of theory' – that is – the levels at which theories underpinning the research are made explicit within the publications. We use the term visibility because this is what we are able to 'see'. As we will discuss later, it may be that researchers *have* applied theory in their study, but that it is not reported clearly. In the language of the typology, it is not visible. The typology captures a range of use of theory from Level 1 (where theory is seemingly absent) through to Level 5 (where theory is consistently applied and highly visible throughout the entire research process). There is a clear gradient among the articles we assessed towards absence of theory, with only a minority applying theory throughout.

7.1. Level 1: seemingly absent

At this level, no mention of theory is made and reference to key theorists in the field is absent. This is similar to [Anfara and Mertz's \(2006\)](#) reference to non-existent use of theory. Twenty (a little over 36%) of the 55 articles that met our criteria were judged as being at this level (Table 2). This means that more than a third of the articles in our appraisal exercise were seemingly a-theoretical. However, we have been careful in our choice of terminology and emphasise the word 'seemingly'. We have made our judgements against published articles and it may be that theory was used in the study, but not reported. This is an important caveat for two reasons.

Firstly, there is an argument that theory is never *really* non-existent: qualitative research and theory always co-exist, albeit in different ways. Several scholars have asserted that research cannot be undertaken in a theoretical vacuum and that theoretical interpretation occurs in qualitative research, even when not acknowledged as such, or denied ([Mitchell and Cody, 1993](#); [Mason, 2002](#); [Alderson, 1998](#)). There are always some initial ideas and orientations ([Miles and Huberman, 1984](#)). So from this perspective, although theory may not be visible within an article, it is there somewhere.

The second caveat relates to the conventions of publishing that might minimise the chances of theory coming to the fore. For example, the restricted word limit of most journals poses a considerable challenge. Requirement to provide details of procedural, ethical and methodological aspects of the study can easily compromise any intended focus on theory. Conventions within journals also vary, with some emphasising theoretical standpoints more than others. Overall though, the implications of a seemingly absent use of theory to inform the research are contrary to the spirit of qualitative inquiry.

7.2. Level 2: implied

Even though a theoretical orientation may not be explicit, it is always implied ([Sandelowski, 1993](#)). Eleven papers (one fifth) of papers in our scoping were judged as having an implied use of theory (Table 2). According to our typology, at this level theory is at least mentioned or to some extent discussed (mainly in the background/introduction section and/or discussion section) and reference might be made to theorists in the field, but no statement is made about the influence of these on the study. In our view, an

example of this is the article by [Bellamy and Gott \(2013\)](#). Their paper investigates the views of healthcare staff regarding the provision of culturally appropriate palliative care for Māori, Pacific Island and Chinese elders living in New Zealand. They provide a great deal of contextual and demographic information and sound justification for the science of their study. Culture and cultural safety are mentioned in the background and picked up again in the discussion, so this article by no means lacks theory. But what makes it different to those at level 5, is lack of explicit statement of how theory has been used in the study.

7.3. Level 3: partially applied

The distinction between this level and Level 2, is that in partially applied, researchers may explicitly locate their study within a particular theory but then seem to abandon efforts to link, apply or interpret their findings in that context. Theory is used only partially throughout the research process in relation to the research aims, interview questions or data analysis. In our judgement, 15 articles (just over 27%) used theory in this way. Out of these, [Ahmad, Jandu, Albagli, Angus and Ginsburg's \(2013\)](#) exploration of exploring barriers to mammography uptake and retention among South Asian immigrant women appears to offer an example of this level. The authors report that they used a theoretical lens of health promotion to inform their analysis. So their study clearly draws upon theory. However, the way in which this is described leads us to conclude that this was partial. It was not the case that a theoretical position was hinted at but never made explicit, because this would have been implied. Rather, these authors make a statement about their use of theory, in relation to a particular part of their study (analysis) and so it aligns with level 3 of the taxonomy.

7.4. Level 4: retrospectively applied

[Coffey and Atkinson \(1996\)](#) cautioned that theories should not be 'added only as a final gloss or justification ... [nor] thrown over the work as a final garnish' (p. 158). Yet this is a use of theory with which we are all familiar. Our conceptualisation of retrospectively applied theory is where theory is applied at the end of a study as a means of making sense of research findings or as a post-hoc activity to strengthen the theoretical thrust of a piece of qualitative work; it is introduced as an afterthought. We see this typically in doctoral work where students have conceived of the need to strengthen their studies theoretically, but the theory has not driven the research from its outset. Level 4 (retrospectively applied) is difficult to identify – few researchers admit it. Thus during our scoping we could not assess whether theory had been applied retrospectively and hence the zero rating for all articles at this level. How are we to know in the reporting of a study that theory has been applied retrospectively? It may well be mistaken for implied or partial application, but it would be impossible without some seriously dubious activities for retrospectively applied theory to masquerade as consistently applied.

7.5. Level 5: consistently applied

Level 5 of the typology is where theory is consistently applied throughout the entire research process. Theory guides and directs the various phases of the research process and can be made visible in any publications that arise from the study. This aligns with [Coffey and Atkinson's \(1996\)](#) description of theory as having potential to be 'drawn on repeatedly as ideas are formulated, tried out, modified, rejected, or polished' (p. 158). Similarly [Wu and Volker \(2009\)](#) highlight how theory can frame the study questions; relate the target phenomenon to the theory; and provide a framework for

Table 3

Papers showing consistently applied theory.

Author(s)	Journal	Subject area	Espoused use of theory
Brüggermann, A.J. & Swahnberg, K.	IJNS	Abuse in health care	Galtung's Theory of Violence
Gallagher, N., MacFarlane, A., Murphy, A.W. et al.	QHR	Continuity of care in out-of-hours primary care	Chronic Illness Trajectory
Gibson, T.	QHR	Construction of the enterprising nurse	Foucault's 'governmentality'
Moll, S., Eakin, J.M., Franche R-L. & Strike, C.	QHR	Health Care Workers' Mental Ill Health	Critical Social Theory
Orzech, K.M.	SS&M	Adolescent perceptions of healthy sleep	Biocultural model
Petit, D., Sondorp, E., Mayhew, S. et al.	SS&M	Health Services in post-conflict Liberia	'Street Level Bureaucrats'
Stoopendaal, A. & Bal, R.	SS&M	Quality improvements in long-term care	Actor Network Theory
Völker, S. & Kistemann, T.	SS&M	Urban blue space	Therapeutic landscapes and space
White, I.D., Faithfull, S. & Allan, H.	SS&M	Women's sexual lives after pelvic radiotherapy	Foucauldian perspectives

data analysis. It has the advantage of ensuring what Morse and Richards (2002) refer to as 'methodological congruence', that is, where the purpose, research questions and its corresponding methods, appear as a cohesive whole.

In our judgements, only nine articles (a little over 16%) were deemed to have used theory at this level (Table 3). Examples can be seen in Gibson's (2013) use of Foucault's notions of governmentality in a qualitative exploration of the enterprising nurse. Gallagher et al. (2012) applied the Chronic Illness Trajectory Framework in their study on continuity of care, and Orzech's (2013) application of a bio-cultural model in adolescent sleep patterns is threaded throughout the publication. Petit et al. (2013) refer to their underpinning theory throughout the paper and make an explicit statement about how it informed the analysis. Additionally, this is reflected in the discussion and conclusion sections of the paper. These are examples taken from the taxonomy that represent level 5 application of theory. A hallmark of all of the articles identified at level 5 is the explicit use of theory and its high visibility in the publications. In these publications one can 'see' the theory and its relationship to the methodology.

It is noteworthy that Gallagher and colleagues allude to the a-theoretical nature of most qualitative studies on continuity of care. We agree. Our argument is that all levels of the typology exist within qualitative research, but our scoping revealed that there is a propensity towards a-theoretical reporting. We are not questioning the scientific quality or methodological rigour of any of the papers included in our appraisal, but we suggest that the absence of theory in many does nothing to strengthen the place of qualitative research as a theoretically strong paradigm. Using a theory that is consistently applied is one way of ensuring that theory is visible throughout the study. However, it does also pose some challenges. We illustrate this in an example from our own research, showing also how we found some solutions.

8. Consistently applied use of theory: an example

In 2011 we undertook a qualitative study in Scotland that explored health professionals' beliefs about domestic abuse (Taylor et al., 2013). Theoretically the study was underpinned by the Common Sense Model (CSM) of self-regulation of health and illness (Leventhal et al., 2003). This is a well-established theory in healthcare that is typically used to explore relationships between cognitive illness representations and health behaviours. Central to this model is representations – or beliefs – about illness. Leventhal and colleagues describe five elements of such representations: identity (the label or name given to a condition); cause (ideas about perceived causes of a condition); time-line (beliefs about how long the condition will last); consequences (perceptions regarding the consequences and impact of a condition); and curability/controlability (beliefs about the extent to which a condition can be cured or controlled). We used the five domains to guide our inquiry

regarding health professionals' beliefs about domestic abuse. The theory can be tracked through our research design (to be honest, this is not something that happens in *all* our work) and was used, for example, to influence our research questions, to organise the interview schedule and to finalise the analysis process (see Taylor et al., 2013 for fuller details of the methodology and application). In our study the research questions were closely mapped to CSM as the underpinning theory (as illustrated in Table 4). Thus, the theory acted as a driver for the rest of the study and a determinant for the research design.

Our argument in this article supports the consistently applied use of theory when undertaking a qualitative study and this is what we attempted to do with the CSM research. However, there were some challenges. In our use of theory, adaptation was necessary and there will be purists who disagree with any modification to tested theories and concepts. As the CSM is a theoretical model to understand 'illness behaviours', we could not apply it to a study on domestic abuse (not an illness) without modification. We moulded it to fit the unique needs of our study and operationalised the CSM alongside the original meaning (Table 5). We can argue that this is justified because theories evolve and develop over time. They are not static.

There was also a risk during the analysis phase of 'squeezing' the data to fit the theory. Because we were keen to use CSM as our guiding theory, it was tempting to use the different elements of it as our 'themes', but they did not always work. To overcome this, inductive analysis, followed by mapping onto the CSM domains, was a key strategy. Whilst use of CSM was what we had promised the funder, there was much data that went well beyond that and was analysed separately (post-study). Funders generally only want what is promised – our extraneous material was not of interest. We would recommend initial discussions and decisions made about the extent to which a theoretical stance will drive the study – particularly the analysis. If rigid adherence is not possible, or not helpful, then as long as clear explanations about divergence are given in a publication, then this may be the most pragmatic and equitable solution.

Overall, the relationship between qualitative research and theory is complex. Inappropriate use of theory can be seen when it is used as a technical fix; for example for PhD students to get their degree or for researchers to increase the chances of getting the

Table 4

Research questions reflecting CSM.

1. What are health professionals' beliefs about the nature and consequences of domestic abuse? (Cause, Time-line, Curability/control, Consequences)
2. In what ways might health professionals' beliefs about domestic abuse shape their practices regarding enquiring and responding to domestic abuse? (Identity)
3. What are the views of women with domestic abuse experiences about health professionals' beliefs about disclosure? (Cause, Time-line, Curability/control, Consequences.)

Table 5
Interpretation of theory (CSM).

Domain	Original understandings	Interpretations in the domestic abuse study
Identity	The label given to a condition	Identification and recognition of domestic abuse
Cause	Ideas about perceived causes	The context in which domestic abuse occurs
Time-line	Beliefs about how long the condition will last	Temporal aspects of domestic abuse, such as the 'right time' for routine inquiry and disclosure
Curability/controllability	Beliefs about the extent to which a condition can be cured	Where the responsibility lies for disclosure and subsequent response
Consequences	Perceptions regarding the consequences and impact of a condition	Consequences of domestic abuse for women; their children and health professionals

article published. In contrast, appropriate use of theory has the potential to strengthen the rigour of qualitative research, but only if embedded in a broad understanding of qualitative research and data analysis. We have argued that theory adds considerable strength to the research process – but only if treated with respect and perhaps not followed too slavishly. It is likely that transparency in our qualitative work is just as important as our use of theory.

9. Limitations

This article has some limitations that need to be acknowledged. Firstly, our 'scoping' falls short of the rigorous, systematic approach associated with a conventional literature review. However, our intention was not to undertake a systematic review. Rather, we sought to refine a rudimentary framework into a more informed, representative illustration of what is actually being published.

The second limitation relates to the fundamental issue of the place of theory in qualitative research. We have advocated the use of consistently applied theory, that is, theory that precedes and guides a qualitative investigation. However, one view is that theory is appropriate for most qualitative studies (in the way advocated in this article), but not for all, such as in grounded theory studies (Vivar et al., 2007). It may appear that we have been blind to the multiplicity of ways that theory can be used in qualitative research: this is not the case. We accept, for example, that qualitative research inquiry can help to generate theory, rather than be guided by it, indeed this is the *raison d'être* of grounded theory. That said, although some qualitative approaches (such as grounded theory and in some cases phenomenology) require researchers to suspend *a priori* theoretical commitments, they do not mandate 'ignorance of relevant scholarship' (Sandelowski, 1993, p. 213).

Earlier we discussed Watling and Lingard (2012) description of substantive theories as those generated from a researcher's own data, as is the case (although not exclusively) with grounded theory. Interestingly, our scoping shows that out of the eight papers deemed to sit at level 5 of the typology, two were reported to be grounded theory studies. Völker and Kistemann (2013) report their methodology as grounded theory but are strongly theoretical throughout, drawing in part on their previous work on spaces (Völker and Kistemann, 2011). Brüggermann and Swahnberg (2013) use Galtung's Theory of Violence throughout their grounded theory study. What these two examples show is that qualitative studies that are methodologically underpinned by grounded theory can fit congruently into the proposed typology. Grounded theory is not, and should not be, a-theoretical.

Finally, we have explained our development of the typology. It arose as a result of considerable consultation and feedback from academic colleagues, but at many levels we accept the rudimentary stage of its development. Over the course of time, it may be revised and challenged. So, the articles we have discussed as being aligned with a certain level will not be static and others may hold a different opinion as to where they sit within the typology. We have deliberately steered away from citing papers that were deemed to

be at level 1 of the taxonomy. Although it may have been helpful for the reader to see these examples, because of the connotations of criticism, we considered it unfair to use these citations given the emergent design of the framework. For similar reasons, we have also been judicious with our citation of articles that we considered to be at levels 2 and 3. Instead, we have chosen to focus on level 5 articles as positive exemplars. Further appraisal can follow, once the typology has itself been critiqued and tested. We do not see any of these issues as a threat to what is presented here, but rather, an opportunity to develop and revise the typology so that it is of use for researchers within the spheres of health and social sciences.

10. Using the typology: implications for research practice

In publishing the Levels of Theoretical Visibility Typology, we envisage that it can have practical utility in multiple ways. In relation to developing a research proposal, the typology could be used as a reference point to argue the theoretical strength of the proposed study. Arguably, an explicit statement about the intention to consistently apply theory would be viewed favourably by most reviewers. This statement would be supported by evidence of a theoretical framework within the proposal and evidence of linkage from the framework to the research aim, research questions, analytical framework, and so forth.

In terms of outputs, in preparing papers derived from qualitative studies, authors might use the typology to argue for the theoretical strength of their study. In this article we have suggested that this kind of articulation of theory is crucial (and it is maybe something that is not always done well). So being equipped with a framework that allows researchers to make an explicit statement about how their study aligns with the typology, may be useful, particularly if it is deemed to be at level 5.

Finally, when reviewing, examining or reading other qualitative researchers' work, the typology has potential to be used as an aid to critical review. Level of theoretical visibility could be included as a quality criterion for qualitative research in critical appraisal tools. Researchers might want to question: How does the study (as reported) sit within the typology? Is it deemed to be at level 5 and if not, what are the reasons for this? We suggest that Level 1 should raise a red flag among reviewers regarding the theoretical strength of a study – although the methodological robustness is a separate issue.

11. Conclusions

We are advocates of the use of theory as an integral part of the qualitative research endeavour. But in our assessment, only nine out of the 55 articles examined, used theory at this level. It is important for qualitative researchers to examine the theoretical bases of their selected methodological approach, articulate a clear theoretical base that fits the phenomenon being studied, and adopt a critical, flexible and creative attitude when applying theory to a study (Wu and Volker, 2009). Different approaches to qualitative inquiry specify different roles for theory. There is an argument that

theory is always present in some guise (Sandelowski, 1993) but it can vary from being non-existent, through to being more pervasive and influential (Anfara and Mertz, 2006). In our view, the latter is preferable because with reference to Alderson cited earlier, theory is at the heart of research and to examine it is both practical and scientific.

References

- Ahmad, F., Jandu, B., Albagli, A., Angus, J.E., Ginsburg, O., 2013. Exploring ways to overcome barriers to mammography uptake and retention among South Asian immigrant women. *Health Soc. Care Community* 21 (1), 88–97.
- Alderson, P., 1998. Theories in health care and research – the importance of theories in health care. *Br. Med. J.* 317, 1007–1010.
- Anfara, V., Mertz, N.T., 2006. *Theoretical Frameworks in Qualitative Research*. Sage Publications Inc., Thousand Oaks.
- Bellamy, G., Gott, M., 2013. What are the priorities for developing culturally appropriate palliative and end-of life care for older people? The views of healthcare staff working in New Zealand. *Health Soc. Care Community* 21 (1), 26–34.
- Blumer, H., 1954. What is wrong with social theory? *Am. Sociol. Rev.* 18, 3–10.
- Bowen, G.A., 2006. Grounded theory and sensitizing concepts. *Int. J. Qual. Methods* 5 (3). <http://wigan-ojs.library.ualberta.ca/index.php/IJQM/article/view/4367/3497>.
- Brüggermann, A.J., Swahnberg, K., 2013. What contributes to abuse in health care? A grounded theory of female patients' stories. *Int. J. Nurs. Stud.* 50, 404–412.
- Charmaz, K., 2003. Grounded theory: objectivist and constructivist methods. In: Denzin, N.K., Lincoln, Y.S. (Eds.), *Strategies for Qualitative Inquiry*, second ed. Sage, Thousand Oaks, CA, pp. 249–291.
- Coffey, A., Atkinson, P., 1996. *Making Sense of Qualitative Data: Complementary Research Strategies*. Sage publications, London.
- Creswell, J.W., 2007. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, second ed. Sage Publication, Thousand Oaks.
- Denzin, N.K., Lincoln, Y., 2005. *The Sage Handbook of Qualitative Research*, third ed. Sage Publication, California.
- Fawcett, J., 1978. The relationship between theory and research: a double helix. *Adv. Nurs. Sci.* 1 (1), 49–62.
- Gallagher, N., MacFarlane, A., Murphy, A.W., Freeman, G.K., Glynn, L.G., Bradley, C.P., 2012. Service user's and caregivers' perspectives on continuity of care in out-of-hours primary care. *Qual. Health Res.* 23 (3), 407–421.
- Gearing, R.E., 2004. Bracketing in research. A typology. *Qual. Health Res.* 14 (10), 1429–1452.
- Gibson, T., 2013. The entrepreneurial rationalities of governing and the construction of the enterprising nurse. *Qual. Health Res.* 23 (1), 93–104.
- Giorgi, A., 1997. The theory, practice, and evaluation of the phenomenological method as a qualitative research procedure. *J. Phenomenol. Psychol.* 28 (2), 235–260.
- Inui, T., 1996. The virtue of qualitative and quantitative research. *Annu. Intern. Med.* 125, 770–771.
- Jones, R., 1995. Why do qualitative research? It should begin to close the gap between the sciences of discovery and implementation. *Br. Med. J.* 311, 2.
- Leventhal, H., Brissette, I., Leventhal, E.A., 2003. The common-sense model of self-regulation of health and illness. In: Cameron, L.D., Leventhal, H. (Eds.), *The Self-regulation of Health and Illness Behaviour*. Routledge, London.
- Lockyer, S., 2008. History of Qualitative Research. In: *The SAGE Encyclopedia of Qualitative Research Methods*.
- Mason, J., 2002. *Qualitative Researching*, second ed. Sage Publications Ltd, London.
- Meleis, A.I., 2007. *Theoretical Nursing. Development & Progress*, fourth ed. Lippincott Williams & Wilkins.
- Meyer, S., Ward, P., 2014. 'How to' use social theory within and throughout qualitative research in healthcare contexts. *Sociol. Compass* 8 (5), 525–539.
- Miles, M., Huberman, A., 1984. *Qualitative Data Analysis*. Sage Publications Ltd, London.
- Mitchell, G.J., Cody, W.K., 1993. The role of theory in qualitative research. *Nurs. Sci. Q.* 6 (4), 170–178.
- Morse, J.M., Richards, L., 2002. *README FIRST for a User's Guide to Qualitative Methods*. Sage, Thousand Oaks, CA.
- Orem, D.E., 2001. *Nursing: Concepts of Practice*, sixth ed. Mosby, St. Louis, MO.
- Orzech, K., 2013. A qualitative exploration of adolescent perceptions of healthy sleep in Tucson, Arizona, USA. *Soc. Sci. Med.* 79, 109–116.
- Parse, R.R., 2007. The humanbecoming school of thought in 2050. *Nurs. Sci. Q.* 20, 308–311.
- Petit, D., Sondorp, E., Mayhew, S., Roura, M., Roberts, B., 2013. Implementing a basic package of health services in post-conflict Liberia: perceptions of key stakeholders. *Soc. Sci. Med.* 78, 42–49.
- Poses, R.M., Isen, A.M., 1998. Qualitative research in medicine and health care: questions and controversy. *J. Gen. Intern. Med.* 13 (1), 32–38.
- Richards, L., Morse, J.M., 2007. *Readme First for a User's Guide to Qualitative Methods*, second ed. Sage, Thousand Oaks, CA.
- Sandelowski, M., 1993. Theory unmasked: the uses and guises of theory in qualitative research. *Res. Nurs. Health* 16, 213–218.
- Tavallai, M., Abu Talib, M., 2010. A general perspective role of theory in qualitative research. *J. Int. Soc. Res.* 3 (11), 570–577.
- Taylor, J., Bradbury-Jones, C., 2012. Qualitative research and theoretical frameworks: uncomfortable bed-fellows?. In: *Symposium Presentation, Royal College of Nursing Annual International Nursing Research Conference*, London. Available: http://www.rcn.org.uk/_data/assets/pdf_file/0006/446307/2012_RCN_research_S1.pdf.
- Taylor, J., Bradbury-Jones, C., Kroll, T., Duncan, F., 2013. Health professionals' beliefs about domestic abuse and the issue of disclosure: a critical incident technique study. *Health Soc. Care Community* 21 (5), 489–499.
- Tufford, L., Newman, P., 2010. Bracketing in qualitative research. *Qual. Soc. Work* 1 (1), 80–96.
- Vivar, C.G., McQueen, A., Whyte, D.A., Armayor, N.C., 2007. Getting started with qualitative research: developing a research proposal. *Nurse Res.* 14 (3), 60–73.
- Völker, S., Kistemann, T., 2011. The impact of blue space on human health and well-being – salutogenic health effects of inland water surfaces: a review. *Int. J. Hyg. Environ. Health* 214 (6), 449–460.
- Völker, S., Kistemann, T., 2013. 'I'm always entirely happy when I'm here!' urban blue enhancing human health and well-being in Cologne and Düsseldorf, Germany. *Soc. Sci. Med.* 78, 113–124.
- Watling, C.J., Lingard, L., 2012. Grounded theory in medical education research: AMEE guide no. 70. *Med. Teach.* 34 (10), 850–861.
- Wu, H.-L., Volker, D.L., 2009. The use of theory in qualitative approaches to research: application in end-of-life studies. *J. Adv. Nurs.* 65 (12), 2719–2732.