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The state of qualitative research in health and social science literature

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Abstract

Pluralism and creativity are inherent and important parts of the qualitative endeavour. The multiplicity of approaches and methods can, however, be confusing. We undertook a focused mapping review and synthesis to obtain a snap-shot profile of the state of qualitative research in health and social science literature. We retrieved 102 qualitative articles published between January and March 2015 from six leading health and social science journals. Articles were scrutinised for alignment between researchers' reported orientation (methodological or philosophical positioning) and the techniques used (methods). In the sampled articles level of alignment was generally high, with considerable mastery of qualitative approaches evident. However, the complexity of the qualitative landscape highlighted in our review, led us to develop a diagrammatic representation: The Qualitative Research Level of Alignment WheelTM. This educational resource/teaching aid is designed to assist qualitative researchers (particularly those more novice) and research students to locate the orientation and techniques of their studies. As an important contribution to the international field of qualitative inquiry, it will assist in understanding and accounting for points at which techniques are melded and orientations blended. In turn this will lead to the individual and collective qualitative endeavour as being a coherent one.

Key words

Alignment, mapping, method, novice, orientation, qualitative, quality, reporting, review, teaching, technique

The State of Qualitative Research in Health and Social Science Literature: A Focused Mapping Review and Synthesis

Introduction

Qualitative research provides a fundamental contribution to social inquiry that seeks to understand the meaning of human actions (Schwandt, 2001). Like human actions themselves, the modes of understanding them are multiple and varied. Pluralism and creativity are important and inherent parts of the qualitative endeavour and there are many methodological approaches, each with a different contribution to make. Hammersley (2008) observed that rather than a set of clearly differentiated qualitative approaches, there is a complex landscape of variable practice with an associated range of descriptors, such as 'ethnography', 'discourse analysis', 'life history', 'interpretivism' or 'feminist epistemology'. Such variety is congruent with the multiplicity of human actions and multiple ways that human beings interpret the world, that attract qualitative investigation.

Several years ago Creswell (2007) presented a helpful analysis of what he discerned as the five traditions of qualitative inquiry: biography, phenomenology, grounded theory, ethnography and case study. He described the key elements of each, mapped to a six-stage research process. By traditions of inquiry he meant:

An approach to qualitative research that has a distinguished history in one of the disciplines and has spawned books, journals, and distinct methodologies (Creswell, 2007: 2)

[Insert Table 1]

Latterly, Creswell changed 'biography' to 'narrative' and the 'traditions' have become 'approaches' (Creswell, 2013). Like Hammersley, he acknowledged rich variation within qualitative research with respect to the five different approaches. But he showed how each

approach has a unique purpose, with its own particular structural and practical characteristics (these are outlined in Table 1). Grounded theory, for example, consists of at least three different versions, each with their own unique and often conflicting views on the purpose and processes of doing grounded theory research (Breckenridge et al., 2012). Phenomenology has several methodological strands, each with a different focus and structure, for example, descriptive, interpretive, hermeneutic or lifeworld phenomenology (Finlay, 2012). Narrative inquiry can adopt many different analytic lenses, drawn from a variety of social and humanities disciplines, and case study methodology can vary in scope from intrinsic, single case to collective or comparative cases (Creswell, 2013). Likewise, there are different types of ethnographic study, including traditional, structural, post-modern reflexive, feminist, institutional, and auto-ethnographic approaches (Van Manaan, 1988; Davies, 1999; Ellis, 2004; Sharma, Reimer-Kirkham & Cochrane, 2009; Taber 2010). Indeed, Mannay and Morgan (2015) argue that most qualitative research is in fact an ethnographic undertaking.

Diversity of approaches available to qualitative researchers is not problematic *per se* and actually it is a significant benefit. It provides a rich pool of methodological and technical options that researchers can use to, for example, expound and explain human reasoning; advocate for participants' experience; examine the contexts in which services operate; develop new theory; and offer insight into the inner-workings of effective, or ineffective, interventions (Greenhalgh et al., 2016). As Madill and Gough (2008) argue, qualitative research is a diverse field and many researchers are actively seeking links across qualitative approaches.

However, while versatility and plurality are aspects of qualitative research that we embrace in our own work, the multiplicity of approaches and methods can be confusing. It may also account for the inconsistency with which qualitative research is sometimes conducted and reported. Certainly, qualitative research has been subject to much scrutiny and

critique, from which none of the five approaches are immune. For instance, there has been long-standing criticism of the lack of philosophical understanding and consistency among many researchers claiming to use phenomenology (Cohen & Omery, 1994; McNamara, 2005; Thomas, 2005; Porter, 2008; Earle, 2010; Norlyk & Harder, 2010). Grounded theory is still a highly popular methodology, however this tends only to extend to the use of one or two methodological components in isolation, using constant comparison as a method for data analysis, rather than adopting the methodology as a 'full package' (Cutcliffe, 2005; Greckhamer & Koro-Ljungberg, 2005; Holton, 2007). Ethnographic studies are similarly critiqued with respect to varying levels of 'participant observation' in the field (Ellen, 1984; Emerson et al., 1995; Manias & Street, 2001; Pope, 2005). So what is it that accounts for such criticisms across the range of qualitative approaches?

Creswell (2013) suggests that researchers may be hampered by insufficient understanding of the chief elements of each methodological approach, thereby resulting in a confused, diluted and inconsistent product. Sometimes there is disconnect between the qualitative approaches that researchers claim to use, and the respective methods and techniques they actually employ. Drawing on the work of Kaplan (1964), Sandelowski and Barroso (2007) have characterised this disconnect as the difference between 'reconstructed logic' (what authors say they do) and 'logic-in-use' (what authors actually do in their studies).

In our article, we report on a focused mapping review and synthesis that examined the extent to which there is congruence between authors' stated qualitative orientation (reconstructed logic) and the research processes and techniques actually reported (logic-in-use). The article arises from our academic curiosity as qualitative researchers regarding the 'current state of play' within our own disciplines of health and social sciences. As far as we are aware, there have been no previous attempts to review and synthesise the literature in this way, in any discipline. Of those that have undertaken similar areas of inquiry, Riessman and

Quinney (2005) reviewed the use of narrative research in social work journals over a period of 15 years (1990-2005). They found that the majority of 200 plus papers reviewed, whilst claiming in their titles to use 'narrative' methods, had in fact used methods such as thematic or content analysis that are non-conducive to a true narrative approach. The review by Riessman and Quinney (2005) is a good indication that there are likely to be similar problems with other methodologies, and we felt a wider analysis of multiple qualitative methodologies was merited. Guetterman (2015) recently analysed sampling practices across the five approaches in education and health sciences, finding inconsistent approaches being used. Guetterman's analysis, however, focused solely on sampling. Richards et al. (2014) found methodological inconsistencies and concerns about reporting in qualitative studies as part of their analysis of 223 articles in nursing. Their focus however was limited by disciplinary scope (nursing only). Caelli and colleagues (2003) and Madill and Gough (2008) have provided critiques of qualitative research but in the form of discussion papers with examples, rather than systematic analyses.

Our article therefore, makes a meaningful and contemporary contribution to qualitative research in health and social sciences. Importantly, our findings have led to a useful teaching resource that we discuss later.

Our approach

The aim was to profile the relationship between qualitative researchers' philosophical claims and their actual methodological practices in the context of reporting in health and social science journals. In relation to researchers' reporting of qualitative research, the review questions were:

- 1. What claims are made regarding philosophical positioning? (Orientation)
- 2. What study designs and data generation methods are used? (Technique)

3. What types of analytical approaches are used? (Technique)

sciences.

- 4. What is the degree of alignment between methodological orientation and respective techniques within individual articles? (Patterning)
- 5. What patterns can be discerned across articles and journals? (Patterning)

 Four of the authors (JB, CB-J, ORH, JT) have been part of research teams that have developed a method we describe as a 'focused mapping review and synthesis'. This is a development and extension of the mapping review and synthesis described by Grant and Booth (2009) in their typology of 14 review types. It is focused in three ways: 1) particular subject; 2) a defined time period; 3) specific journals. Unlike some other forms of review such as systematic reviews that strive towards breadth and exhaustive searches, the focused mapping review searches within specific, pre-determined journals. Platt (2016) observed that 'a number of studies have used samples of journal articles' (p. 31) but the distinctive feature of the focused mapping review and synthesis is the purposive selection of journals. These are selected on the basis of their likelihood to contain articles relevant to the field of inquiry in this case qualitative research published in a range of journals from the health and social

We undertook a focused mapping of empirical, qualitative research articles published during the first quarter of 2015 in six different journals: British Journal of Social Work (BJSW); Health and Social Care in the Community (HSCC), Journal of Advanced Nursing (JAN), Qualitative Health Research (QHR), Social Science and Medicine (SS&M) and Sociology of Health and Illness (SH&I). We selected these particular journals because of their likelihood to publish qualitative articles. We included an equal number of profession and context specific journals (BJSW; HSCC; JAN) and methodology focused journals (QHR; SS&M; SH&I) in order to capture qualitative papers written for different audiences. As a multi-disciplinary team of nurses, health visitors and occupational therapists, we identified

these six journals as being most prominent in health and social care and as being well known in our respective professions. Journals were excluded if they published methodological papers rather than findings from primary studies (such as International Journal of Social Research Methodology).

[Insert Table 2]

Table 2 shows the inclusion and exclusion criteria for the review. We included all articles that reported on primary empirical, qualitative research, published in the three month period between January 1st and March 31st 2015. We excluded systematic reviews, methodological and theoretical reports and mixed method studies. Each team member was responsible for searching within one of the selected journals for retrieval of articles.

[Insert Table 3]

Every article published in the timeframe was scrutinised against the inclusion and exclusion criteria. Articles meeting the inclusion criteria were read in full and the lead reviewer for each journal loaded predefined details onto a proforma developed for the project (Table 3). We ranked each article as having high, partial or low levels of alignment. As indicated in Table 3, the descriptor for assessing level of alignment was the degree of congruence and fit between researchers' orientation (the underlying world view/philosophical stance) and research technique. In this we asked ourselves 'Do authors do what they say? Are there any surprises in what they do? Have researchers used congruent techniques associated with their claimed approach (phenomenology, grounded theory etcetera)?' This was necessarily a subjective process and we accept that our judgements will have been influenced by what Sandelowski calls a 'matter of taste'.

'*Taste* refers to the ability to be discriminating about some object of evaluation. Individuals are considered to have good taste to the extent that they show a cultivated or educated eye, ear or feeling for an object among other

objects of its kind' (Sandelowski, 2015: 87).

Our own cultivation and education is based on considerable, collective years in the field as qualitative researchers and our professional intuiting regarding quality in qualitative research. However, in an attempt to instil rigour in the process, the appraisal of every article was verified by a second reviewer within the team: we worked in pairs.

Using Table 1 as a framework, we mapped the orientation as stated in each article to the five approaches as described by Creswell. Some authors reported a combined orientation that straddled research approaches, and in such cases the primary or dominant approach was recorded. Our classifications were cross-checked by a second reviewer within our pairs. In cases of ambiguity or uncertainty (of which there was a great deal), discussion within the wider group resolved such issues and on-going refinements to the criteria were made in the early stages. We also held two calibration exercises with the entire review team, where on each occasion the classification and proforma results of randomly selected articles were discussed at length. The aim of the calibration was to ensure that we were all working within the same parameters of understanding. The calibration meetings provided a mechanism to explain our judgements, discuss the subtleties of the evaluation/judgement process and create consensus regarding classifications. We retrieved 106 articles that were considered to meet our inclusion criteria, but four were excluded because they reported on mixed methods studies. This resulted in 102 articles being included in our review (Table 4).

What we found from the review

Orientation

In the first instance we scrutinised titles looking for an explicit statement regarding use of a qualitative approach. Where these were clearly and explicitly stated we classified them as 'Yes'. There are certain conventions among qualitative researchers in formulating

searched titles for what we termed 'implied' use of qualitative research, hallmarked by any of these three conventions. We also looked for other markers of qualitative studies by identifying the language and methods often associated with qualitative approaches, for example, 'lived experience', focus groups and interviews. Table 4 shows the findings from this part of our analysis. Of the 102 articles only 17 (16.6%) met the 'Yes' criteria for having stated in the title that a qualitative approach had been used. A further 39 (38.2%) were 'Implied' and a majority of 46 articles (45%) were categorised as 'No'. These did not state or explain their qualitative approach in the title of their article (the statement was made somewhere in the abstract, key words and/or body of the article). Overall, SS&M ranked high in this part of the analysis, with 15 out of the 19 included articles having explicit or implied statements about the approach in the title. Table 5 provides an overview of selected criteria including title or maximum wordage relevant for the reporting of original (qualitative) research as depicted in the author guidelines of the respective journals.

[Insert Table 4]

[Insert Table 5]

Orientation across Journals

As shown on Table 5, the approaches as described by Creswell (2013) were reported to be used 46 (45%) times. Of the five approaches, ethnography proved most popular (15.7%) and was most commonly reported in SH&I and SS&M. This was followed by phenomenology (9.8%) which was most strongly represented in QHR. Grounded theory (6.9%) and case study (6.9%) appeared more or less equally represented across journals. Narrative approaches were least represented overall (5.9%) and most of these were published in QHR.

[Insert Table 6]

Aside from identifying articles whose qualitative orientation mapped to one of Creswell's (2013) approaches, we identified 43 (42.1%) articles that we classified as using 'generic qualitative' approaches. An array of descriptors was used by researchers in such articles, including, qualitative study; descriptive exploratory study; qualitative descriptive study, qualitative approach underpinned by interpretivism; inductive qualitative approach. The category determined as 'Other' included 13 (12.7%) approaches that were difficult to subsume within any of the previously discussed categories, for example, co-operative enquiry, biopedagogy, realist evaluation and participatory mapping. Although less than half of the qualitative articles included in our review applied Creswell's five approaches, this does not allow conclusions to be drawn regarding the quality of the research undertaken. Indeed much of such generic qualitative research 'borrows' methodological components that have origins within Creswell's five approaches anyway.

[Insert Figure 1]

Data Generation Techniques

We present this as a figure rather than a table, to show that data generation and analysis in qualitative research are most often overlapping and are not discrete processes. Representing them in this way avoids seeing them as separate activities. As shown in Figure 1, individual interviews were the most popular form of data generation by far, with 87 researchers reporting the use of this method. Observation and focus group were reported in 14 and 13 articles respectively. Observations were most commonly reported in SH&I (10) and of these there were also four uses of field notes with participant observation. There was an array of other techniques (13) including vignettes, emails, photographs and drawings.

Data Analysis Techniques

Thematic analysis was popular with 31 articles describing this approach, within this the approach of Braun and Clark (2006) was cited frequently. Use of framework analysis

following Ritchie and Spencer (1994) or Ritchie and Lewis (2003), was reported in nine articles. Interestingly, 30 articles reported the use of open coding, axial coding, constant comparison and memoing. These are terms usually associated with grounded theory and given that only seven articles reported the use of grounded theory this was an interesting finding. Other data analysis techniques (n=10) included qualitative data analysis, deductive analysis, and visual mapping technique. Thirty six articles reported the use of computer software for analysis, most often NVivo.

Patterning of Alignment and Orientation

[Insert Table 7]

This part of the analysis was concerned with the degree of alignment between methodological orientation and respective techniques across the different qualitative approaches. As shown in Table 7, levels of alignment were high (n=65) with many researchers demonstrating sophisticated engagement with qualitative approaches and well-described orientations and techniques (see for example the phenomenologically inspired narrative approach of Caddick et al., 2015, that incorporates the techniques of interviews and participant observation). Early in their paper, these authors refer to key theorists and philosophers from whom they draw inspiration, namely, Frank and Merleau-Ponty. Their influence on the study is explained and critiqued and they are referred to throughout; through to the discussion and conclusion. Data collection and analysis are explained in relation to both the narrative and phenomenological orientation and the data presented have a narrative 'feel'. The reporting of Caddick and colleagues' complex blending of orientations and techniques has potential to be confused. It is in fact an example of clarity and cohesiveness, with high level of alignment.

The mapping found only a minority of articles (n=4) showing a mismatch of alignment between orientation and technique. This is a positive finding with respect to the

field of qualitative research in health and social science literature. When considering patterning across approaches it is noteworthy that high levels of alignment are associated with generic qualitative approaches, with 32 out of the 43 articles within this category achieving high levels of alignment. This may seem surprising given the variety and heterogeneity of this group of articles. What it shows however, is that where level of alignment is concerned, it is 'safer' to describe research as generic, than to claim alignment to a specific approach and for this to be poorly aligned and poorly described. It also underscores the importance of understanding an orientation when claims are made for its influence on a study.

Limitations of our approach

This focused mapping review and synthesis aimed to shed light on a particular topic that has hitherto been un-investigated. Whilst other types of review were possible, a focused mapping review and synthesis was chosen. This has inherent limitation regarding scope. The snap-shot is contextual and temporal and it could be argued that findings from this form of review are an artefact of the included journals: another timeframe with other journals would likely create a different profile. However, as an impression of the state of qualitative research in health and social science literature, our review has provided useful insights. Similarly, findings are based on a small sample of good quality social science, health, nursing and social work/care journals and it is difficult to generalise to the very large number of journals that publish qualitative research. A larger range of journals from across more disciplines beyond health and social sciences may reflect greater diversity in how qualitative research is currently reported. This is a suggestion for further reviews. That said, in her analysis of what makes good qualitative research, Meyrick (2006) examined how quality judgements vary across different disciplines. For example, bio-medical approaches and sociology focus on

objectivity, researcher neutrality and distance from data; in psychology/ health psychology, transparency, reflexivity and practical utility are important; and health services research tends to value ontological differences and generation of theory. Therefore, attempting to analyse across too many disciplines may prove problematic.

During the mapping of orientations, we used Creswell's five approaches as the framework and our project may be limited by focusing too narrowly on one scholar's work. We chose Creswell's five approaches because in our experience they are well-recognised and helpful to many novice qualitative researchers. Also, although there is some over-lap, they provide detailed descriptions of techniques for each approach.

We may also be criticised for failing to provide details of every article included in our review. However, there were 102 and this would have been unwieldly. We have provided details of exemplar articles in relation to each of the three levels of alignment to assist readers in understanding our analysis and findings. Our review has included judgements about other qualitative researchers' work and some may regard this as threatening or critical. But our intention has been to explore the current state of play and we have highlighted the strength of qualitative research (although there are some areas for improvement).

Finally, reflecting on the words of Tight (2016, p. 320) 'Research design typically encompasses methodological and theoretical positions or viewpoints (even if these are not recognised and articulated)'. We found apparent uncritical blurring and confusion among some researchers regarding orientation and technique and we advocate the need for greater clarity in the recognition and articulation of philosophical stance, methodology, theory and methods in qualitative research, and the relationships between them.

Mannay and Morgan (2015) have argued that qualitative researchers have become distracted by technique and arguably this criticism could be levied at us. But we are not advocating staunch methodological purism. One of the joys of qualitative research is its

flexibility and this allows considerable deviation and adaptation of design (Grbich, 2007; Madill & Gough 2008). Qualitative approaches are diverse, complex and nuanced (Braun & Clarke, 2006) and this is to be embraced. We agree with Frost and colleagues (2010) and Taber (2010), that pluralism in qualitative research is not only possible, but also desirable. Methodological elements can be combined and novel approaches can be taken in order to advance and improve existing methodological approaches. We do not dissuade such hybridisation. Rather, we argue that it needs to occur knowingly and purposefully and be rooted in a sound understanding and reporting of the compatibility of different philosophical underpinnings and practical applications.

Reflections on our review

The discussion is based upon a number of issues stemming from the outcomes of our review (the findings) and our experiences of undertaking it (the processes).

Is this article qualitative - or not?

The starting point for our analysis was to make decisions about whether an article was 'qualitative' as judged by the title. This proved more of a challenge than we had anticipated and the majority of article titles did not make this clear. A considerable majority gave no hint in neither the abstract nor the key words. As indicated in Table 5, publishing conventions and the role of journal editorial policies will undoubtedly influence this (along with structure, content, and framing the way that methods are presented). Also, in the case of some journals, for example QHR, the focus of the journal on qualitative research explains this. Why would it be necessary given the qualitative focus of the journal? In QHR, advice is given to ensure that titles are descriptive, unambiguous and accurate but there is no explicit recommendation to include the methodology in the title. But, might there still be scope for authors to include details of their specific qualitative orientation in order for readers to get a fuller picture of the article? For journals who publish articles with methodological variety, this issue is all the

more important. There might be many reasons why a reader needs to know whether or not an article is qualitative, in the case of those undertaking a meta-synthesis for example. Absence or implied orientation makes retrieval difficult. Authors and journals have a vested interest in making articles easy to find and we argue that in some cases qualitative researchers make this difficult. In discussing our findings with colleagues, we have been asked on two occasions whether qualitative researchers may be hiding their qualitative work and deliberately masking it through use of ambiguous titles or avoidance of naming it as 'qualitative'. The inference is that they might somehow be fearful that it is not scientific enough in relation to other research approaches. As researchers who are passionate about the qualitative endeavour we would be disappointed if this was the case, but it is a point of reflection and further debate. In conclusion, we would urge authors to seriously consider stating the methodology as one of the main key phrase required in formulating a good title.

A repeated point of discussion among the research team during the process of our review was 'what makes a qualitative article qualitative?' We came across a number of articles (for example, Chang & Basnyat, 2015; Fisher, 2015; Rees et al., 2015) that created a great deal of debate regarding their use of numbers/statistics. Maxwell (2010) observed that the use of numerical data in qualitative research is controversial. It certainly challenged us to reflect on our own understandings. In this we remained grounded in what authors told us about their articles. Our argument is that numbers are not antithetical to qualitative inquiry. They have a legitimate and valuable place for qualitative researchers when used as a complement to the process (Maxwell, 2010). Similarly, Hesse-Biber's work on qualitatively-driven mixed methods research (Hesse-Biber, 2010; Hesse-Biber, Rodriguez & Frost, 2015) provides good explanation of how numbers can be used as a complement to the research process. In our view, it is the orientation that is important and more so the clear articulation of that orientation. It is noteworthy that the four articles cited as exemplars here were all ranked

as having high level of alignment. We think this demonstrates how the division between quantitative and qualitative approaches can be arbitrary, and dichotomising them is unhelpful.

Orientation and techniques

The most frequently used technique in the included articles was the qualitative interview.

Savage and Burrows (2007) have made some interesting points about interviews, arguing that sociology faces 'a coming crisis' regarding their use. They suggest that while in-depth interviews were deployed in innovative ways in the 1970s their significance is now less clear. As a tool to generating sophisticated understandings of diverse populations in contemporary society, they propose that the place of the in-depth interview is uncertain, because:

'The world-views of diverse populations (are) now routinely presented to us in the popular and new media in such a manner that their summary characterization by sociologists is no longer as necessary (or as interesting) as once it was' (p.894).

We see this as a point of interest rather than concern and as already discussed, our review also included reports of 'newer' approaches being used such as emails. As new technologies emerge, the spectrum of techniques will increase, which eventually may indeed bring about the demise of the in-depth interview.

An important part of our review was to rank articles for the level of alignment between orientation and techniques. Most articles we reviewed had high level of alignment (n=65), with examples of sophisticated engagement with qualitative approaches. This is not to say that scientifically they were necessarily stronger than other articles in the review; we did not review them for quality in this sense. Similarly, high level of alignment says nothing about theoretical strength; this requires an altogether different judgement (Bradbury-Jones, Taylor & Herber 2014). Arguably however, level of alignment is an important indicator of rigour. A minority of articles (n=4) were deemed to have low level of alignment. For

example, we could not 'see' the grounded theory in the article by Riera et al. (2015) and we found the blending of phenomenology and ethnography in Mogensen and Mason's (2015) article confusing. We are not judging the science of these studies and they may be valuable and of good quality in terms of their significance to knowledge development. However, as readers, the alignment between what we expect to see in the published article and what we get appear at odds.

Of the articles ranked as partial (n=33), many featured some degree of mismatch between orientation and technique. Most often this was the unexplained application of techniques associated with another orientation. For example, Kelly et al. (2015) unexpectedly refer to Strauss and Corbin (1998) in their ethnographically orientated study. Similarly, Liamputtong and Suwankhong (2015) report on the open coding and axial coding undertaken as part of a thematic analysis (where they cite Braun and Clarke, 2006). Braun and Clarke (2006) however, make it clear that thematic analysis differs from other analytic methods that seek to describe patterns (such as those in phenomenology and grounded theory). While we are not to judge whether authors are right or wrong in what they describe, we can observe that as readers this is often confusing. We are not the first to make this point. Walting and Linigard (2012) observed that grounded theory has been used as an umbrella term for a wide variety of styles and approaches to qualitative data analysis. But they cautioned that the anything goes approach is harmful to the credibility and relevance of grounded theory. Richards and colleagues (2014) found that many researchers used words such as 'thematic analysis', rather than providing details of the explicit philosophical assumptions guiding their work. Likewise, Burnard (2004) advised that care should be taken with terms such as 'content analysis' because the term is so broad as to have limited meaning. It could be argued that content analysis is inherent in all qualitative data analysis and that coding and memoing are components of many analytic approaches. What this calls for then, is the adoption of a critical

stance in relation to the techniques adopted and how these relate to the orientation.

Importantly, it also calls for honesty and clarity in reporting.

Reporting Qualitative Research: Some Issues

Sandelowski and Barroso (2007) observed that 'form is inescapably content' (p.76) or in other words, the article template or author guidelines will necessarily influence content. We acknowledge that requirements imposed by journals do impact on publishing content and style. For many qualitative researchers this can limit and stifle opportunities for creativity in reporting. Arguably however, some aspects of guidance are needed for the sake of good science. All of the journals included in our review make it clear in the author guidelines that authors provide justification and rationale for their studies. Other guidance echoes this. For example, the Critical Appraisal Skills Programme (2013) asks readers and reviewers to consider whether the researcher has justified the research design. The Consolidated Criteria for Reporting Qualitative Research (COREQ) (Tong et al., 2007: 351) developed to guide the 'explicit and comprehensive reporting of qualitative studies' includes among its 32 criteria, the need to state the methodological orientation underpinning a study. Overall, the main goal of reporting guidelines is to improve the clarity, completeness and transparency of research reports (Simera et al., 2010). There are critics of checklists in qualitative research (Barbour, 2001) and potential stifling of the qualitative endeavour (Sandelowski, 1993). Kitto and colleagues (2008) observed that the sheer number of checklists is overwhelming. They argued however, that it is possible to develop clear and useful generic guidelines for assessing and presenting qualitative research. In this we agree and findings from the review suggest the need for improved reporting in some areas.

Bradbury-Jones, Sambrook & Irvine (2009) observed that some qualitative researchers align themselves with specific orientations (such as phenomenology or grounded

theory) inappropriately without understanding the implications of adopting this orientation. They argued that there are examples of studies that are mislabelled as phenomenological and would be more appropriately referred to as generic research. Caelli et al. (2003) have a great deal to say about the issue of generic research. They discern four basic requirements for such studies: noting the researchers' position; distinguishing method and methodology; making explicit the approach to rigour; identifying the researchers' analytic lens. In our review, level of alignment was highest among articles with a 'generic' qualitative orientation, such as those of Druetz and colleagues (2015) and van Hoof et al. (2015). Both of these articles are described as 'a qualitative study' in the title. Neither of them is aligned to a particular orientation and in both cases, the articles report quite 'simply' on the findings arising from the semi-structured interviews they employ. Unlike Caddick and colleagues' complex blending of orientation and technique discussed earlier, these illustrative examples of high level of alignment are characterised by simplicity. There are no surprises and you get what you expect in the reporting. A message arising from the review therefore is to avoid claims to a specific orientation unless it is articulated and visible within the reporting and when aligning to a particular approach, to make sure it is understood. As Grbich (2007) cautions, if you choose a particular path you need to understand and be able to articulate the epistemological and ontology of that choice and how this might influence data collection and analysis.

[Insert Figure 2]

Development of a new resource for qualitative researchers

We focused considerable attention in the review on the five approaches as described by Creswell. Regarding synthesis, we sought ways to work with the five approaches and incorporate the generic orientations that were so dominant within the findings. In considering influence on research practice, we debated how our findings might be of practical use among those engaging with qualitative approaches, particularly those with less experience. We envisioned a way of representing the findings diagrammatically, showing the linkages between orientations and techniques. As a result, we developed the Qualitative Research Level of Alignment WheelTM (QR-LAW) (Figure 2). As a diagrammatic representation, it shows the six dominant research orientations and their respective techniques, encompassing Creswell's five approaches and the sixth 'generic qualitative' domain. This captures the breadth and variations in qualitative approaches reflected in our review.

As an educational and reflexive resource, the QR-LAW has potential to assist predominantly novice qualitative researchers – and those more experienced – in locating the orientation and techniques of their studies, and for them to be aware of, and account for, points at which they might meld techniques or blend the different orientations. It may also help researchers to articulate any 'deviancy' from considered norms within each approach by better identifying the norms in the first instance. We have already begun to use the QR-LAW with students undertaking post-graduate qualitative research classes. They have commented favourably on its pedagogical benefits.

Our review has shown that some researchers competently blend approaches and in doing so, push and advance the boundaries of qualitative research. The QR-LAW might assist such researchers in justifying the changes to alignment they make with respect to drawing from different perspectives. Researchers can conceptually turn the wheel through different rotations and it will allow them to see where certain techniques may be 'borrowed from' regarding the six orientations. In turn, this will aid continued clarity and robust reporting of qualitative research. To that end we believe it advances knowledge and makes an important contribution to the field of qualitative inquiry. Thus, the wheel represents the flexibility inherent in qualitative research while – at the same time – indicating its roots in relation to the five "traditional" approaches.

Travers (2009) observed two striking responses to innovation within the qualitative research community: from celebration and promotion of ceaseless innovation on one hand, to defence of tradition on the other. We lean more towards innovation and like many other qualitative researchers we are excited about the multiple means of inquiry at our disposal that can lead to advancement of knowledge. The QR-LAW is not intended to draw arbitrary, rigid lines between different approaches; it actually allows them to be changed. As indicated in Figure 2, the arrows indicate circular movement that encourages conceptual movement through each layer (approach, focus, sample and so on) with a visual capturing of this process. Our intention is to develop the diagrammatic form of the QR-LAW into an actual resource. This will fully realise its dynamic nature.

The Current State of Qualitative Research: Some Reflections

In their review of nursing studies, Richards and colleagues (2014) found a number of problems with many articles – both qualitative and quantitative. They reported that among the qualitative articles, methodological description was often poor, misleading or absent, leading them to conclude that the reporting leaves much to be desired. Specifically they had difficulties classifying qualitative designs, with examples of undefined terms such as 'exploratory comparative design'. Caelli et al. (2003) refer to the state of play in qualitative research as 'clear as mud' and more recently, Lau and Traulsen (2016) have argued that there are shortcomings in contemporary qualitative health research that need to be addressed. Our review has also highlighted some problem areas, including an array of terminology being used, which we agree is very confusing. We accept that there are important lessons regarding quality of reporting and the QR-LAW may assist this in the ways we have already described. However, findings from our review do not concur entirely with the view that qualitative research is in a poor state. In fact, when it comes to level of alignment, we conclude that qualitative research in the field of health and social science is currently in good shape.

Conclusions

This focused mapping review and synthesis aimed to profile the relationship between qualitative researchers' philosophical claims and their reported practices in the context of health and social science journals. We found the targeted nature of the review invaluable in achieving detailed data mining and from this we were able to build a rich, comprehensive profile.

Conclusions that can be drawn from the review are that it is sometimes difficult to tell whether or not an article is qualitative. Much could be done to improve this issue and to make qualitative articles more identifiable and retrievable. In our sampled articles, the level of alignment was generally high, particularly in 'generic qualitative' studies. Wiles et al. (2011) cautioned against 'over-claiming' innovation in qualitative research and similarly, we recommend that researchers stay simple to avoid muddling orientation and techniques. Of course these can be carefully blended and the QR-LAW may assist authors' clarity, critique and description when this occurs.

As mentioned at the beginning of this article, Creswell (upon whom we have drawn heavily) changed the titles of his books on qualitative inquiry from 'traditions' (2007) to 'approaches' (2013), reflecting a changing world of qualitative research and signalling a respect for past approaches, while encouraging current practices in qualitative research. He argued that a 'healthy respect' exists for variations within each of the five approaches and 'there is no single way to approach an ethnography, a grounded theory study, and so forth' (p.4). This concurs closely with the view of Hammersley (2008) in that approaches often coexist in a single study. We agree. We hope the QR-LAW contributes to knowledge in the field and we envisage that it will assist many qualitative researchers and students undertaking qualitative classes, to look critically at the orientations and techniques and particularly the alignment between them. This might promote a healthy respect for the six orientations while

facilitating creative ways of combining them and advancing the field of qualitative inquiry in



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Table 1: Five main qualitative approaches (adapted from Creswell 2007 & 2013)

Narrative		Phenomenology		Grounded theory		Ethnography		Case study		
Exploring the life of an individual		Understanding the essence of experiences of a phenomenon		Developing a theory grounded in data from the field		Describing and interpreting a cultural/social group		Developing an in decase or multiple case	epth analysis of a single	
Data collection	Data analysis	Data collection	Data analysis	Data collection	Data analysis	Data collection	Data analysis	Data collection	Data analysis	
Documents and	Identify stories;	Long interviews	List statements of	Interviews with	Axial coding;	Participant	Analyse data for	Documents;	Establish patterns of	
archival material;	Locate	with small	meaning for	around 20-30	Open coding;	observations;	themes and	records;	categories;	
Open ended	epiphanies;	groups of people	individuals;	people.	Selective	interviews;	patterns;	interviews;	Direct interpretation;	
interviews;	Develop patterns	(up to 10).	Group statements		coding;	artefacts;	Interpret and	observation;	Develop naturalistic	
Participant	and meanings.		into meaning		Develop a	documents (through	make sense of	artefacts.	generalisations.	
observation.			units;		conditional	extended time in	findings.			
			Develop textural		matrix.	the field).				
			and structural	4)>					
			descriptions;	C)						
		I	Develop an	RY						
			overall description							
			of the experience	4						
			(the essence).							

Table 2: Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
Primary empirical study	Systematic reviews
Qualitative research	Mixed method studies
Published between 1st January & 31st March 2015	Methodological & theoretical articles

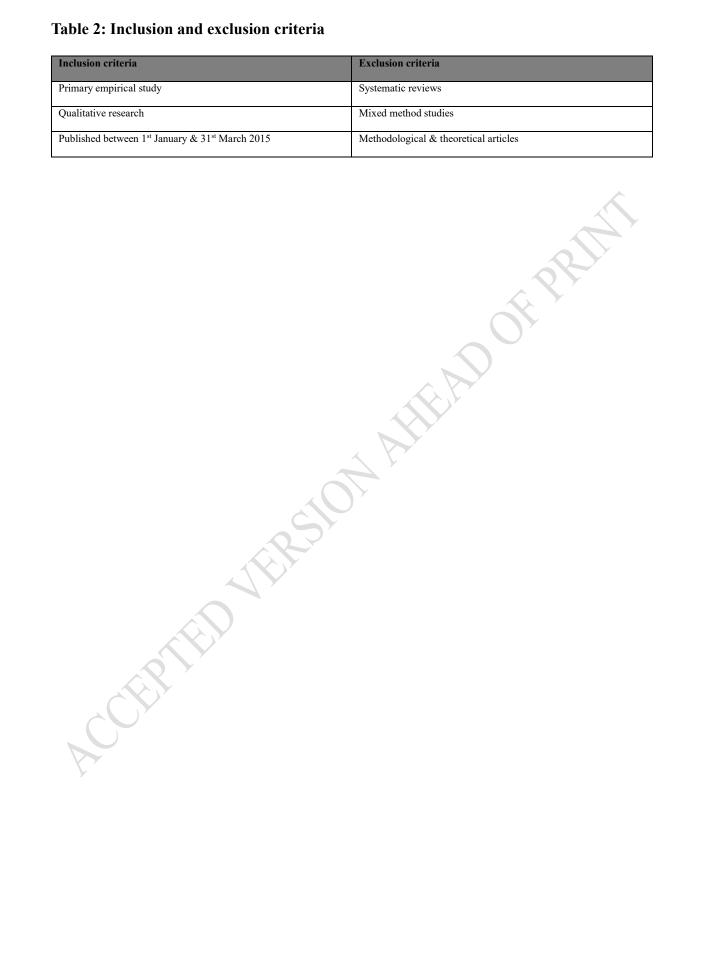


Table 3: Mapping proforma for each journal

Journal name:						Reviewers' initials:				
Publication details			Orientation	Techniques		Patterning				
Issue,	Authors	Title of article	Stated	qualitati	ve	Claimed methodological or philosophical	Data generation	Data analysis	Level of alignment between orientation and	
Volume		approach in title? Y N Implied			approach	Data generation Data analysis approach Level of alignment between oriental technique				

Descriptors:

Stated qualitative approach:

1) One of the five approaches of qualitative inquiry: narrative, phenomenology, grounded theory, ethnography and case study

2) A generic qualitative study (no explicitly stated positioning regarding the five main approaches)

Level of alignment:

An assessment of the alignment between orientation and technique. Do authors do what they say? Ask yourself 'are there any surprises?'

Have researchers used congruent techniques associated with their claimed approach (phenomenology, grounded theory etcetera)?

Table 4: Included articles and analysis of titles

Journal	Number of articles meeting inclusion criteria	Descriptions of qualitative approach in title					
		No	Implied	Yes			
BJSW	8	6	2	0			
HSCC	13	3	6	4			
JAN	13	5	4	4			
QHR	29	15	12	2			
SH&I	20	6	12	2			
SS&M	19	4	10	5			
Total	102	39	46	17			

Table 5: Overview of (adapted) author guidelines for the reporting of original (qualitative) research

	Title	Data generation techniques	Methodology/ Study Design	Sampling strategy	Data analysis	Maximum wordage
BJSW	Include article title in final version of manuscript	Not mentioned.	Not mentioned.	Not mentioned.	Not mentioned.	Major articles should not exceed 7000 words in length, excluding the abstract, but including references, tables and figures.
HSCC	The title page should contain a concise title of the article.	Include details such as the interviews (or observation approaches or other data collection methods) with rationale and literature support. Data collection procedures including recruitment, settings, sampling, etc.	Include the type of study design including the rationale for the selection of the particular design with literature support.	Include data collection procedures including recruitment, settings, sampling, etc.	Include analysis procedures with literature support. Include details on any computer software used to manage data.	Articles should not exceed 5000 words (excluding figures, tables and the reference list).
JAN	Full title (maximum 25 words)	Describe each technique used to collect data, such as interview guide questions, or observation checklist items.	State a research question appropriate for the methodology. Describe research design, e.g. grounded theory, phenomenology, ethnography.	Identify the specific purposeful sampling strategy/strategies used-theoretical, maximum variation, extreme case.	Describe the techniques used to analyse the data incl. computer software used.	5000 words for main text.
QHR	Supply a title, short title and keywords to accompany your article. Ensure the main key phrase for your topic is in your article title. Make sure your title is descriptive, unambiguous, accurate and reads well.	Not mentioned.	Not mentioned.	Not mentioned.	Not mentioned.	Not mentioned.
SHI	Not mentioned.	Not mentioned.	Researchers should strive to describe their methods clearly and unambiguously so that their findings can be confirmed by others.	The criteria for selecting the sample should be clearly described and justified.	Not mentioned.	8000 words in length including notes and bibliography.
SS&M	Concise and informative. Avoid abbreviations and formulae where possible and make clear the article's aim and health relevance.	Provide full details of the research methods used, including study location, sampling procedures, the dates when data were collected, research instruments, and techniques of data analysis.	In the abstract: Country of the study should be clearly stated, as should the methods and nature of the sample, the dates and a summary of the findings/conclusions.	The selection of units of research (e.g. people, institutions, etc.) should be theoretically justified e.g. it should be made clear how respondents were selected.	Include a dedicated methods section which specifies, as appropriate, the sample recruitment strategy, sample size, and analytical strategy. The process of analysis should be made as transparent as possible (notwithstanding the conceptual and theoretical creativity that typically characterises qualitative research).	8000 words including abstract, tables, and references as well as the main text.

Table 6: Orientation across journals

	Narrative	Phenomenology	Grounded Theory	Ethnography	Case Study	Generic Qualitative	Other
BJSW	0	2	1	1	1	4	0
HSCC	0	0	1	1	1	9	1
JAN	1	1	1	0	0	9	1
QHR	4	5	2	3	'	5	7
SH&I	1	1	2	6	2	7	2
SS&M	0	1	0	5	2	9	2
Total	6(5.9%)	10(9.8%)	7(6.9%)	16(15.7%)	7 (6.9%)	43 (42.1%)	13(12.7%)

Table 7: Patterning of alignment and orientation

	Narrative	Phenomenology	Grounded Theory	Ethnography	Case Study	Generic Qualitative	Other	Total
Low	0	1	1	2	0	0	0	4
Partial	2	2	1	6	3	41	8	33
High	4	7	5	8	4	32	5	65

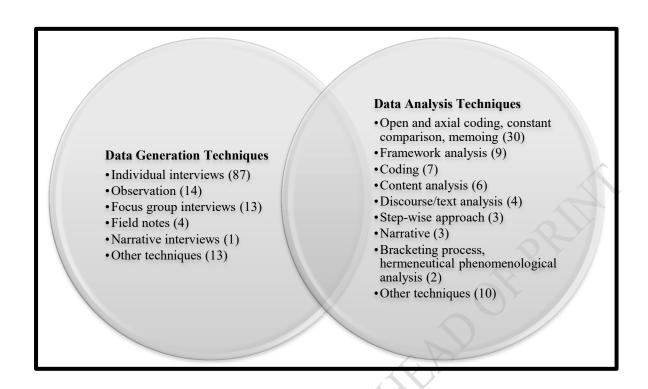
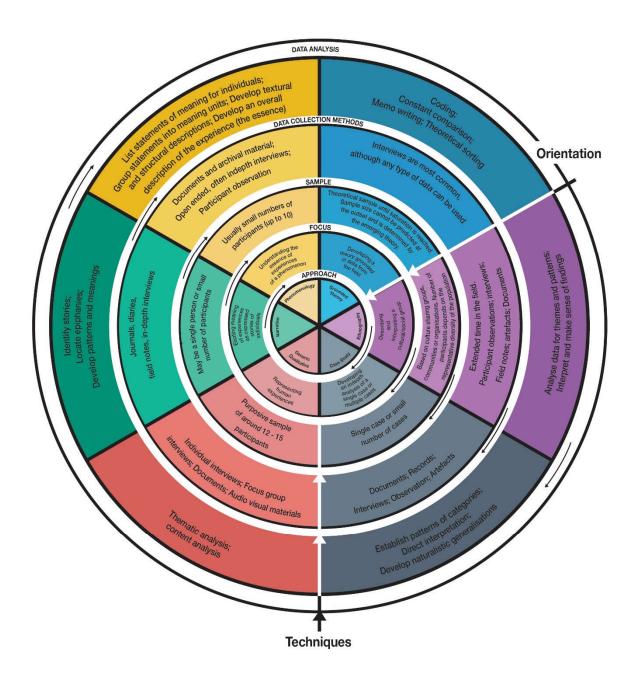


Figure 1: Data generation and analysis techniques



Qualitative Research Level of Alignment Wheel (QR-LAW)™

Figure 2: Qualitative Research Level of Alignment Wheel™ (QR-LAW)