Analysing qualitative data: More than 'identifying themes'

Article · January 2009

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Analysing Qualitative Data: More Than 'Identifying Themes'

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ABSTRACT

Too often, qualitative researchers rely on the presentation of key themes supported by quotes from participants' text as the primary form of analysis and reporting of their data. In this paper I argue that qualitative data require and support much deeper analysis. Strategies that might assist researchers to enrich their analysis of qualitative data are described. These strategies include improving interpretation and naming of categories; using comparison and pattern analysis to refine and relate categories or themes; using divergent views and negative cases to challenge generalisations; returning to substantive, theoretical or methodological literature; creating displays using matrices, graphs, flow charts and models; and using writing itself to prompt deeper thinking. Each strategy is illustrated by examples.

Introduction: "Themes will be identified.…"

Reliance on the identification of themes as the goal of analysis is endemic in qualitative research. Often, in funding proposals, there will be a lengthy description of how qualitative data are going to be gathered, but the only thing said about how these data are going to be managed or analysed is that 'themes will be identified in the data'. Similarly, writers of journal articles often simply identify and discuss four or five 'themes' as their analysis of the qualitative data in the study, with no attempt to link those themes into a more comprehensive model of what they have found.

Researchers often use the terms *concept*, *category* and *theme* interchangeably in the literature. I tend to use *category* for the descriptive level of coding and *concept* for a more abstract level, and hence will often refer to *categories and concepts* when discussing coding (Bazeley, 2007). Others (e.g., Strauss & Corbin, 1998) use *concept* for the lower level, and *category* for a combination of several concepts. While *theme* is sometimes used to describe an integrating, relational idea from the data (Richards, 2005), more often it is used to describe elements identified from text and this is typically the approach which is meant when people talk about identifying themes in the data as their method of analysis.

Identifying themes has its place in qualitative research. They are a starting point in a report of findings from a study. Effective reporting, however, requires your having used data, and the ideas generated from the data, to build an argument that establishes the point or points you wish to make. Strength of analysis will be recognised even by those who may work differently, while descriptive reporting is likely to be unconvincing even to those familiar with qualitative methods.

The Problem with 'Themes'

Problems in ensuring quality analysis can begin from the point of research design and data-making, through to the integration of data and drawing sound conclusions. For example, if interview questions are asked in such a way as to prompt superficial answers, there is not even a starting point for meaningful analysis. Further problems occur in interpretation of data, in the 'emergence' and naming of themes, and in integrating themes to provide a rich, deep understanding or a coordinated, explanatory model of what has been found.

Interpreting Data

Once data are gathered, reading and interpretation are the starting points for meaningful analysis. I have a problem, for example, with a researcher's reading of this data segment:

> *He probably had been told that he had schizophrenia, but we didn't mention it, we didn't say it, because it wasn't our job to help him through it. We felt it was the job of the psychiatric services that would have been well trained in that, if he had been told by the doctor then he would know what he faced.*

This was interpreted as suggesting that satisfied participants had a clear idea of where their caring responsibility ended and the responsibility of available professional mental health services began. To me the far more significant issue raised was the silence around mental illness, and the way in which such issues were avoided within the family. This issue was never discussed by the researcher.

It can be very useful to share some small portions of your data with a colleague, or a small group of colleagues (or fellow students) in a relaxed setting where individual and collective attention is turned to making meaning from the passage being considered. This has the benefit of serving as a reality check on your own interpretation, but more particularly, discussion of that data segment typically creates added awareness of dimensions in the data and prompts fresh ideas, with new questions to pursue.

Naming Themes and Connecting Data

Even where codes are appropriately developed, there is often a problem with the naming of broader themes. Themes that are presented are often simply labels for metacategories (a more inclusive category), or perhaps as a classification of codes into types of categories. For example, Martin, Farrell, Lambrenos and Nayagam (2003) undertook qualitative interviews with a sample of adolescents before and after their experience of living with an Ilizarov

frame—an external device fixed to a bone, designed to assist in the lengthening of that bone over a period of up to nine months. They grouped codes into a thematic structure which was thought to reflect common patterns emanating from the data (Table 1). These 'themes,' however, amount to little more than a way of organising the areas discussed by the adolescents. Because of the way they are named, they cannot communicate to the reader without considerable explanation, and they cannot be used to construct a meaningful summary or model of the experience. None of the themes was examined comparatively in relation to age, gender, reason for needing the frame or location of the frame. Nor were they related, on an individual basis, to the scaled quantitative measures for coping or depression, despite this being presented as a mixed methods study. No case histories were given to illustrate any connection of events (all reports were group based).

Table 1: Themes emerging from qualitative analysis[1]

Before application of frame	After application of frame
• An all-encompassing impact	• Actuality of experience
• Coping resources	• Coping and getting on
• Treatment expectations	• Concerns, feelings and reactions
	• Support for coping
	• Advice and recommendations
	• Treatment experiences

[1]Originally presented as Table 4, in Martin *et al.* (2003, p. 483)

Additionally, in Martin *et al.*'s (2003) report, discrepancies between scaled measures and interview data on the role of resignation and of social support as coping mechanisms (both of which were more evident in the qualitative data) were not commented on until discussion—and there the suggestion was simply that the children had come up with aspects of these not thought of by the scale developers. Description *is* part of the analytic journey, and 'thick description' is a valuable component of, for example, phenomenological or ethnographic reporting, but description alone is not sufficient. The data must be challenged, extended, supported, and linked in order to reveal their full value.

Emergent Themes and Grounded Theory

In a draft report of a grounded theory study of what it means to be a good care worker, the author wrote:

> The interview data were initially coded according to a number of themes that corresponded to the focus questions. Unanticipated issues and concerns were raised and recurred in a number of interviews, for example, the care workers repeatedly spoke of the importance of forming good relationships to provide good care….

And,

> A theme that recurred repeatedly was that central to being a good care worker was having the ability to negotiate boundaries between personal and professional relationships.

Were these themes of the importance of relationships and the need to maintain boundaries *really* unanticipated? Are emergent themes actually emergent? The author had just stated that the coding categories chosen corresponded to the focus questions, and indeed, these questions (which were provided in an appendix) specifically asked about relationships and boundaries.

Emergent themes are often remarkably similar to those in the literature (as indeed, occurred also in this case). There is no problem with a priori categories or themes as long as they are recognised and declared as such, and they are actually supported in the data; the analyst can still retain flexibility and be open to the presence of finer nuances or different emphasis in the data. There is a problem, however, if something is written up as unanticipated when it was clearly anticipated, and to have a point worth making in that situation one does need to extend or relate the concept in fresh ways, to build new theory. In this case, it could be helpful to 'break open' what *relationship* means when it is between a care worker and an aged person, and so the work of analysis needs to shift in that direction (cf. Figure 1,p. 12).

Reporting Themes

These problems are further reflected in often shallow reporting in which themes are typically presented using a brief summary and with a quote for each point as 'evidence' for the theme. There is a problem with relying for evidence on one or two quotes that might have been drawn from hundreds of pages of text. While one or two quotes might powerfully illustrate a theme, they do not convey how widely this theme might have applied, or for whom, or how it links to other themes. Frequencies are sometimes reported, but there is rarely any attempt to explain those who express this theme differently, or who do not express the theme at all.

There is a problem also in being purely descriptive, presenting each theme in sequence, just as there might be if the only report given from a survey was of simple frequencies or means. Themes only attain full significance when they are linked to form a coordinated picture or an explanatory model.

Moving from 'Garden Path Analysis' Toward a Coherent Model

My colleague, Lyn Richards, often talks about 'garden path analysis' when she is teaching about qualitative analysis, as a way of showing how thematic 'analysis' can take the reader along a pleasant pathway that leads nowhere: 'Here are the roses, there are the jonquils, and aren't the daffodils lovely today!' The suggestions which follow are designed to help you

move beyond the garden path toward a more meaningful and coherent model or theory from your data.

Describe- Compare- Relate

'Describe, compare, relate' is a simple three-step formula I use when starting to work through and record results of an analysis.

- **Describing is an important starting point**
  Outline the context for the study and provide details about sources of data, such as the demographic features of the sample and the interrelationships between these features. These give necessary background against which further analyses will be read, as well as providing a basis for comparative analysis. Then move to the first major category or 'theme'. Describe (and record) its characteristics and boundaries. *How* did people talk about this aspect, and *how many* talked about it? What's *not* included?

- **Compare differences in the characteristics and boundaries for just that category or theme across contrasting demographic groups or across variations in context**
  Do themes occur more or less frequently for different groups? Are they expressed differently by different groups? Ask questions of your data about this category or theme—who, why, what, when? Record meaningful associations—doing so will prompt further questions in your mind. Record, also, an absence of association—not only is it important to know if there is no variation across groups or contexts, recording these means you won't need to waste time later re-checking.

- **Relate this category or theme to others already written about**
  Ask more questions—does it make a difference if…? Use Strauss' (1987) coding paradigm to assist: Under what conditions does this category or theme arise? What actions/interactions/strategies are involved? What are the consequences and do these vary depending on the particular circumstances or the form in which it is expressed? Record the questions you ask, and the results you find (or don't find).

Repeat these three steps for each category or theme you want or need to write about. As you relate categories you will be helped to structure your data because relating is best done to categories already discussed. Thus, you will need to think about what the reader already needs to know before they can understand what you are now writing about.

Parts of this initial approach to reporting the data will be preserved in the final report, article or thesis, but further transformation will also occur. As you describe, compare and relate for each element with an enquiring mind and an eye for evidence, your picture will become increasingly complex and your theory or thesis will develop, building on the foundation you have laid. Your analysis, then, will come together around an integrating idea, with arguments to support it drawn from across your completed (interim) analyses. Whether the integrating thesis/theory/model follows the description and analysis of key themes as a conclusion drawn

from them, or whether it is presented early and then followed by further description will depend on the nature of the particular set of data and the issues to be discussed.

In the draft of an article on what makes a good care worker, a doctoral student described communication skills necessary for building and maintaining relationships between care workers and clients in a way that made it very hard for the reader to take in (two quotes followed, to support this extensive list):

> Particular skills that were singled out were communication skills, skills in negotiating and managing difficult situations, being able to take initiative and be flexible, to exercise judgement, to be sensitive to and recognise people's needs and to deal with problems as they arose. In order to build a working relationship with people, the participants stated they needed to be able to listen carefully and respond appropriately to the client. They spoke of needing highly developed 'people skills' that would enable care workers to see things from the client's point of view. They spoke of the importance of being able to empathise and connect with people to be able to talk and to listen when it was appropriate.

Exploring (from this passage only) how the various skills mentioned related to both communication and to the goal of caring led to the following suggestion for an alternative presentation:

Communication skills of care workers were demonstrated in two primary ways (Figure 1):

- through their ability to negotiate and manage difficult situations, and
- through their capacity to listen and respond to the client.

> Together, these skills reflect the practical and emotive dimensions of an ability to *take account of the client*—a core category in what makes for good care work.

The article might then continue with a description and analysis of each of these two primary dimensions, but now *in terms of* how each involves communication skills and contributes to the core process of taking account of the client.

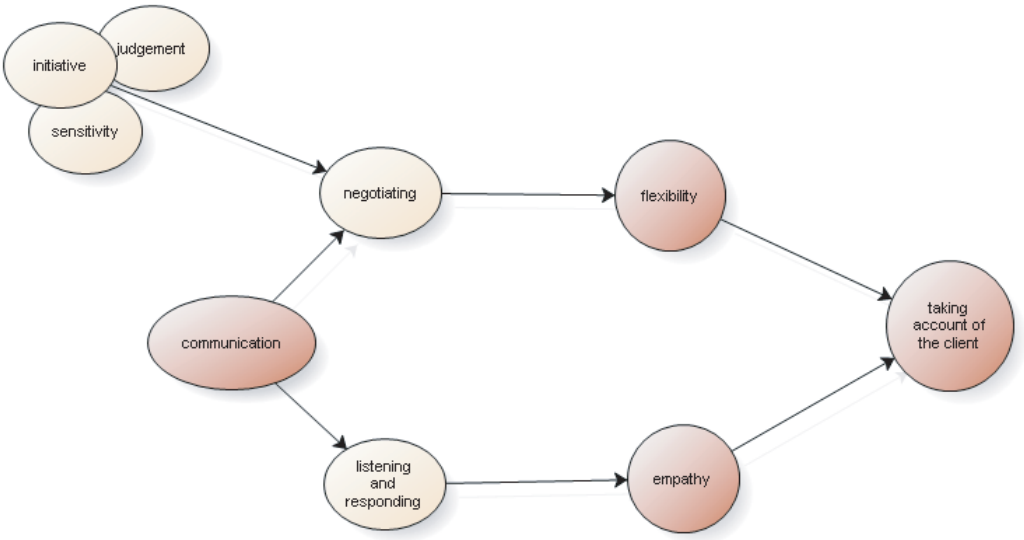


Figure 1: The role of communication skills in 'taking account of the client

Using Divergent Views to Challenge Generalisations

Divergent views, negative cases or outliers—however you choose to label them—provide a rich source for further analytic thinking, as you learn from them and grow your understanding to incorporate them in your theorising (Miles & Huberman, 1994). In qualitative work they cannot be ignored, but more than that, at times they provide the hint that explains what is happening for the larger sample.

A doctoral student at a rural university in Australia is studying responses to amalgamations of administrative regions within government health services in low-density, rural areas. Communication issues were assuming a central focus in her analysis (primarily, the lack of communication with employees throughout the process of amalgamation). Two of her 20 interviewees stood out, however, in having positive views about the amalgamations. So what was special about these two? One had taken a redundancy and established a new career, another had been given a senior position in the new system, with more power. Thus, those who were positive had personally benefited from the amalgamations. This raised the question of whether those who were negative were so more because they were now worse off in a personal sense than because the service had deteriorated, and sent the student off on a new line of investigation to check for evidence on selfish versus altruistic thinking in her interview and questionnaire data. It challenged her generalisation about the centrality of the communication issue alone in explaining interviewees' responses, and eventually pointed to a much richer picture in which communication issues, specifically lack of engagement and

transparency by the hierarchy, created a sense of uncertainty which fostered in employees a focus on their own interests.

Work at proposing alternative explanations, of which negative cases are just one source, then check the elements of these explanations or ideas generated from them against other data (Yin, 2003). How widely are they supported? Can they be refined and developed? Record these verifying strategies and their results, even if they prove to be false leads, as this will help you build a case for your chosen explanation.

Returning to the Substantive, Theoretical and Methodological Literature

Your substantive and theoretical literature is another source of explanations to explore and test. Read broadly. Your analysis may be stimulated by something from outside your own area of work that nevertheless has application to it either in substance or in form. Or, the way in which others have drawn from their data to reach an elegant and enlightening conclusion may simply serve to inspire you to keep working at it!

Read the methodological literature for additional ideas on ways to refine or extend your analysis strategies. For example, when I was writing about using NVivo for different methodologies for the final chapter in *Qualitative data analysis with NVivo* (Bazeley, 2007), I read a number of chapters and articles on various forms of discourse analysis. I make no pretence to having any expertise in discourse analysis, but the reading did at least give me a new awareness of some features in my own data about academic researchers, such that I could clearly identify at least three patterns of discourse in the texts: discourses of performance, of romance, and of play. The danger is that, like themes, these also can easily be presented as descriptive and disjointed observations and so, like themes, they need to be integrated into a cohesive and purposeful analysis.

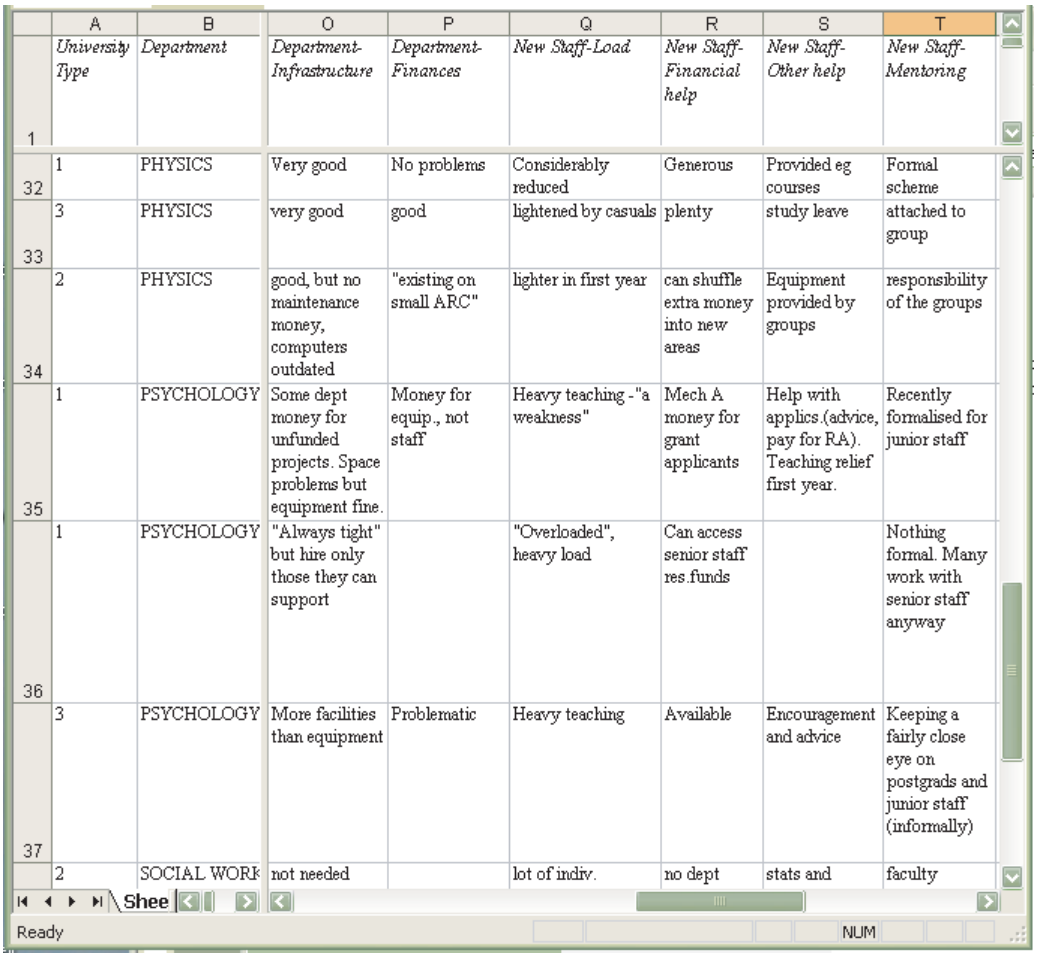
Creating and Using Displays from the Data

Miles and Huberman, in their classic 1994 text, argue cogently for the value of displaying data to develop researcher understanding and for presentation of conclusions from the data: "You know what you display" (p. 91). In displaying data, the researcher moves from describing to explaining, through a "ladder of abstraction." The form of a display will vary depending on its purpose, the stage the analysis has reached, and on whether the enquiry has a variable or process orientation.

Matrix displays: Whether they are drawn by hand or created through software, matrix displays are an extremely useful way of detecting patterns in data.

The display in Figure 2 is part of a larger matrix that was used as an initial form of data entry, designed to extract relevant information about research opportunities for new academics from a series of interviews with 56 heads of departments across six disciplines in three university types (Bazeley *et al.*, 1996). From this display it was possible to compare patterns for different departments and university types, facilitated by its having been entered in Excel. For example, it became evident that while new staff in Physics and Psychology were both

supported in doing research (in contrast to some other disciplines), they experienced considerable differences in teaching loads and thus in opportunities to actually engage in research.



	A	B	O	P	Q	R	S	T
1	*University Type*	*Department*	*Department-Infrastructure*	*Department-Finances*	*New Staff-Load*	*New Staff-Financial help*	*New Staff-Other help*	*New Staff-Mentoring*
32	1	PHYSICS	Very good	No problems	Considerably reduced	Generous	Provided eg courses	Formal scheme
33	3	PHYSICS	very good	good	lightened by casuals	plenty	study leave	attached to group
34	2	PHYSICS	good, but no maintenance money, computers outdated	"existing on small ARC"	lighter in first year	can shuffle extra money into new areas	Equipment provided by groups	responsibility of the groups
35	1	PSYCHOLOGY	Some dept money for unfunded projects. Space problems but equipment fine.	Money for equip., not staff	Heavy teaching -"a weakness"	Mech A money for grant applicants	Help with applics.(advice, pay for RA). Teaching relief first year.	Recently formalised for junior staff
36	1	PSYCHOLOGY	"Always tight" but hire only those they can support		"Overloaded", heavy load	Can access senior staff res.funds		Nothing formal. Many work with senior staff anyway
37	3	PSYCHOLOGY	More facilities than equipment	Problematic	Heavy teaching	Available	Encouragement and advice	Keeping a fairly close eye on postgrads and junior staff (informally)
	2	SOCIAL WORK	not needed		lot of indiv.	no dept	stats and	faculty

Shee

Ready NUM

Figure 2: Matrix display of interview data, to examine patterns

Where text has been coded using software such as NVivo, those codes can be used to construct matrix displays based on the co-occurrence of codes within the text, or of codes and demographic attributes. The resulting matrix display (Figure 3) provides both the frequency of responses and the detailed content of responses, allowing the researcher to assess both patterns of association (*how often* things vary under different circumstances), and the nature of the associations (*in what ways* something might vary under particular or different circumstances).

Matrices are primarily useful for facilitating comparative analysis of data, and sometimes for presenting conclusions.

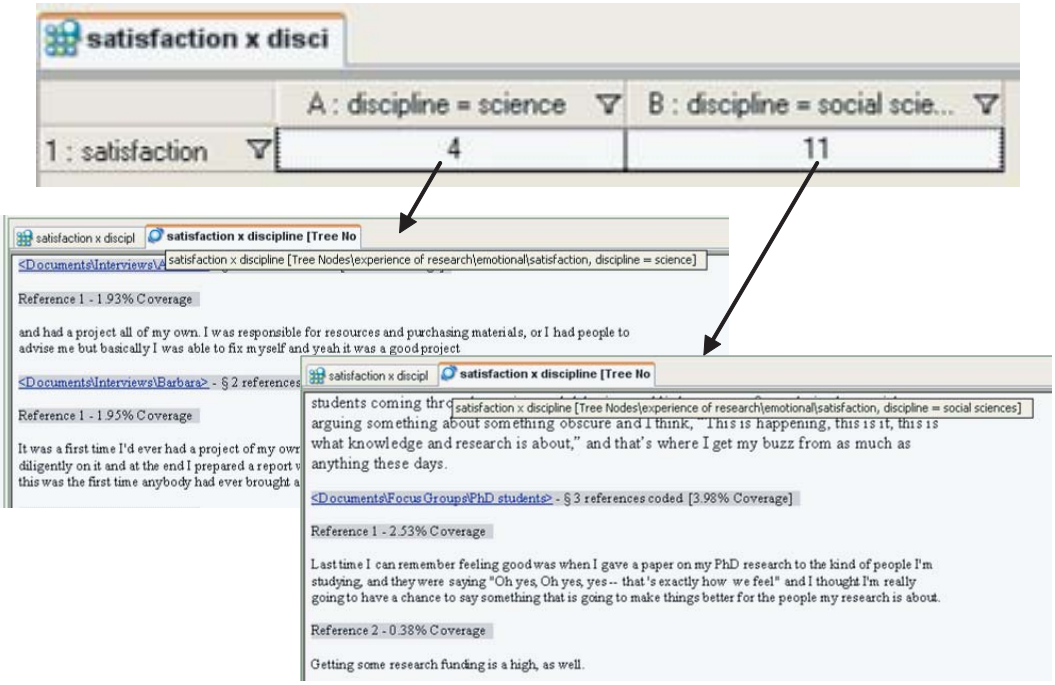


Figure 3: Results from a matrix query in NVivo (Bazeley, 2007)

Flow charts and models are valuable early in a project to assist in initial conceptualisation and planning, but their particular strength is as a means to present conclusions from an analysis.

Figure 4 provides the overview for a more detailed series of flow charts through which I presented my thesis that *community development is an effective strategy for the promotion of mental health in a disadvantaged population* (Bazeley, 1977). What is important here is that on the journey through my research I had already clarified what I understood by key concepts for my research: a definition of mental health relevant to a community context, the implications of disadvantage with respect to mental health, and also my understanding of community development (which had been an unanticipated component of my community mental health project). These clarifications greatly facilitated my being able to visualise and theorise the links between community development and mental health as I came to the conclusion of my project—indeed, building the final model was possible only because I had undertaken these clarifications. The way I often talk about this now with students is to ask them to write, at the end of each segment of their work, what they are taking forward from it. Each component of

Community development		ðî	Mental health	
• **Rebuilding community**				• **Avoid psychological disorder**
o shared identity	◂ personal identity ◂ 'whole person' acceptance ◂ rootedness, commitment to values	Details of specific links followed in further charts	coping skills ▸ interpersonal support ▸ reduced stressors ▸ self esteem ▸	o absence of impairment from persistent symptomatology
o mutual support	◂ enhanced interpersonal equity ◂ rootedness, security ◂ crisis management resources			
• **Personal/group development through decision making**				• **Self direction**
o competence	◂ personal coping skills ◂ environmental mastery ◂ individual instrumental skills		environmental mastery (competence) ▸	o solve life problems
o power	◂ personal ◂ societal		autonomy ▸ opportunity for varied roles and statuses ▸	o make life choices
• **The public context**				• **Self actualisation**
o social system linkages	◂ participatory power ◂ increased knowledge		rootedness, commitment to values ▸ 'whole person' acceptance ▸ self esteem ▸	o personal integration
o instrumental changes in the environment	◂ reduced environmental stressors ◂ increased opportunities		development of skills ▸ opportunity for varied roles and statuses ▸	o individuation

Figure 4: Community development for mental health in a disadvantaged community (Bazeley, 1977)

their writing then becomes focused, it provides a 'road map' for the reader, and each can then contribute to building a conclusion.

In her study of spinal injured people, Lynn Kemp (1999) developed a series of increasingly complex theoretical models to illustrate various approaches to identifying need for community services, including normative need, comparative need, perceived need, felt need. Each was dismissed, in turn, as it was found to be not supported by her data. At the end of the process, based on a combination of survey and interview data, she reached an understanding of need as fulfilling a plan of life. For these spinal injured people, the plan was to be 'ordinary,' but community services typically fostered difference (Figure 5). Just occasionally, services supported the plan of the person with an injury, but more often, in order to receive services, the recipient had to accept difference. This model was built on careful consideration of the key themes in her participants' narratives and, critically, the relationships between those themes, strongly supported by the theoretical and research literature.

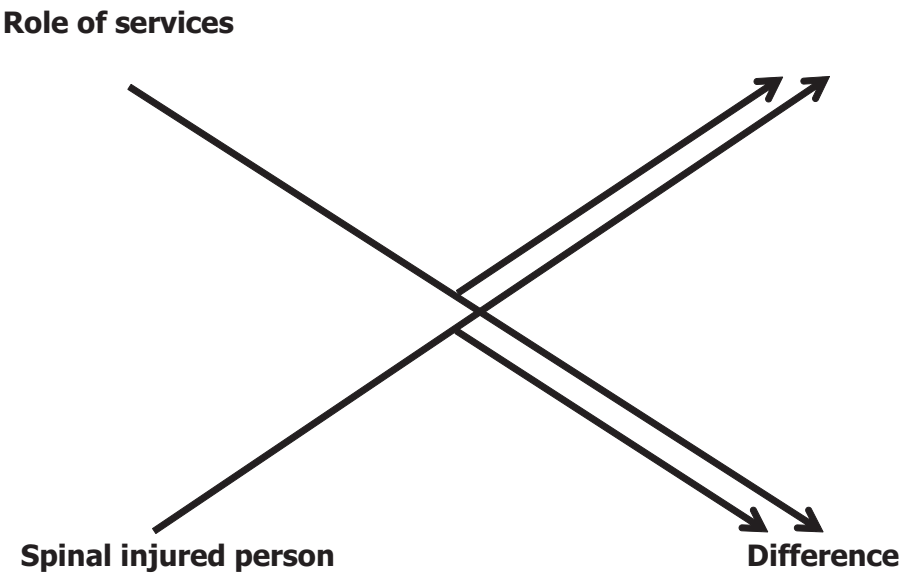


Figure 5: Plans of life and the role of services (Kemp, 1999)

Models for final conclusions and presentation purposes are often simplified from a more complex version. I am reminded of the famous quote by Blaise Pascal: "The present letter is a very long one, simply because I had no leisure to make it shorter." Kemp's model was built on the basis of much more complex maps of interrelated categories but, in its simple form, it holds within it a wealth of meaning that perfectly summed up both the desires and the experiences of her spinal injured participants.

As well as providing a presentation tool, the process of creating a flow chart or model will stimulate your thinking at any stage in the research process, as you determine how the various elements (or themes) that you are investigating fit together. It was only as I started to draw Figure 1, shown earlier, to puzzle about how the various listed categories and themes might relate, that I realised that negotiation and listening/responding could be seen as two kinds of communication and also two aspects of relationship, and that what they had in common was the idea that each was a particular way of taking account of the client. This model would inevitably change and develop as additional data and themes are considered, but even as an interim step based on a small segment of summary text, it proved to be enlightening and could begin to move the analysis beyond a simple description of themes.

Typologies: A typology is a classification system built by viewing a concept along a continuum, or perhaps by taking two (or more) dimensions to make an orthogonal display (Patton, 2002). The logic of the pattern so made is then examined against the data to see if this makes for meaningful subgroups, classes or ideal types, and for whether the pattern holds in different settings. Labels for cells often draw on 'indigenous' terms, i.e. those used by the participants in their everyday conversations. Patton describes a researcher's generation of fresh ideas through logically working between theory and data in this way as 'abductive thinking,' while warning against manipulating the matrix in an attempt to fill out all cells—all new ideas generated must be tested and confirmed by the data. In that sense the typology created is a working tool, but possibly becomes also a final presentation tool.

Table 2 is the initial result of my 'playing around' with cross-classifying some important dimensions in researchers' lives, derived from interview and focus group data. Once I created it, I realised there must be at least one additional dimension needed (perhaps opportunity?), as low support from the institution could equally well result in the researcher's experiencing moderate or high levels of frustration, leading to low research activity-something that is not adequately captured in this table. I am also unsure about some of the labels I've used. As a working model, nevertheless, it serves a purpose in prompting further exploration of the relationships between personal and environmental factors in research activity.

The creation of these various forms of display assumes that adequate concepts, categories or themes are being (or have been) developed and substantiated in the available data. Each has the potential to extend the analysis beyond those concepts, categories or themes, to take the researcher into deeper understanding of experience or process, and hence to theory building.

Writing Research as a Tool for Analysis

Like many others, I recommend that you start writing early, and that you keep writing.

Start Early

In qualitative research, the researcher's reflective writing becomes a critical source of interpretive understanding as concepts are dissected and ideas explored. Your reflective writing, additionally, is invaluable in pointing to arguments to support your conclusions, in that

		Research orientation of the institution	
		Low	High
Level of personal commitment to research	Low	**Non-researcher:** No need for opportunity	**Reluctant researcher:** Only does what is required
	Moderate	**Distracted researcher:** Always something more important to do	**Small 'r' researcher:** Engages in data gathering, projects of local significance, or with team
	High	**Addicted researcher:** Will do it anyway, but may suffer in their personal life as a consequence	**Big 'R' researcher:** Harmony between personal and institutional goals creating possibility of major interpretive breakthroughs

Table 2: A typology of academics' responses to institutional research orientation

it provides an audit trail of how those conclusions were reached. Then, as you move toward creating a report from your study, the exercise of writing in an ordered presentation forces clarification of ideas.

As you start to write you will be prompted to go back to your data with further questions to be resolved. There are practical benefits as well in beginning to write early: you don't become overwhelmed with data; you don't become stuck with writer's block–and you don't waste the world's resources on printing out reams of unhelpful results for later perusal.

Avoid Reliance on Quotes for Evidence

When the results of a qualitative project are presented as a series of themes, very often each theme or sub-theme is presented as a statement followed by a quote designed to provide evidence for the theme. Clearly, participants' words must lie at the basis of the conclusions you reach, but rarely will a participant make the argument for you in a few words.

Reliance on presenting brief quoted segments of text as 'evidence' encourages superficial reporting of themes, whereas building an argument requires that conclusions are drawn from across the full range of available texts. One of the best strategies for ensuring you write more than themes is to write the first draft of your results without any quotes. This forces you to rely on wider evidence for what you are saying. Only when you have built that evidence for your conclusions can you safely add some illustrative quotes to add interest and clarity for the reader.

Before Lynn Kemp came up with her concluding model (Figure 5, above), she had made two attempts to write results from the analysis of her interview data. In both she had relied heavily on quotes; it was only when she was forced to write a version without quotes that she saw and developed the central organising principle on which her final thesis rested. She was then able to effectively illustrate that principle and demonstrate its variations with quotes and selected case vignettes.

Keeping the Purpose in Focus

In recent work I have come across examples of researchers:

- writing to the sources – organising chapters by the kind of source (most commonly, separating qualitative and quantitative sources);
- writing to the voices – organising chapters around the perspectives on the topic held by each group of participants in a process;
- writing to the method – organising chapters around the approach taken to analysis of the data where the particular method being used to guide the analysis prescribed three different readings of the participants' narratives. This could also apply if different methodologies are employed in analysing the same data (such as phenomenology and grounded theory).

In each of these cases the research purpose related to investigation of a substantive topic and not to an analysis of the role of sources, voice or method. By organising their writing around some aspect of the way in which they gained their data or approached their analysis, rather than around what their data were saying with respect to the topic of the research, the purpose was 'hijacked' and the text became repetitive. In each case that I was involved with, shifting the organisation and focus of their writing to the topic of the research brought fresh insights and a renewed sense of purpose to the writers as different perspectives and data relating to each theme or issue could be brought together, compared, contrasted and developed.

When Have You Arrived?

Lyn Richards (2005), in *Handling qualitative data*, suggests five signs of sufficiency for an analysis:

- Simplicity – a 'small polished gem of a theory', rather than 'a mere pebble of truism;'
- Elegance and balance – it is coherent;
- Completeness – it explains all;
- Robustness – it doesn't fall over with new data; and
- It makes sense to relevant audiences.

Conclusion

I have a Welsh Springer Spaniel dog. It is fascinating to watch him cross a field: he will course back and forth in what appears to be a very indirect route until he picks up a scent—

his brain makes the connection with rabbit, and so then he will move rapidly and directly in line with that scent. Arrival requires that you have moved along a tortuous and possibly twisted path until you have found the scent, but having found it, you make the connections and you are then able to lead the reader directly to the goal.

Identification of themes as a goal and as an end point of analysis fails Richards' five tests. Contextualising and making connections between those themes to build a coherent argument supported by data is needed to satisfy immediate stakeholder audiences as well as journal reviewers.

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Dr Pat Bazeley provides assistance and time out (and good food) to local and international researchers from a wide range of disciplines at her research retreat at Bowral, in the Southern Highlands of New South Wales. She also holds senior, part-time appointments in Research Centres at the University of New South Wales and at the Australian Catholic University, and has served as an Associate Editor for the Journal of Mixed Methods Research. Her particular expertise is in helping researchers to make sense of both quantitative and qualitative data and in using computer software for management and analysis of data. Her publications focus on qualitative and mixed methods data analysis, and on the development and performance of researchers.