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Qualitative psychology in the real world: The utility of template analysis


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‘Applied’ psychology is the application of psychological knowledge to solve practical problems in real world settings. Notions of an ‘applied science’ originally derive from distinctions made in the natural sciences between ‘pure’ and ‘applied’ research. In this context, it is fairly easy to distinguish between the ‘pure’ and the ‘applied’ in terms of their focus on either the theoretical or the experimental. However, this distinction becomes more problematic when considered in the discipline of psychology, and for qualitative psychologists, whose central focus is on human experience, notions of ‘pure’ and ‘applied’ research are difficult to reconcile with an essential concern with human beings as meaning makers. For qualitative psychologists, rather than defining ‘applied’ research as a dichotomous alternative to ‘pure’ or ‘basic’ research, it may be that a more meaningful distinction can be made in terms of the main focus of a piece of research. This may vary from those studies aimed primarily at addressing academic debates to those with a very pragmatic and practical research focus. Thus, for qualitative research in psychology, one can consider at what point on this spectrum a particular piece of work is situated, and to consider this in dimensional rather than dichotomous terms.

For qualitative psychologists whose work involves them taking a ‘hands on’ approach to pragmatic research questions in real world settings, it is essential that methods of data analysis should be able to genuinely incorporate the concerns of those whom the research is intending to help. There are many ways to achieve this but this paper introduces one method of qualitative data analysis known as ‘template analysis’ as an approach which we argue has particular utility in ‘real world’ or applied qualitative research in psychology.

Template analysis is a technique for thematically organising and analysing qualitative data. The data involved are usually interview transcripts, but may be any kind of textual data, including focus groups, diary entries, text from electronic interviews (via email/ web based chatrooms, social networking sites etc.) or open ended question responses on a written questionnaire. The essence of template analysis is that the researcher produces a list of codes (their ‘template’) representing
themes identified in their textual data. The template is organised in a way which represents the relationship between themes, as defined by the researcher, involving a hierarchical structure.

There are a wide array of data collection and analysis methods available to those undertaking qualitative research in psychology and introductory texts on the subject usually start off with some explanation of the way in which epistemological assumptions guide and shape a researcher’s choices in terms of both data collection and data analysis. A key area of epistemological debate in qualitative research is the extent to which any method can provide access to the personal world of the research participant. Template analysis can be used in real world research from a range of epistemological positions. It can be used in research that takes a similar realist position to mainstream quantitative psychology, and which is concerned with ‘discovering’ underlying causes of human action and particular human phenomena. In contrast it can also be used within what Madill, Jordan and Shirley (2000) have termed a "contextual constructivist" position, which assumes that there are always multiple interpretations to be made of any phenomenon, and that these depend upon the position of the researcher and the specific social context of the research. And somewhere between these two approaches, template analysis can also be used in research adopting a ‘subtle realist’ approach (Hammersley, 1992), a position which acknowledges that the researcher’s perspective is inevitably influenced by their inability to truly stand outside the social world, own position in the social world, but nonetheless retains a belief in phenomena that are independent of the researcher and knowable through the research process. Such an approach can thus make claims as to the validity of a representation arising from research, while recognising that other perspectives on the phenomenon are possible.

Template analysis is compatible with many but by no means all epistemological positions. It would be inappropriate to use template analysis in methodologies that are concerned with the detail of how language is used in interaction, like discourse analysis and conversation analysis. Such approaches require a much more finely grained textual analysis than could be provided by template analysis, and as such are not easily compatible with the segmentation of text and attachment of themes or codes to extracts of textual data.

There are very many approaches to data analysis available to those undertaking qualitative research in psychology, so why might a researcher choose to use template analysis, especially when there
exist other approaches which resemble it and for which there exists a more substantial literature? There are a number of reasons which might make template analysis appealing to those embarking on applied qualitative research. As just described, template analysis can be used from a range of epistemological positions. An alternative approach such as grounded theory is arguably also compatible with different epistemological positions, but it has primarily been developed as a ‘realist’ methodology (with the exception of Charmaz’s (2006) constructionist version) and as such may not be conducive to the position of researchers who do not claim to be uncovering ‘real’ beliefs, attitudes and values of their research participants. Additionally, the procedures that need to be followed in terms of both data collection and data analysis in ‘traditional’ grounded theory studies can be prescriptive (e.g. Corbin & Strauss, 2008), and template analysis may be preferred as a more flexible technique with fewer specified procedures which allows researchers to tailor the approach to the requirements of their particular research project.

Template analysis can be used within a broadly phenomenological perspective, and when employed in this way there are clear similarities between this approach and IPA (Smith, Flowers and Larkin, 2009). There are two key features which differentiate between the approaches. Firstly, the idiographic focus of IPA and its detailed case-by-case analysis of individual transcripts means that studies are usually based on small samples. Template analysis studies usually have rather more participants and often focus more on across case rather than within case analysis. Secondly, in IPA, codes are generated from the data rather than using pre-existing knowledge or theory to identify codes that might be applied to the data set. Template analysis allows the researcher to define some themes in advance of the analysis process, referred to as "a priori" themes. (Note though that it is not a requirement of the method that a priori themes are used). This is usually because a research project has started with the assumption that certain aspects of the phenomena under investigation should be focused on. It is important to recognise that a priori themes should always be recognised as tentative. A priori themes are as equally subject to redefinition or removal as any other theme should they prove ineffective in characterising the data. It is generally recommended that researchers restrict the number of a priori themes as far as possible so as to avoid definition of the template at too early a stage and to ensure that data which do not relate to these themes are not mistakenly overlooked. However, the use of a priori themes may be particularly advantageous in applied qualitative research. A priori themes may relate to important theoretical concepts or perspectives that have informed the design and aims of the study, or to practical concerns such as evaluation criteria that the research project has been devised to address. The use of a priori themes
means that template analysis may be well suited to studies with particular applied concerns which need to be incorporated into the analysis.

Template analysis emphasises the use of hierarchical coding but balances a relatively high degree of structure in the process of analysing textual data with the flexibility to adapt it to the needs of a particular study. Central to the technique is the development of a coding template, usually on the basis of a subset of data, which is then applied to further data, revised and refined. The approach is very flexible regarding the style and the format of the template that is produced and unlike some other thematic approaches to data coding, it does not suggest in advance a set sequence of coding levels. Rather, it encourages the analyst to develop themes more extensively where the richest data (in relation to the research question) are found. Equally, template analysis does not insist on an explicit distinction between descriptive and interpretive themes, nor on a particular position for each type in the structure. There are a number of useful texts and resources with procedural guidelines for undertaking template analysis including King (2012) and the template analysis website at http://www2.hud.ac.uk/hhs/research/template_analysis/index.htm.

To illustrate how template analysis can be used in real world applied qualitative research we will now briefly describe two recent and current research projects undertaken at the Centre for Applied Psychological Research at the University of Huddersfield which have used template analysis. The studies are:

- A large scale health services research project examining collaborative working between healthcare professionals;
- A small pilot study exploring the impact of family members on back pain disability;

Example 1: Collaborative working in Cancer Care

‘Unpicking the threads’ is a three year qualitative research project undertaken in the Centre for Applied Psychological Research, University of Huddersfield and funded by Macmillan Cancer Support. The focus of the study is an examination of how different healthcare professionals work together in the United Kingdom to provide supportive and palliative care to patients with cancer and other long-term chronic health conditions. The main research aims are:
(i) to examine how specialist and generalist nurses work with each other and with other professionals, carers and patients in providing supportive and palliative care to cancer patients; and (ii) to explore how these professional practices and relationships might differ in the care of long term condition patients.

We are using a novel interview tool known as the ‘Pictor’ technique in this project. Pictor has been developed at the University of Huddersfield by Professor King and this research team to explore networks of care and support in health and social care. The technique requires the research participant to choose a case of collaborative working in which they are, or have been, involved (in interviews with lay people this means their own case as patient, or that of the person they care for). Participants are provided with a set of arrow-shaped Post It notes and asked to lay them out on a large sheet of paper in a manner that helps them tell the story of their case. The ‘Pictor chart’ produced by the participant serves as the basis for the researcher to explore and reflect upon the case with the participant. Figure 1 shows an example of a Pictor chart from this study. Our primary focus is on nurses, in both the acute and community sectors, but we have also interviewed a wide range of other professionals with whom they interact, and some patients and carers. Our total participant sample size numbers over seventy, making this an extremely large scale project in comparison to many research projects utilising qualitative research methods.

Figure 2 shows the initial template developed by the research team. The approach taken by the team was to develop an initial template through group analysis of early interviews undertaken with different participant types. Codes were defined in the light of the stated aims of the project and through drawing on priority areas covered in the interviews. Over the next eight months, and in parallel with ongoing data collection, the team then met at regular intervals to analyse further interviews, and again using interview data from different participant types. We have found this kind of collaborative working strategy valuable as it necessitates clear agreement and justification for the inclusion of each code, and a clear definition of its use.

Analysis of the data is still ongoing but almost complete. We are now working to version 8 of the project template, which is being subjected to minimal modification. Decisions about when a template is ‘good enough’ are unique to each particular project and inevitably face pragmatic
external constraints. In this instance, the research team have established that all members are in agreement that the template covers all sections of text thus far encountered adequately. The team are now working their way through the mass of interview transcripts individually. Our sessions of data analysis working as a team mean that we have a good understanding of the template, which is a great advantage given its size and complexity. We are using the qualitative research software NVivo to assist coding and if needed, there is an option of coding any data which appear important but which are not accounted for in the current version of the template under a ‘free node’ in NVivo with any such additions being reviewed at regular research team meetings. Figure 3 shows the top level themes for the final version template. At first glance, given that there are fewer top level themes than in our initial version, it might appear that the template has been shortened and simplified. Not so: what has happened is that with closer examination of the data, and continual discussion amongst the team, the coding has increased in depth – representing increased discrimination and clarity in our thinking about the data. Figure 2 showed the entire first version template, including top level themes and all lower level coding. In contrast, Figure 3 shows just the first top level theme and the lower level coding associated with this one theme. The version 8 template we are currently working to is a nine page document, in comparison to our first version which in contrast covered just one and a half A4 pages.

Example 2: Patient and significant other experiences of back pain

The second project we are using as an example of ‘real world’ research using template analysis employed the technique in a rather different way to meet the needs of this particular piece of research. The focus of this research project was work participation outcomes in patients with chronic low back pain. Back pain is a leading cause of disability in the UK and chronic back pain accounts for around 20% of claims for long term state benefit. Clinical guidelines for the management of back pain emphasise the importance of remaining active and vocational rehabilitation research suggests that remaining in work or returning to work as soon as possible is better for patients. There is an emerging body of research suggesting that beliefs about illness are important influences on functional outcomes in back pain. The self-regulatory model of health and illness or SRM has been established as a useful framework through which to explore beliefs about illness in this context. In response to calls in the literature for more qualitative research to provide a better insight into psychosocial obstacles to recovery and work participation in back pain, a team at the University of Huddersfield has been undertaking a series of exploratory interview studies using the SRM to ask patients about their back pain in relation to work participation outcomes. A further
novel aspect to this research is our inclusion of those close to the patient—their significant others—in the study to look at the potential family factors which may have ramifications for work participation outcomes in back pain. In the study described here, we interviewed a sample of back pain patients who had remained at work and their significant others and a sample of patients who had become incapacitated due to their back pain and their significant others. This allowed for preliminary comparison between the two groups so that potentially important factors differentiating them might be identified. Two researchers interviewed patients and their significant others separately at the same time and the components of the SRM were used as a guide to construct a semi-structured interview schedule. Given our focus in this research on the SRM as a framework to conceptualise beliefs about back pain, we used the dimensions of the SRM as a priori themes to organise our initial template. These dimensions cover both cognitive and emotional representations of illness. Through engagement with the data, various lower level coding of these themes was applied to our template and two further themes emerged covering the impact of the back pain condition on the patient’s identity and the impact on and influence of significant others with regards to the back pain condition. The final template is shown in Figure 4.

In template analysis, exactly how to go about drawing together an interpretation of the coded data will depend on the aims and content of the particular study. In our final report on this work, three overarching themes were presented and discussed: two drawn from lower level themes and one of the new top level themes. We focused on three themes where there seemed to be potentially important differences in the ways in which dyads from the working and non-working sample thought about the back pain condition. The three overarching themes presented and discussed at greater length in the final report were:

(1) Treatment expectations;

(2) Impact on patient activities (including employment);

(3) Patient identity.

Briefly, in terms of treatment expectations, significant others of out of work patients appeared to believe that their relatives needed to be pain-free in order to resume participation in normal life, and equated only complete removal of pain with treatment success. In contrast, participants in the employed sample tended to talk in terms of ‘management’ rather than ‘cure’, and were more accepting of the possibility that medical treatment would be unable to provide complete relief from symptoms. Those dyads in which the patient was out of work due to their back problem tended to
emphasise the extreme consequences of the patient’s back pain on every aspect of their lives. Those dyads in which the patient remained in employment focused instead on what the patient could still do. These attitudes were further reflected in participants’ beliefs about patient identity: employed patients were described in heroic terms; out of work patients were described as disabled and blameless victims. Undertaken as it was in the context of current changes to the UK’s welfare system, this work has potential implications for understanding how patients and their families may respond to these benefit system changes, and how this may impact on work participation outcomes. Our findings suggest that there is a danger that patients who feel unable to stay in or return to their previous employment may adopt a very limiting “disabled” identity as a protection from socio-cultural scepticism about their condition, and derogatory rhetoric about “benefits scroungers”. Such a strategy for defending the self may lead to a vicious circle whereby the patient (backed up by the significant other) focuses on what s/he cannot do, restricts activity further, and exacerbates the condition making it even less likely they will be able to return to work. Our findings emphasise the importance of taking wider social and environmental factors into account and suggest that significant others may have an important role to play in this context. Should you be interested in finding out any more about this work, our final research report (Brooks, McCluskey, King & Burton, 2012) is freely available online at http://eprints.hud.ac.uk/13217.

Whilst the two examples of research utilising template analysis discussed here are examples of the technique being used in health and social care type settings, template analysis is been used in many other research areas. Recent examples include a PhD thesis recently completed at the University of Huddersfield by Dr Emma Turley investigating the lived experience of bondage, discipline, dominance and submission and sadism and masochism. Emma used a number of innovative ways to explore this topic with her research participants, including imaginative variation and successfully combined mixed phenomenological approaches including template analysis to excellent effect in her work (Turley, 2012). Another good example of template analysis in a different research setting is a paper published by Dick and Hyde in 2006 examining the ways in which gendered assumptions and taken for granted organisational practices and structure impact on the career development of reduced hours professionals. Beyond these examples, template analysis has been used in a wide range of other settings including education, clinical psychology and sports science (King, 2012, provides more detail and references).
In conclusion, a common feature of qualitative psychological research undertaken in real world settings is the extensive and often complex data it produces. How a researcher or research team moves from this mass of data to produce an understanding of their research participants’ experiences depends upon their choice of data analysis technique. In this presentation we have suggested that template analysis can be used to pragmatically address real world issues in a wide variety of settings. Why might interested psychology researchers working in real world settings choose to use template analysis? We would suggest that the following are key features which may make it appealing. It is a highly flexible approach that can be modified for the needs of any study. It may be an appealing alternative when other methods come with prescriptions and procedures which are difficult to reconcile with the features of a particular research study. The flexibility of the coding structure in template analysis allows researchers to explore the richest aspects of data in real depth. The principles of the methods are easily grasped and the discipline of producing a template forces the researcher to take a systematic and well-structured approach to data handling. It lends itself well to group or team analysis and working in this way ensures a careful focus on elaborate coding structures as the team collaboratively define meanings and structure. The use of an initial template followed by the iterative process of coding means that the method is often less time-consuming than other approaches to qualitative data analysis. Template analysis can handle larger data sets rather more comfortably than some other methods of qualitative data analysis although it can also be used with small sample sizes and has been used in the analysis of a single autobiographical case (King, 2008). Finally, its use of a priori themes means that template analysis may be particularly well suited to studies with particular applied concerns which need to be incorporated into the analysis. In qualitative psychology research, there is no one ‘best’ method of data analysis but we hope that this presentation has introduced template analysis as one method which has, in our experience, real utility in real world research settings.

References


Figure 1, example of Pictor chart from the Unpicking the Threads project
Figure 2, Unpicking the Threads initial template

1. Survivorship
   1.1 Understanding of the concept
      1.1.1 Patient perceptions of survivorship
   1.2 Whose responsibility is it?
   1.3 Early intervention?
   1.4 End of life vs. survivorship
   1.5 Practices to support ‘survivors’

2. Comparisons between cancer and LTC
   2.1 DN’s re. LTC – short term problem solving; Cancer – longer term, more emotional support [role perception]
   2.2 LTC’s more unpredictable than cancer

3. Organisational change
   3.1 Process of managing change
      3.1.1 Need for liaison at different levels
   3.2 Impact of NHS changes
      3.2.1 Fragmentation

4. Roles and perception of roles
   4.1 Perceptions of CM role
      4.1.1 Long term monitoring
   4.2 Perceptions of GP role
      4.2.1 GPs – curative/medical models
      4.2.2 GPs respond to financial incentives
      4.2.3 GPs see selves as independent of NHS
      4.2.4 GPs role in palliative/supportive care
         4.2.4.1 OOF – more GP focus on palliative care
         4.2.4.2 GPs pass palliative care to nurses
   4.3 Perceptions of DN role
      4.3.1 DN’s task focused 2

5. Relationships and collaborative working
   5.1 Relationships amongst nursing groups
      5.1.1 Work as integrated team
   5.2 Relationships between nurses and other professionals
      5.2.1 Nurses and GPs
         5.2.1.1 GPs difficult to work with
   5.3 Relationships between organisations
      5.3.1 Influences (interpersonal; intergroup; structural; geographical)

6. Workload issues
   6.1 More palliative LTC patients nursed at home
Figure 3, Unpicking the Threads version 8 template (top theme 1)

1. What affects collaborative working?
   1.1 Role definitions and distinctions
      1.1.1 Inter-professional understanding
         1.1.1.1 Level of understanding
            1.1.1.1.1 Clear understanding of professional role
            1.1.1.1.2 Poor understanding of professional role
         1.1.1.2 Managing boundaries and defining territory
            1.1.1.2.1 Role flexibility
            1.1.1.2.2 Role duplication
      1.1.2 Understanding of own professional role
      1.1.3 Organisational definitions of role

1.2 Collaborative working practices and systems
   1.2.1 Access to information and information exchange
      1.2.1.1 Facilitators
         1.2.1.1.1 Inter-professional meetings
            1.2.1.1.1.1 CSF
            1.2.1.1.1.2 Other inter-professional meetings
         1.2.1.1.2 Information sharing initiatives
            1.2.1.1.2.1 Roles / posts facilitating information exchange (e.g. liaison DN)
            1.2.1.1.2.2 Specific schemes (e.g. "Good to talk" sessions)
         1.2.1.1.3 Good procedural and case record information available (e.g. Cod & drug information sheets)
         1.2.1.1.4 Effective use of IT systems
         1.2.1.1.5 Joint visits
      1.2.1.2 Inhibitors
         1.2.1.2.1 IT system problems
         1.2.1.2.2 Failure to pass on information
         1.2.1.2.3 Lack of knowledge about available resources
         1.2.1.2.4 Boundary issues in information exchange
      1.2.1.3 Inequities in access to information

1.2.2 How to manage the co-ordination of different professional groups working together on a case?
   1.2.2.1 Extent of integration between different teams and services
   1.2.2.2 Challenges for managing the co-ordination of services
      1.2.2.2.1 Boundary issues
      1.2.2.2.2 Cross-sentor issues
      1.2.2.2.3 "Too many cooks"
      1.2.2.2.4 Managerial
      1.2.2.2.5 Number of different services

1.2.3 Resource issues that affect collaborative working
   1.2.3.1 Workload issues that affect collaborative working
   1.2.3.2 Financial resource issues that affect collaborative working

1.3 Impact of intra-team dynamics on collaborative working
   1.4 Impact of inter-personal relationships on collaborative working
      1.4.1 Longevity of relationship
      1.4.2 Stepping on toes (role overlap)
      1.4.3 Respect
      1.4.4 Making an effort
      1.4.5 Shared job history
      1.4.6 Availability and accessibility
      1.4.7 Personal chemistry
Figure 4, Final template from back pain study

1. Illness identity
   1.1 Specific label attributed to condition
   1.2 Symptoms
      1.2.1 New onset symptoms
      1.2.2 Previously experienced symptoms
      1.2.3 Pain
         1.2.3.1 Constant
      1.2.4 Symptoms come and go
   1.3 Co-morbidities

2. Beliefs about causality
   2.1 Beliefs about triggers
   2.2 Cause unknown
   2.3 Outside sources used to back up causal explanations
   2.4 Work as causal

3. Expectations about timeline
   3.1. Chronicity (through experience)
   3.2 Acute
   3.3 Cyclical
   3.4 Degenerative

4. Consequences of illness
   4.1 Future consequences
      4.1.1 Potential future consequences
      4.1.2 Expected future consequences
   4.2 Work
      4.2.1 Adjustments/ flexibility at work
   4.3 Sleep
   4.4. Things can do
      4.4.1 Positive developments skills resulting from condition
   4.5 Impact on everyday activities
5. Beliefs about curability and management
5.1 Pain relief
   5.1.1 Medication
      5.1.1.1 Dissatisfaction with
      5.1.1.1.1 not a cure
      5.1.1.1.2 side effects
      5.1.1.2 Would like more
   5.1.2 Injections
      5.1.2.1 Less effective over time
5.2 Surgery
   5.2.1 Last resort/risks
5.3 Self management
   5.3.1 Just carry on
      5.3.1.1 Takes mind off
   5.3.2 Keep mobile
   5.3.3 Equipment
   5.3.4 Weight issues
      5.3.4.1 Exercise
5.4 Not possible to control/manage
5.5 Treatment expectations
5.6 Alternative therapies
5.7 Physiotherapy
6. Emotional representations (emotional responses generated by condition)
   6.1 SO
   6.2 Pat
   6.2.1 Antidepressants

7. Patient identity
   7.1 Being a fighter
   7.2 Removing blame
   7.3 Co-morbidities
   7.4 SO as ‘true witness’ to ‘real’ patient
   7.5 Patient as victim

8. Impact on and influence of SO
   8.1 Fears of future dependency
   8.2 Routine dependency
   8.2.1 Normalising dependency

9. Illness coherence
   9.1 Understanding of the dyad
   9.1.1 Shared understanding
   9.1.2 Differing models
   9.2 Professional (medical) understanding of condition
   9.2.1 Pat or SO as more expert
   9.2.2 Time taken for medical treatment
   9.3 Outsider understanding
   9.3.1 Understanding through personal experience
   9.3.2 Unsupportive
   9.3.2.1 Due to invisibility
   9.4 Social services understanding