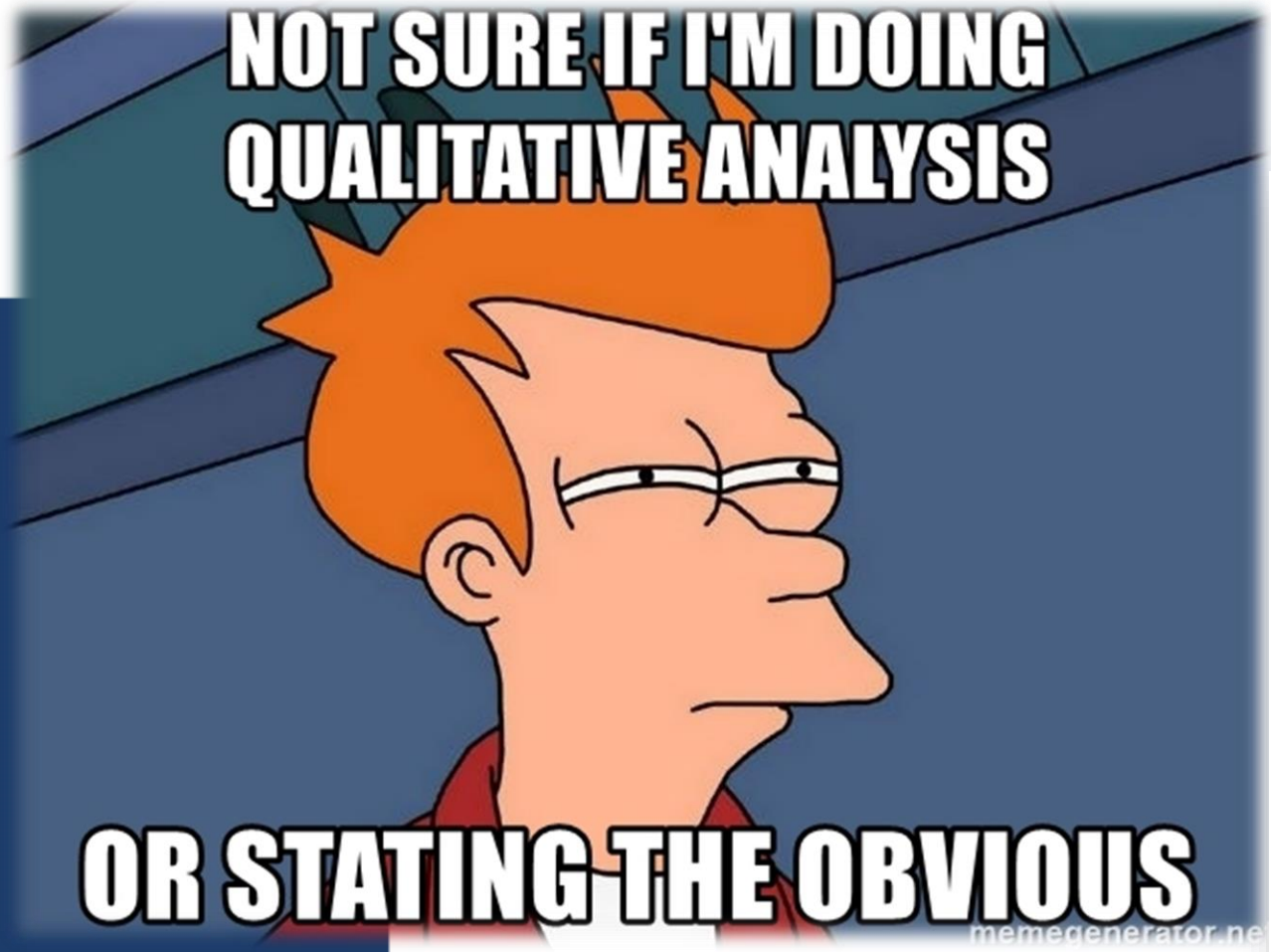
Critically using qualitative thematic analysis - a case study from StudentSurvey.ie data

Dr Darragh McCashin
Assistant Professor, School of Psychology
Darragh.mccashin@dcu.ie
@DarraghMcCashin

DCU
Ollscoil Chathair
Bhaile Átha Cliath
Dublin City University



A small - but important - rant about 'that' image - dump the qual/quant wars

Updated: Feb 19, 2021

If you're on Twitter you've likely seen this image doing the rounds in recent weeks...

DCU
Ollscoil Chathair
Bhaile Átha Cliath
Dublin City University

Quantitative research

Data Driven

Numbers & percentages

Concrete & objective

HOW MUCH? HOW MANY?

Qualitative research

Design Thinking

Quotes & expressions

Abstract & subjective

WHY? WHAT? HOW TO FIX?

Qualitative

Quantitative

DCU

Ollscoil Chathair
Bhaile Átha Cliath
Dublin City University

Today's session

- The use (and abuse!) of qualitative thematic analysis
- Our findings from applying qualitative thematic analysis within the *StudentSurvey.ie* project
- Critical reflections on the process
- Sharing of updated resources to guide newcomers/seasoned qualitative researchers

DCU
Ollscoil Chathair
Bhaile Átha Cliath
Dublin City University

Background

- Complexity in defining ‘student engagement’
- Evidence indicates: Student engagement improves outcomes; *but* due to the absence of robustness and cross-study variability in terms of a shared understanding of student engagement as a concept, many findings should be interpreted with a degree a caution (Trowler & Trowler, 2010).
- Criticisms endure: lack of theoretical coherence, and its adverse impact on the rigour of research (Lawson & Lawson, 2013; Zepke, 2018).
- Involvement of students as co-creators/co-designers within research is lacking across literature
- Motivation *precedes* engagement (Bond, Buntins, Bedenlier, Zawacki-Richter, & Kerres, 2020; Reeve et al., 2012) yet the two are often conflated

DCU
Ollscoil Chathair
Bhaile Átha Cliath
Dublin City University

DCU
Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

Method

- Random sample of *n* = 8942 students - 20% of total dataset (*n* = 44,707)

- Focus on two open-ended questions:

1) What does your institution do best to engage students in learning?

2) What could your institution do to improve students' engagement in learning?

Cohort	
First Year Undergraduate	49%
Final Year Undergraduate	31%
Taught Postgraduate	20%
Institution Type	
Universities	50%
Technological Institutions	42%
Other Institutions	8%
Mode of Study	
Full-time	88%
Part-time	12%
Programme type	
Undergraduate Cert/Dip	6%
Undergraduate Ordinary Degree	10%
Undergraduate Honours Degree	65%
Graduate Certificate/Diploma	3%
Masters Taught	16%
Field of Study	
Generic Programmes and Qualifications	0.20%
Education	5%
Arts and Humanities	14%
Social Sciences, journalism and information	6%
Business, administration and law	22%
Natural sciences, mathematics, and statistics	10%
Information and Communication Technologies	9%
Engineering, manufacturing and construction	11%
Agriculture, forestry, fisheries, and vetinary	2%
Health and welfare	16%
Services	4%
Gender	
Female	60%
Male	40%
Undeclared	0.07%
Age Group	
23 and under	66%
24 and over	34%

DCU
Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

Method

- Braun and Clarke's qualitative thematic analysis (2006; 2019; 2021)
- Applied the 6-phase coding procedure using a combination of MS Excel and Miro.com (pandemic-proof tools!)

DCU
Ollscoil Chathair
Bhaile Átha Cliath
Dublin City University

www.QualResearchPsych.com *Qualitative Research in Psychology* 2006; 3: 77–101

Using thematic analysis in psychology

Virginia Braun[1] and Victoria Clarke[2]

[1]University of Auckland and [2]University of the West of England

Thematic analysis is a poorly demarcated, rarely acknowledged, yet widely used qualitative analytic method within psychology. In this paper, we argue that it offers an accessible and theoretically flexible approach to analysing qualitative data. We outline what thematic analysis is, locating it in relation to other qualitative analytic methods that search for themes or patterns, and in relation to different epistemological and ontological positions. We then provide clear guidelines to those wanting to start thematic analysis, or conduct it in a more deliberate and rigorous way, and consider potential pitfalls in conducting thematic analysis. Finally, we outline the disadvantages and advantages of thematic analysis. We conclude by advocating thematic analysis as a useful and flexible method for qualitative research in and beyond psychology. *Qualitative Research in Psychology* 2006; 3: 77–101

Key words: epistemology; flexibility; patterns; qualitative psychology; thematic analysis

- Over 100,000 citations – the Braun & Clarke ‘bingo card’
- Its inherent flexibility and its 6-step approach responsible for its popularity (amidst a conceptual/philosophical qualitative minefield!)

DCU
Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

'Unlike quantitative research, which values striving for objective knowledge of the world, qualitative approaches like Braun and Clarke's approach to thematic analysis embrace the idea that any 'making sense' of data will be shaped by the researcher's values and positioning in the world. Qualitative researchers using thematic analysis are conceptually more like storytellers or sculptors than scientists.

They spend time 'getting to know' their data and becoming intimately acquainted with its contents – known as 'familiarisation' – before engaging in a systematic process of coding the data.

With coding, the goal is to understand, parse and tag (with coding labels – pithy phrases that evoke the data content and its analytic relevance) the full range of meanings relevant to the research question. Coding produces a lot of codes, and the researcher then clusters together similar and related codes, to develop 'themes' – multifaceted meaning-based patterns. The researcher actively works and reworks the clusters, to determine a set of themes that best captures and tells a story about important meanings in the data, related to the research question.'

DCU
Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

What are the 6-phases in Thematic Analysis?

Table 1 Phases of thematic analysis

Phase	Description of the process
1. Familiarizing yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

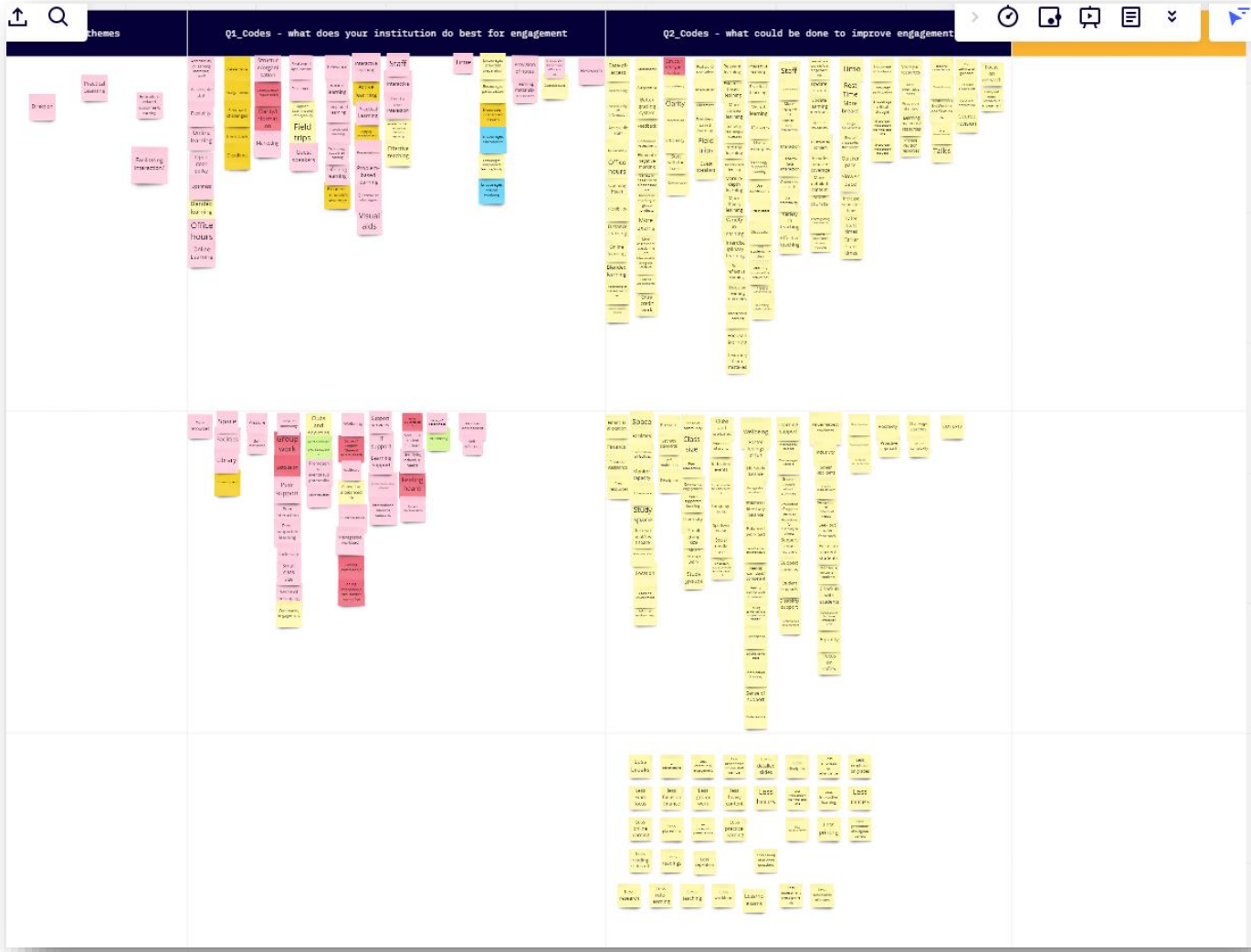
Howitt (2013) identifies the 'analytic effort' of TA as including the process of familiarisation, coding, processing data, resolving difficulties & thoroughness of checks within these processes (p.179)

DCU
Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

How did we do this? Phase 1-2 of QTA

Phase 1 and 2

- Randomisation function in Excel to export our 20% portion – data cleaning, removal of non-responses/errors, and initial reading of data preceded the transfer to our *Miro* board. (Phase 1)
- Working as a team to collectively note initial interpretation of reading and re-reading your data
- We also provided our initial coding heading within aligning columns in Excel, and exported on these codes to *Miro.* 10% of data analysed for inter-rater reliability.



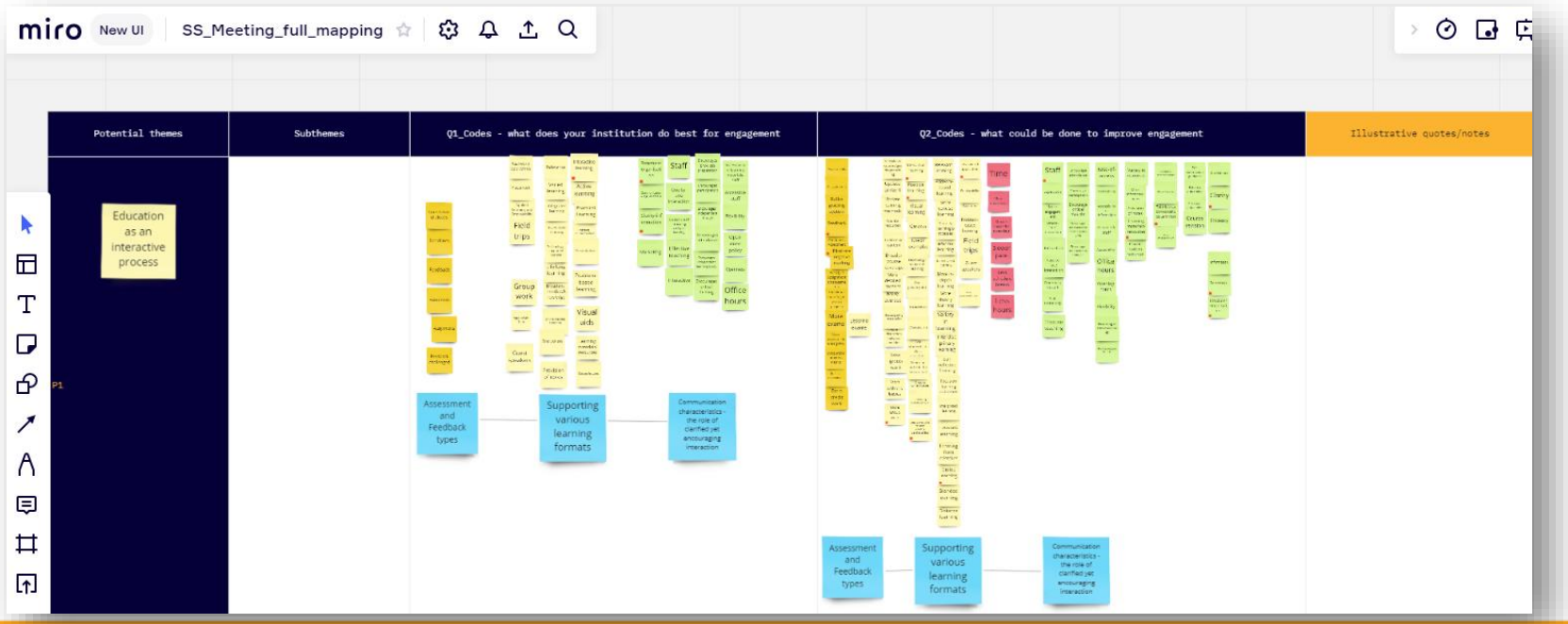
Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

Phase 3-4 of QTA

-After generating our initial codes manually, we collated all our outputs in Miro to begin the grouping of them into draft ‘themes’

-Phase 4 involves seeing if your draft themes actually concur with your rereading of sample data/quotes. Is there more to the experience here? Why are other researchers interpreting the same data differently? *Re*iterate!

-A thematic map is continually being drafted/doodled throughout these phases



Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

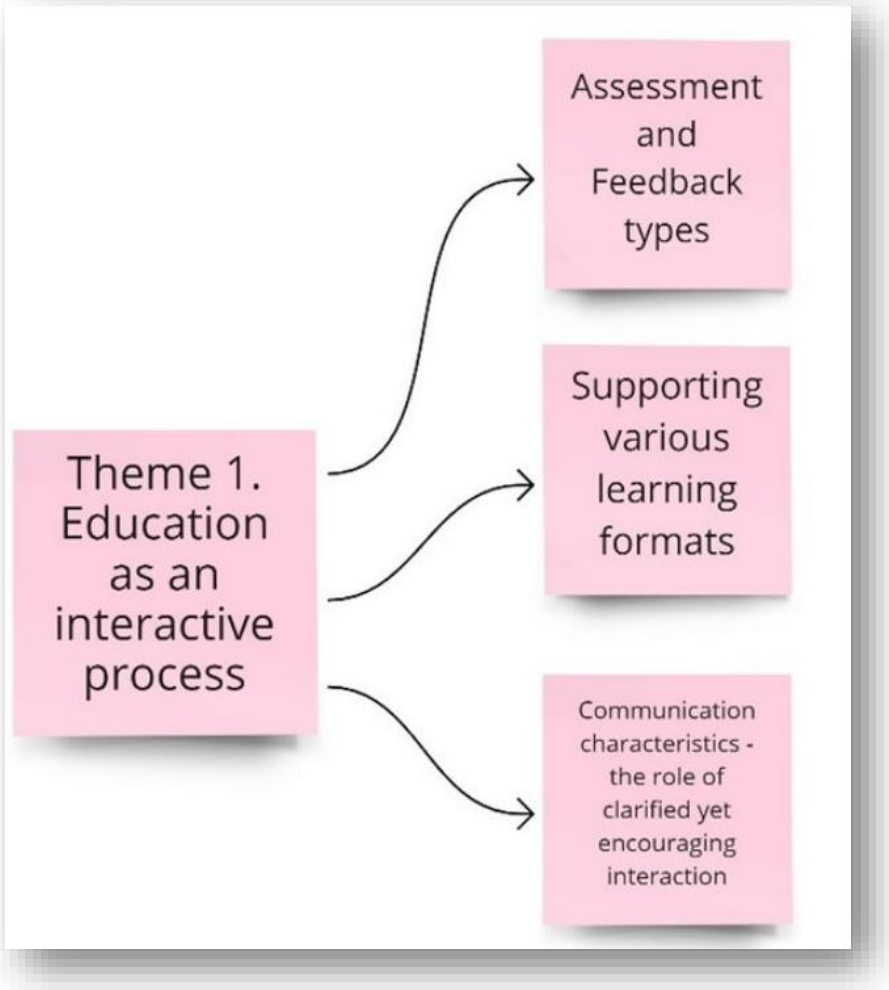
Phase 5-6 of QTA

-Naming and defining your themes – higher order global themes that often subsume a variety of experiences, but best capture the overall richness of your data as it relates to your research question(s) (phase 5)

-Phase 6 blends the scientific writing process with the art of telling the story – can you summarise your findings in the context of extant literature? Illustrative quotation that represents a large portion of your data can be strategically used in your final paper/report

DCU
Ollscoil Chathair
Bhaile Átha Cliath
Dublin City University

Our results (1)

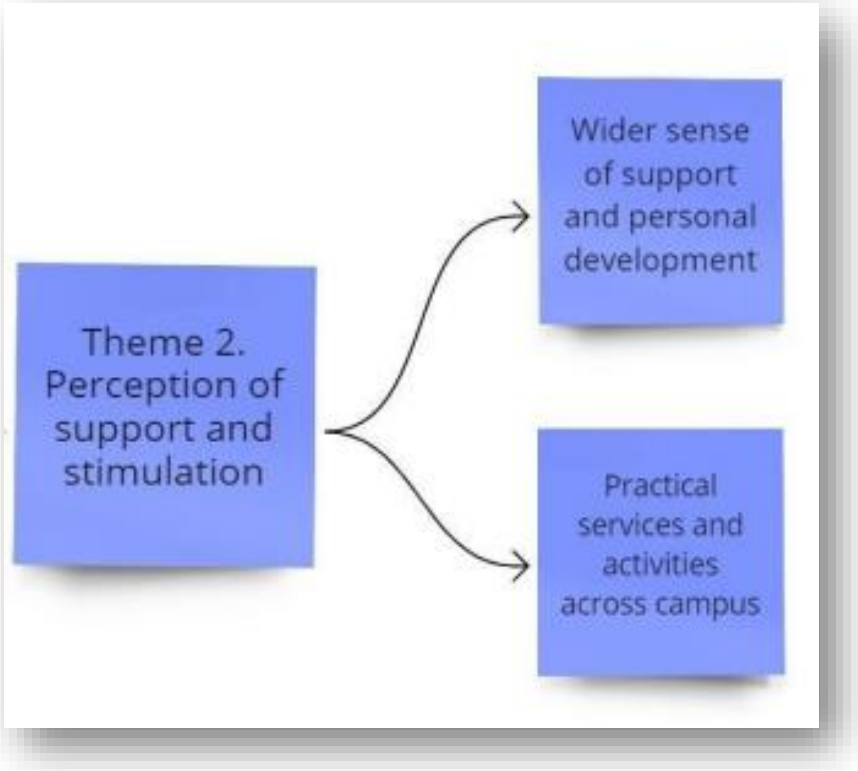


Our first key finding highlighted how student's valued their education as an *interactive* process. This was seen in subthemes relating to:

- dynamic assessment & feedback types (e.g. continuous assessments): *"Assignments … help motivate students to get work done and helps the information sink in"*
- varied learning formats (e.g. more group work): *"I would love to see an emphasis on the diversification of assessment and learning styles"*

DCU
Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

Our results (2)



Our second key finding underscored the *perception* of support and stimulation across campus (not just the learning environment) in shaping teaching and learning experiences. This was seen in subthemes relating to:

- The sense of community throughout the HEI- *"communicate with [us] like people and not a separate student entity".*
- "would create an environment where you actually want to go to college to learn and hang out with people you know".
- The sense of practical services/activities around them: academic/social/clinical etc. - *"with so many events taking place on campus every day there is almost always a reason to go into college, even when you're not motivated by your classes"*

DCU
Ollscoil Chathair
Bhaile Átha Cliath
Dublin City University

Our conclusions

- As per literature, a full range of behavioural, cognitive, emotional and social components of student engagement were present in the data
- Corroborates earlier StudentSurvey.ie qualitative themes: collaborative learning, student-faculty interactions, etc.
- The role of interactive learning and measuring this over time requires further attention
- Motivation precedes behaviour – are we capturing this distinction?
- Stakeholders may be disconnecting the importance of student perceptions of support and stimulation from the teaching/learning objectives.

DCU
Ollscoil Chathair
Bhaile Átha Cliath
Dublin City University

Top tips / critical reflections of QTA

- The flexibility and appropriateness for capturing rich subjective experiences is both a double-edged sword
- According to Braun and Clarke, it has often been misused – pet peeve: themes 'emerged'…
- Braun and Clarke (2006) is not the only citation, you *must* evidence your knowledge of later publications with a more refined QTA – e.g it's not atheoretical, nor the only game in town!

Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

Standards for Qualitative research

O'Brien et al (2014) - SRQR

Standards for Reporting Qualitative Research: A Synthesis of Recommendations

Bridget C. O'Brien, PhD, Ilene B. Harris, PhD, Thomas J. Beckman, MD, Darcy A. Reed, MD, MPH, and David A. Cook, MD, MHPE

Abstract

Purpose
Standards for reporting exist for many types of quantitative research, but currently none exist for the broad spectrum of qualitative research. The purpose of the present study was to formulate and define standards for reporting qualitative research while preserving the requisite flexibility to accommodate various paradigms, approaches, and methods.

Method
The authors identified guidelines, reporting standards, and critical appraisal criteria for qualitative research by searching PubMed, Web of Science, and Google through July 2013; reviewing the reference lists of retrieved sources; and contacting experts. Specifically, two authors reviewed a sample of sources to generate an initial set of items that were potentially important in reporting qualitative research. Through an iterative process of reviewing sources, modifying the set of items, and coding all sources for items, the authors prepared a near-final list of items and descriptions and sent this list to five external reviewers for feedback. The final items and descriptions included in the reporting standards reflect this feedback.

Results
The Standards for Reporting Qualitative Research (SRQR) consists of 21 items. The authors define and explain key elements of each item and provide examples from recently published articles to illustrate ways in which the standards can be met.

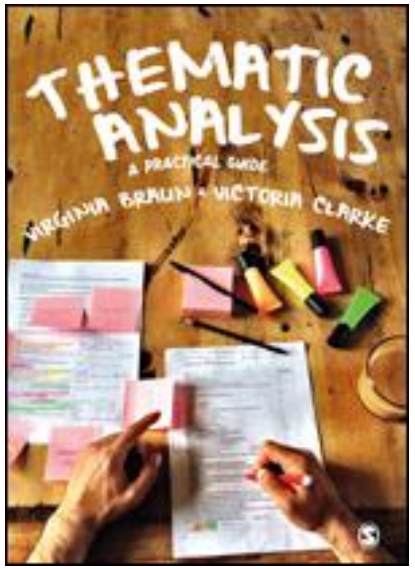
Conclusions
The SRQR aims to improve the transparency of all aspects of qualitative research by providing clear standards for reporting qualitative research. These standards will assist authors during manuscript preparation, editors and reviewers in evaluating a manuscript for potential publication, and readers when critically appraising, applying, and synthesizing study findings.

Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

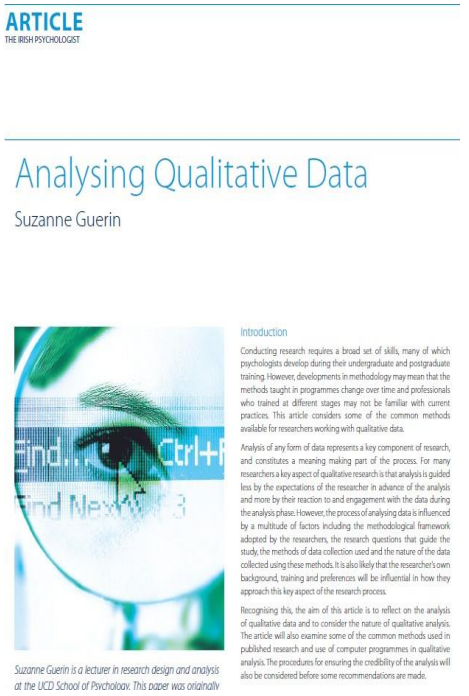
Resources

Further to references throughout, here are some useful resources:

- [Doing Qualitative Research: Initial Questions | Online Resources (sagepub.com)]



EVIDENCE SYNTHESIS IRELAND


ARTICLE
THE IRISH PSYCHOLOGIST

Analysing Qualitative Data

Suzanne Guerin

Introduction

Conducting research requires a broad set of skills, many of which psychologists develop during their undergraduate and postgraduate training. However, developments in methodology may mean that the methods taught in programmes change over time and professionals who trained at different stages may not be familiar with current practices. This article considers some of the common methods available for researchers working with qualitative data.

Analysis of any form of data represents a key component of research, and constitutes a meaning making part of the process. For many researchers a key aspect of qualitative research is that analysis is guided less by the expectations of the researcher in advance of the analysis and more by their reaction to and engagement with the data during the analysis phase. However, the process of analysing data is influenced by a multitude of factors including the methodological framework adopted by the researchers, the research questions that guide the study, the methods of data collection used and the nature of the data collected using these methods. It is also likely that the researcher's own background, training and preferences will be influential in how they approach this key aspect of the research process.

Recognising this, the aim of this article is to reflect on the analysis of qualitative data and to consider the nature of qualitative analysis. The article will also examine some of the common methods used in published research and use of computer programmes in qualitative analysis. The procedures for ensuring the credibility of the analysis will also be considered before some recommendations are made.

Suzanne Guerin is a lecturer in research design and analysis at the UCD School of Psychology. This paper was originally

DCU
Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

Accessible software/online tools

DCU
Ollscoil Chathair
Bhaile Átha Cliath
Dublin City University