

Qualitative Analysis Activity ('The Button Activity')

Lesson Plan

Duration: 3 hrs

Class size: 8-60 students

Level: Can be tailored, from advanced undergraduate through to doctoral level

Assumed prior knowledge

Basic understanding of research paradigms (ontology & epistemology) and qualitative data collection (e.g., interviews, focus groups, questionnaires, etc.).

No knowledge of qualitative data analysis assumed.

Aim

To introduce students to qualitative data analysis and prepare them for the analysis required in their thesis work.

Intended learning outcomes

By the end of this activity, students should be able to:

- Describe various coding and qualitative data analysis strategies
- Design a qualitative data analysis strategy using coding and rationalise its use for a particular dataset and research question

Key concepts

- Coding
- Inductive analysis
- Deductive analysis
- Thematic analysis
- *In vivo* coding

Resources

- Laptop (PowerPoint presentation, Zoom, Word docs)

Classroom set up

'Pods,' or small tables with clusters of 4-8 chairs depending on class size with flipchart paper, pens, and jars of buttons at each 'pod.'

Time (minutes)	Content & Teacher Activity	Student Activity	Resources
0-5	<p>Check audiovisual technology is working</p> <p>Confirm students have access to the coding template documents</p> <p>Introduce aims/ILOs and timeline of the session</p>	Listen and watch	PowerPoint, Zoom
6-15	<p>Review earlier content about quantitative vs qualitative data</p> <p>Introduce coding as a concept</p>	Listen and watch	PowerPoint, Zoom
16-20	<p>Introduce coding button activity: Round 1</p> <p>Give the following instructions:</p> <p style="padding-left: 40px;">Treat the buttons in the photo as data.</p> <p style="padding-left: 40px;">Code the buttons according to the following question:</p> <p style="padding-left: 80px;"><i>What themes are present in the data?</i></p> <p>Invite process questions and respond.</p>	Listen, watch, ask questions	PowerPoint, Zoom
21-30	<p>Facilitate coding activity: Round 1</p> <p>Visit students in breakout rooms.</p> <p>Respond to process questions.</p>	Follow instructions from above	PowerPoint, Zoom (breakout rooms)
31-50	<p>Facilitate discussion about the activity: Round 1</p> <p>Invite students to share what happened in their breakout room descriptively. The following questions could be used as prompts:</p> <p style="padding-left: 40px;"><i>What were the themes you identified?</i></p> <p style="padding-left: 40px;"><i>How did the table decide which themes were coded for?</i></p> <p style="padding-left: 40px;"><i>How did the coding strategies differ between breakout rooms?</i></p> <p>Then, once students have described what happened, invite students to consider the activity more reflectively, asking questions like:</p> <p style="padding-left: 40px;"><i>Why do you think ___ happened?</i></p> <p style="padding-left: 40px;"><i>How might this process have looked different using actual qualitative data, like interview transcripts, for example?</i></p> <p>Use opportunities to identify examples of inductive or deductive analysis, thematic analysis, and in vivo coding.</p>	Reflect, respond to questions, listen	PowerPoint, Zoom
51-60	Break		
61-65	<p>Introduce coding button activity: Round 2</p> <p>Give the following instructions:</p> <p style="padding-left: 40px;">Treat the buttons in each photo as a different dataset.</p> <p style="padding-left: 40px;">Think of the characteristic you want to code for. What are the possible categories for this? Label them along the y axis of the table.</p>	Listen, watch, ask questions	PowerPoint, Zoom

	<p>Code the buttons according to the following question:</p> <p><i>What is the relationship between the datasets and the characteristic you are coding for?</i></p> <p>Invite process questions and respond.</p>		
66-75	<p>Facilitate coding activity: Round 2</p> <p>Observe students.</p> <p>Respond to process questions.</p>	Follow instructions from above	PowerPoint, Zoom (breakout rooms)
76-95	<p>Facilitate discussion about the activity: Round 2</p> <p>Invite students to share what happened in their breakout room, descriptively. The following questions could be used as prompts:</p> <p><i>How was this round of coding different from the last round?</i></p> <p><i>How did the coding strategies differ between breakout rooms?</i></p> <p>Then, once students have described what happened, invite students to consider the activity more reflectively, asking questions like:</p> <p><i>Why might a researcher choose a strategy like was used in this round of coding rather than the first round?</i></p> <p><i>When might be a situation when you might want to analyse data in this way? Why? How might this process have looked different using actual qualitative data, like interview transcripts, for example?</i></p> <p>Use opportunities to identify examples of inductive or deductive analysis, thematic analysis, and in vivo coding.</p>	Reflect, respond to questions, listen	PowerPoint, Zoom
96-100	<p>Introduce coding button activity: Round 3</p> <p>Give the following instructions:</p> <p>Treat the buttons in the photo as data.</p> <p>Think about two characteristics of the buttons and decide on two characteristics you would like to code for.</p> <p>Think of the first characteristic you want to code for. What are the possible categories for this? Label them along the y axis.</p> <p>Think about the second characteristic you want to code for. What are the possible categories for this? Label them along the x axis.</p> <p>Code the buttons according to the following question:</p> <p><i>What is the relationship between characteristic 1 and characteristic 2?</i></p> <p>Invite process questions and respond.</p>	Listen, watch, ask questions	PowerPoint, Zoom

101-110	<p>Facilitate coding activity: Round 3</p> <p>Observe students.</p> <p>Respond to process questions.</p>	Follow instructions from above	PowerPoint, Zoom (breakout rooms)
111-130	<p>Facilitate discussion about the activity: Round 3</p> <p>Invite students to share what happened in their breakout room, descriptively. The following questions could be used as prompts:</p> <p style="padding-left: 40px;"><i>How was this round of coding different from the last round?</i></p> <p style="padding-left: 40px;"><i>How did the coding strategies differ between breakout rooms?</i></p> <p>Then, once students have described what happened, invite students to consider the activity more reflectively, asking questions like:</p> <p style="padding-left: 40px;"><i>Why might a researcher choose a strategy like was used in this round of coding rather than the first round?</i></p> <p style="padding-left: 40px;"><i>When might be a situation when you might want to analyse data in this way? Why? How might this process have looked different using actual qualitative data, like interview transcripts, for example?</i></p> <p>Use opportunities to identify examples of inductive or deductive analysis, thematic analysis, and in vivo coding.</p>	Reflect, respond to questions, listen	PowerPoint, Zoom
131.140	Break		
141-155	<p>Presentation on qualitative data analysis</p> <p>Introduce strategies for analysis:</p> <ul style="list-style-type: none"> • Thematic Analysis • Grounded Theory • Content Analysis • Narrative Analysis <p>Describe different coding strategies</p> <ul style="list-style-type: none"> • Lumping vs splitting • Manual coding vs computer assisted qualitative data analysis software <p>Useful tips</p>	Listen and watch	Powerpoint
156-175	<p>Facilitate reflection on the activity and presentation</p> <p>Invite questions and reflections generally, and if there is a need, the following prompts can be used:</p> <p style="padding-left: 40px;"><i>What do you think are the benefits of using coding as a strategy to analyse data? Why? What do you think the weaknesses are of coding as a data analysis strategy? Why?</i></p> <p style="padding-left: 40px;"><i>How do you think rigour can be built into the coding process? Why?</i></p>	Reflect, respond to questions, listen	Zoom

	<p><i>What measures of rigour do you think are appropriate for qualitative research? Why?</i></p> <p>At this point it is common for epistemological questions to be raised, particularly concerning the subjectivity of the process. This is a good opportunity to link with earlier content.</p>		
176-180	<p>Wrap up</p> <p>Summarise key points from the lecture, intended learning outcomes.</p> <p>Point students to academic resources for further information.</p>	Watch and listen	PowerPoint, Zoom



The Button Activity by [Rebecca Laycock Pedersen](#) is licensed under [CC BY-NC-SA 4.0](#)

Appendix. Worksheet for the button activity (online)

Breakout 1



What themes are present in the data?

...

Breakout 2



You have been given three 'datasets' (buttons in piles, as in the above picture). Think about the characteristics (e.g., colour) of the buttons and decide what characteristic you want to code for (only pick one).

What possible categories could exist for this characteristic (e.g., white, blue, etc)? Label them along the left-hand column of the table.

Create more rows if you need to.

		Dataset 1	Dataset 2	Dataset 3	Dataset 4
Characteristic:	Category 1: _____				
	Category 2: _____				
	Category 3: _____				
	...				

Breakout 3



Think about two characteristics of the buttons in the photo below and decide on two characteristics you would like to code for. Label them on the x and y axes below.

Think of the characteristic on the y axis. What are the possible categories for this? Label them in the column of the table. Create more rows if you need to.

Think of the characteristic on the x axis. What are the possible categories for this? Label them in the column of the table. Create more rows if you need to.

		Characteristic 2:			
		Category 1: _____	Category 2: _____	Category 3: _____	...
Characteristic 1: 	Category 1: _____				
	Category 2: _____				
	Category 3: _____				
	...				

Breakout 4

Discuss:

- What do you think are the benefits of using coding as a strategy to analyse data? Why?
- What do you think the weaknesses are of coding as a data analysis strategy? Why?
- How do you think rigour can be built into the coding process? Why?
- What measures of rigour do you think are appropriate for qualitative research? Why?