

AN INTRODUCTION TO QUALITATIVE DATA ANALYSIS

WHAT IS CODING?



Coding is a way to analyze data from qualitative narrative-style data. Coding is the core part of grounded theory. Where you don't approach the data with an idea of what the outcome will be but is an inductive approach that looks for emergent themes within the data.

OPEN CODE

Step one of analyzing qualitative data is open coding. Open code finds common themes within the interviews that relate to the research questions. The best way to do this is to just copy over parts from the interview which is why having the transcription of the interview is needed.

I. Question: Why Do Participants Connect with The Land Institute?	
Open Codes	
interested in work (3-2)	
What TLU is doing/feeling is important (1-4)	
intrigued by their science (1-6, 1-8, 1-20)	
Found through someone they know (3-2)	
is an organic regenerative organic research scientist farmer (3-20)	
Has PhD in plant chemistry (3-10)	
Personal connection (3-10)	
Been apart of another project (3-20)	
Childhood connection to Ag, farming, gardening (3-2, 1-5)	
TLU newsletter and email list (3-2, 1-7)	
Participated in karma (3-2)	
Personal connection with TLU (1-4, 1-5, 1-6)	
getting new plants to try (1-4, 1-6)	
Owne land for farming/gardening (1-2, 1-5, 1-6, 1-7)	
how to steward the land (3-2)	
background in soil science (3-4)	
curiosity (3-5)	
see what can be done (3-5)	
likes TLU vision, what they're trying to do (3-6)	
background in sustainability, ecology (3-7)	
love for science (3-8)	
saw a presentation by TLU (3-2)	

I. Question: Why Do Participants Connect with The Land Institute?	
Open Codes	Axial Codes
is an organic regenerative organic research scientist farmer (3-20)	1. Personal history with agriculture
Has PhD in plant chemistry (3-10)	1. Personal history with agriculture
Childhood connection to Ag, farming, gardening (1-2, 1-5)	1. Personal history with agriculture
Background in soil science (3-4)	1. Personal history with agriculture
Background in sustainability, ecology (3-7)	1. Personal history with agriculture
Owne land for farming/gardening (1-2, 1-5, 1-6, 1-7)	1. Personal history with agriculture
working in Ag (3-7)	1. Personal history with agriculture
Personal connection with TLU (1-4, 1-5, 1-6)	2. Direct or indirect community connection
getting new plants to try (1-4, 1-6)	2. Direct or indirect community connection
Owne land for farming/gardening (1-2, 1-5, 1-6, 1-7)	2. Direct or indirect community connection
how to steward the land (3-2)	2. Direct or indirect community connection
background in soil science (3-4)	3. Learning and benefit driven
curiosity (3-5)	3. Learning and benefit driven
see what can be done (3-5)	3. Learning and benefit driven
likes TLU vision, what they're trying to do (3-6)	3. Learning and benefit driven
background in sustainability, ecology (3-7)	4. Specific interest in TLU
love for science (3-8)	4. Specific interest in TLU
saw a presentation by TLU (3-2)	5. Connection and interest in science

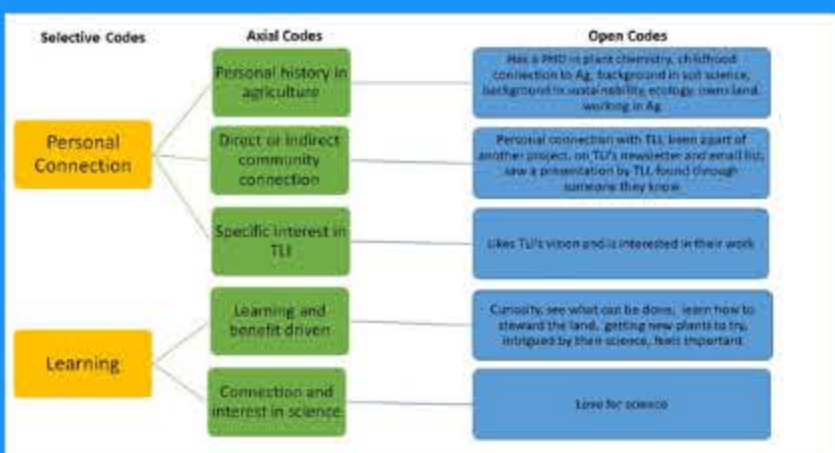
AXIAL CODE

Step two of analyzing qualitative data is axial coding. Axial code takes what was found in the open code and narrows it down more. By looking for common themes within the open code to find patterns within the data.

SELECTIVE CODE

Step three of analyzing qualitative data is selective coding. Selective code is more abstract and broad than the axial code. It breaks down the axial code once more and put the codes under more of an umbrella term.

I. Question: Why Do Participants Connect with The Land Institute?		
Open Codes	Axial Codes	Selective Codes
is an organic regenerative organic research scientist farmer (3-20)		
Has PhD in plant chemistry (3-10)		
Childhood connection to Ag, farming, gardening (1-2, 1-5)	1. Personal history with agriculture	
Background in soil science (3-4)		
Background in sustainability, ecology (3-7)		
Owne land for farming/gardening (1-2, 1-5, 1-6, 1-7)		
working in Ag (3-7)		
Personal connection with TLU (1-4, 1-5, 1-6)	2. Direct or indirect community connection	
getting new plants to try (1-4, 1-6)		
Owne land for farming/gardening (1-2, 1-5, 1-6, 1-7)		
how to steward the land (3-2)		
background in soil science (3-4)		
curiosity (3-5)		
see what can be done (3-5)	4. Specific interest in TLU	Personal Connection
likes TLU vision, what they're trying to do (3-6)		
background in sustainability, ecology (3-7)		
love for science (3-8)	3. Learning and benefit driven	Learning
saw a presentation by TLU (3-2)	5. Connection and interest in science	



Communicating Qualitative Results

Figures like this one are a great way to visualize results from doing this method of coding. The end result should be a couple of the main takeaways from the original data. These main takeaways are what can be used to answer the research questions.

References

VOLLSTEDT, M., & REZAT, S. (2019). AN INTRODUCTION TO GROUNDED THEORY WITH A SPECIAL FOCUS ON AXIAL CODING AND THE CODING PARADIGM. IN G. KAISER & N. PRESMEG (EDS.), COMPENDIUM FOR EARLY CAREER RESEARCHERS IN MATHEMATICS EDUCATION (PP. 81-100). SPRINGER INTERNATIONAL PUBLISHING. [HTTPS://DOI.ORG/10.1007/978-3-030-15636-7_4](https://doi.org/10.1007/978-3-030-15636-7_4)

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