



# Choosing Qualitative Software

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# Digital Scholarship Center

**dsc.gmu.edu**

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- Software Workshops
- Consultations
- Troubleshooting Help
- Data Management Plans

datahelp@gmu.edu



# What is Qualitative Software?

Computer Assisted  
Qualitative Data Analysis Software  
**CAQDAS** or **QDAS**



<https://infoguides.gmu.edu/qual/software>

## People to Know:

**Dr. Christina Silver**, CAQDAS Networking Project

<https://www.surrey.ac.uk/computer-assisted-qualitative-data-analysis>

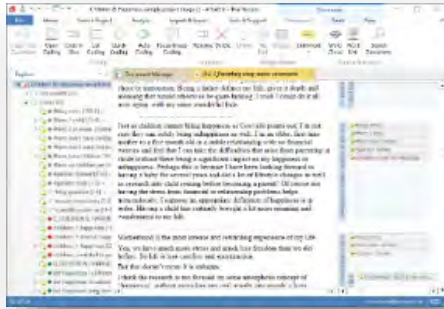
**Dr. Susanne Frieze**, Qeluda

<https://www.qeludra.com/>

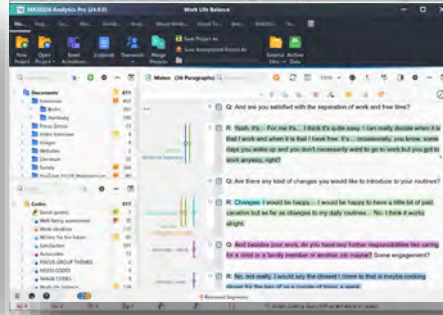


# Qualitative Software Options

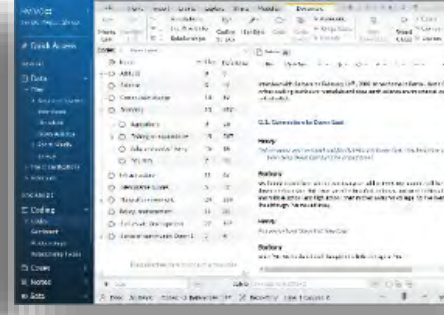
ATLAS.ti



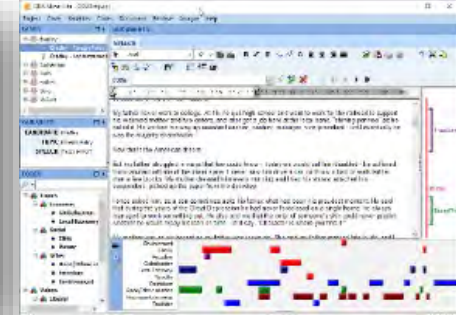
MAXQDA



NVIVO



QDA MINER



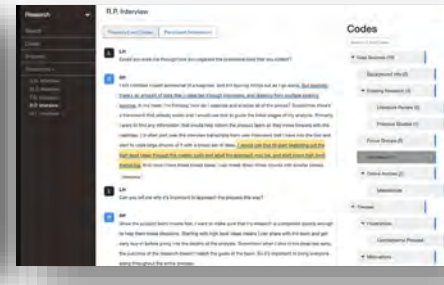
ATLAS.ti Web



dedoose



Delve



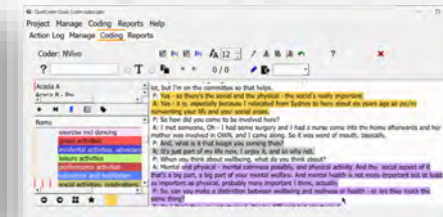
Quirkos



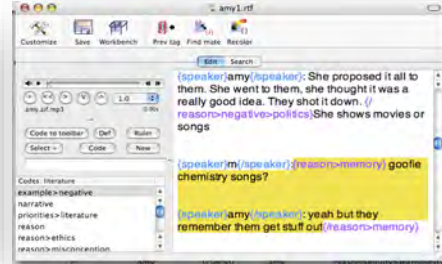
TAGUETTE



QualCoder



TAMS Analyzer



qualtrics<sup>XM</sup>



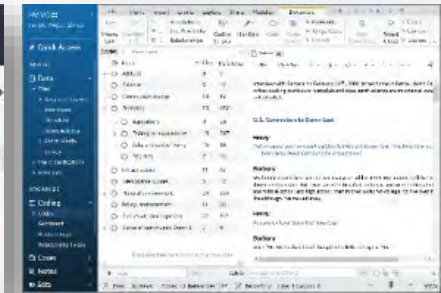
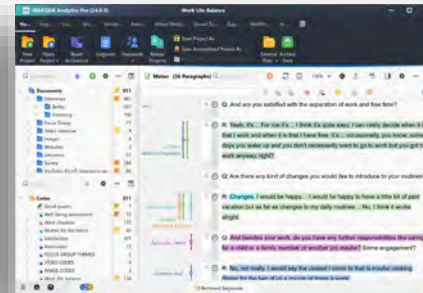
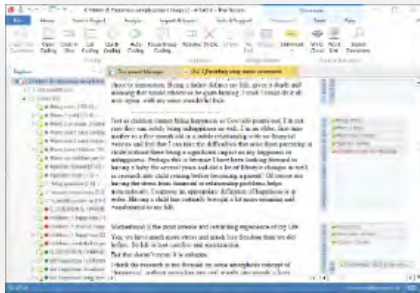
# The 4 most popular

 ATLAS.ti

 dedoose

 MAXQDA

 NVIVO



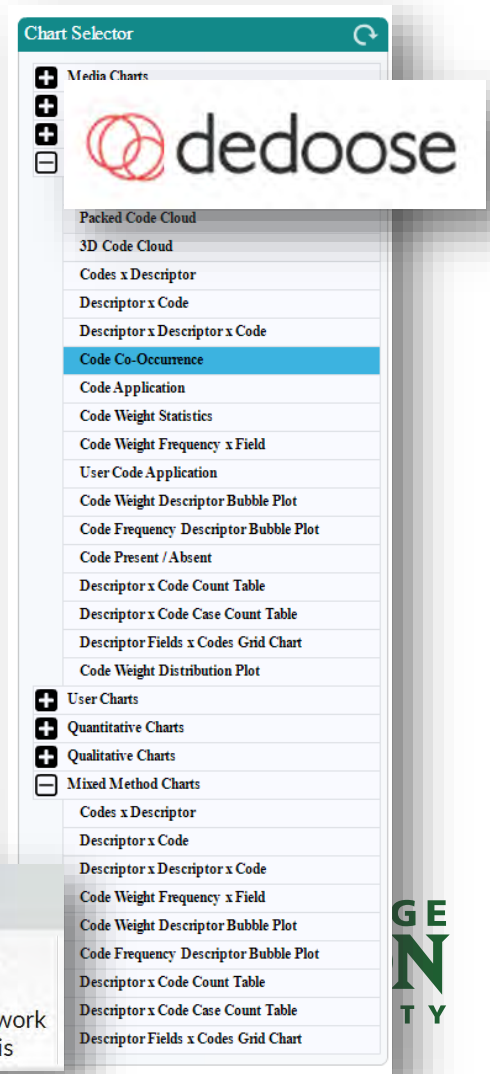
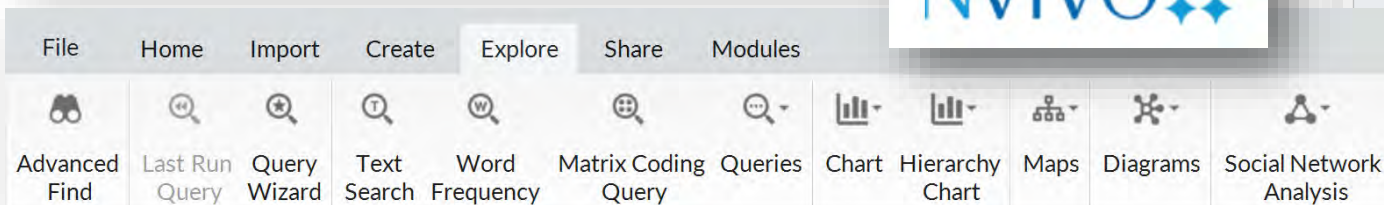
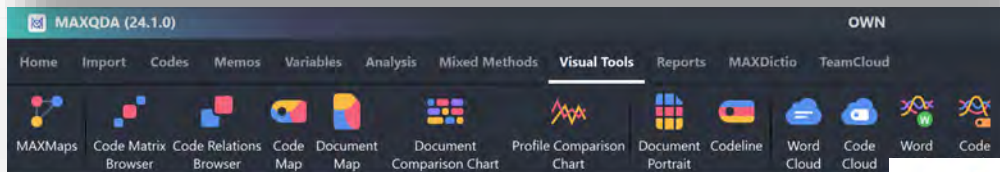
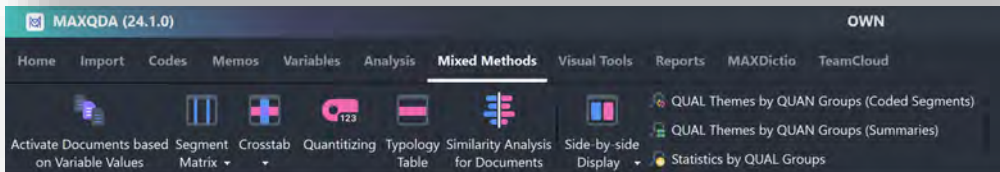
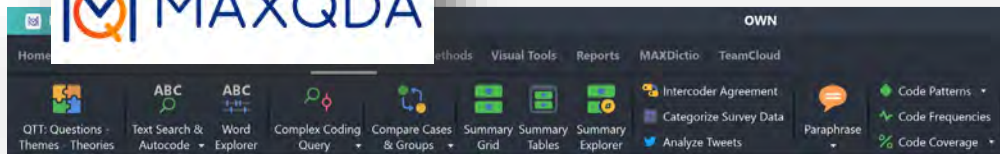
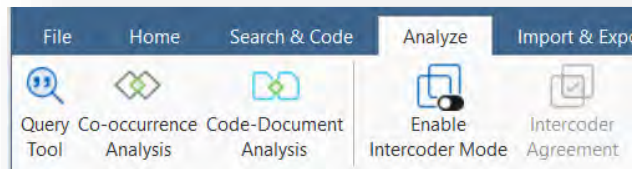
These all have:

- The same core functions
- Great documentation / tutorials
- Free trial periods
- Sample/Demo projects
- REF1 Exchange format

Choose transcription software separately.



# Interface Differences



# Foundations

- Operating System
- Language
- Data Types
- Automation
- Cost
- Teams

# Operating System

- All support both Mac/OSX and Windows
  - **NVivo** has several major differences (interface, file type)
    - Avoid if compatibility is relevant (e.g., teams).
  - **ATLAS.ti** has minor differences
- **Dedoose** is equivalent to a web app
  - But, you must download a desktop application.
  - It also supports Linux and Chromebook.
  - *Always consider privacy with web applications.*



# Languages

- Data
  - All support Unicode
  - **NVivo** does NOT support Right-to-Left Languages
- Analytics and Automated tools
  - Check before choosing
- Researcher
  - **MAXQDA** has the most interface translations, plus tutorial videos in Spanish, German, Chinese, Japanese, Turkish, and Polish

# Data Types

## Universal Support

- Plain Text
- Word Documents
- PDFs

## These also support

- Spreadsheets / Survey data \*
- Images
- Audio
- Video
- All **but Dedoose** have special importers for other softwares.

\* All **but NVivo** spreadsheet rows as individual documents  
(coded by row id and question).

# Automated Features / AI



*unique  
feature*

 ATLAS.ti

 dedoose





 MAXQDA

 NVIVO

	ATLAS.ti	dedoose	MAXQDA	NVIVO
Identify Themes	✓	✗	✓	✓
Auto-code based on hand coding	✗	✗	✗	✓
Summarize	✓	✗	✓	✗
Paraphrase / Explain	✗	✗	✓	✗
Interactive AI – ask questions, inferences	✓	✗	✗	✗
Uses OpenAI model (sends data to cloud)	✓	✗	✓	✗



# Cost

Approximate pricing				
	 ATLAS.ti	 dedoose	 MAXQDA	 NVIVO
<b>Faculty</b>	\$350 / yr	\$18 / <b>month</b>	\$250 * / yr	\$1,000 / <b>perpetual</b>
Multi-year / yr	\$250	\$200	\$180 *	
<b>Student</b>	\$115 / 2yr	\$13 / <b>month</b>	\$100 / 2yr	\$120 / <b>yr</b>
6 mo	\$60	\$65 *	\$50	
<b>Cost to view?</b>	<b>No</b>	<b>Yes</b>	Free Reader	<b>Yes</b>

\* MAXQDA - add \$120 / yr for unlimited AI Assist

\* Dedoose – with 30 day free trial

see also <https://gmu.libanswers.com/disc/faq/398979>

# Teams

## Licenses

- **ATLAS.ti**'s non-student licenses allow multiple users (non-concurrent)

## Project Transfer / Cloud Storage

- **Dedoose** has real-time collaboration built-in
- Others offer for additional cost

## Comparing Coding

- Combining and reviewing coding
- Calculating Kappa for Inter-rater Reliability

see also <https://gmu.libanswers.com/disc/faq/401787>

# Core QDAS Functions

- **Code** (apply "codes" to) segments of text
- **Retrieve** the segments of text assigned to a code



# Coding

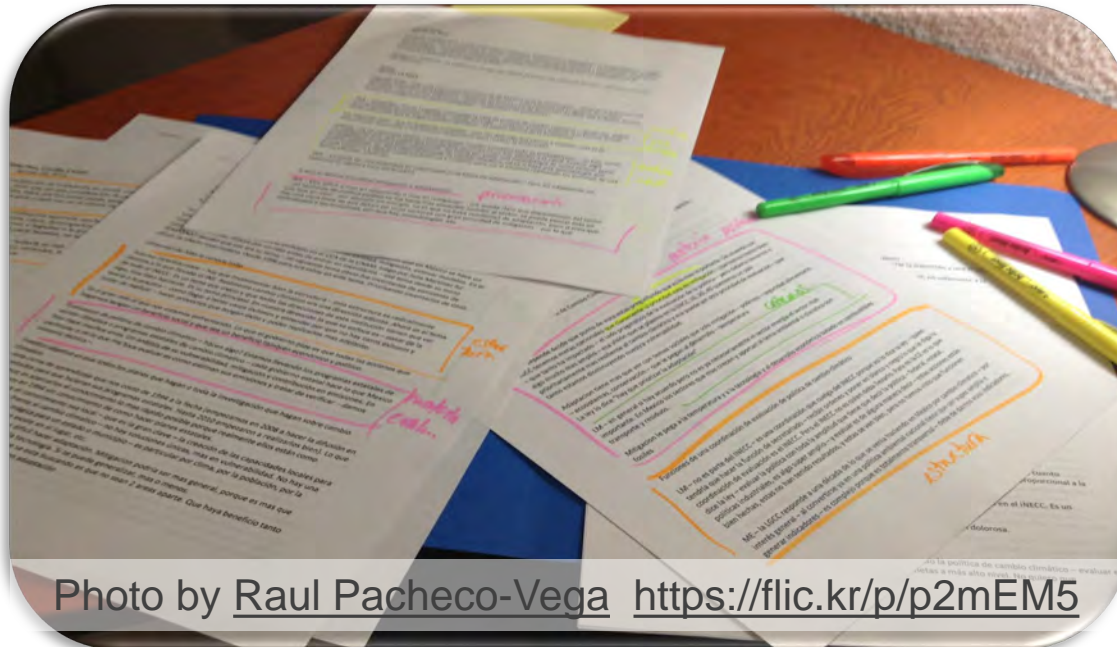


Photo by [Raul Pacheco-Vega](https://flic.kr/p/p2mEM5) <https://flic.kr/p/p2mEM5>

 ATLAS.ti

 dedoose

 MAXQDA

 NVIVO

Do

Document

Media

Document

File

Code

Code

Code

Code

Quotation

Excerpt

Segment

Reference

ed  
ta

UNIVERSITY

# Computer Coding

## Navigation

## Open Document

## Coding

The screenshot displays a software interface for computer coding, organized into three main panels: Navigation, Open Document, and Coding.

**Navigation Panel (Left):** This panel contains two sections. The top section, titled "Documents", lists files and their line counts: "The wellbeing project - an in..." (0), "Group discussions" (80), "Interviews" (655), "Acacia L" (31), "Acacia A" (30), "Melaleuca L & Melaleuca..." (109), "Acacia V" (45), "Melaleuca D" (60), and "Correa C" (38). The bottom section, titled "Codes", lists code categories and their line counts: "mental-emotional wellbeing" (114), "OWN involvement" (91), "group activities" (60), "involvement in OWN Wel..." (54), "volunteers" (10), "personal-individual factors" (99), "physical health" (82), "social connection" (83), and "belonging, acceptance" (12).

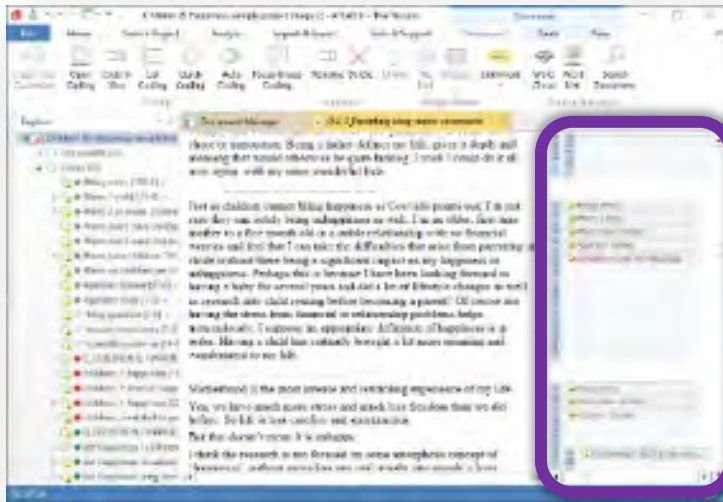
**Open Document Panel (Middle):** This panel shows the text of an open document. The document is titled "physical health" and contains a list of text segments, each preceded by a line number. The segments are: 6 P: So how did you come to be involved here?; 7 A: I met someone, Oh - I had some surgery and I had a nurse come into the home afterwards and her mother was involved in OWN, and I came along. So it was word of mouth, basically.; 8 P: And, what is it that keeps you coming then?; 9 A: It's just part of my life now, I enjoy it, and so why not.; 10 P: When you think about wellbeing, what do you think about?; 11 A: Mental and physical - mental calmness possibly, and physical activity. And the social aspect of it that's a big part, a big part of your mental welfare. And mental health is not more important but at least as important as physical, probably more important I think, actually.; 12 P: So, can you make a distinction between wellbeing and wellness or health - or are they much the same thing?; 13 A: No I think they are intertwined, they're different but intertwined.; 14 P: So how do you see them as different?; 15 A: Well, I think of wellbeing as something intangible, you can't put a label on it, it's just how you feel, whereas wellness is more activity and doing physical things and trying to do the best thing for your body - and your mind.; 16 P: If you could choose a picture, or some literature, or a piece of music that suggested wellbeing to you, what would that be? Is there anything?; 17 A: The first thing that comes to mind is a tranquil lake, like a Norwegian fjord or something with mountains around it and fjord and water and that sort of thing.; 18 P: So, tranquility.; 19 A: Tranquility, peace, calm.; 20 P: OK. Can you tell me about an experience of wellbeing that you've had here?; 21 A: I think, just - someone said "Oh, we like coming in and you're at the desk".

**Coding Panel (Right):** This panel displays a vertical timeline of codes applied to the text segments. The codes are represented by colored circles and lines, indicating their application to specific segments. The codes include: "becoming involved", "maintaining involvement", "relaxed, less stressed", "being active, keeping fit", "social connection", "wellbeing", "mental-emotional wellbeing", "interrelation H & Wb", "wellness", "wellbeing", "interrelation H & Wb", "mental-emotional wellbeing", "wellness", "physical health", "being active, keeping fit", "relaxed, less stressed", "connection with nature", and "wellbeing".

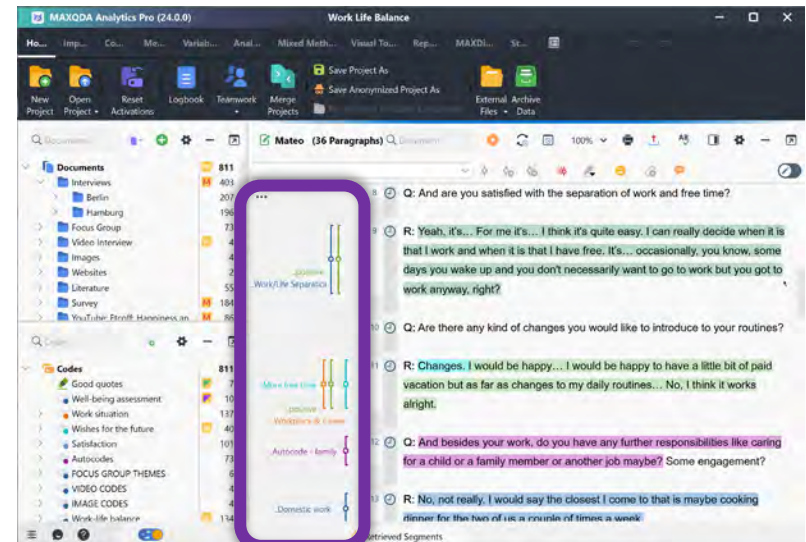


# Coding Interface

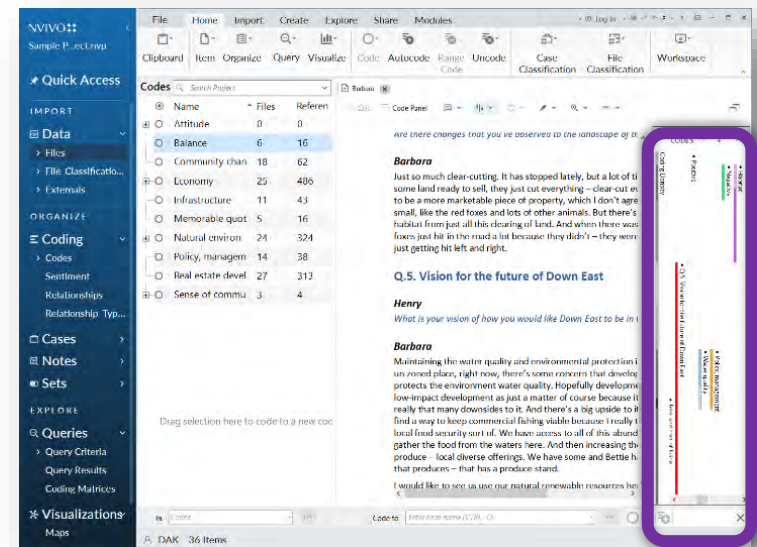
ATLAS.ti



MAXQDA



NVIVO

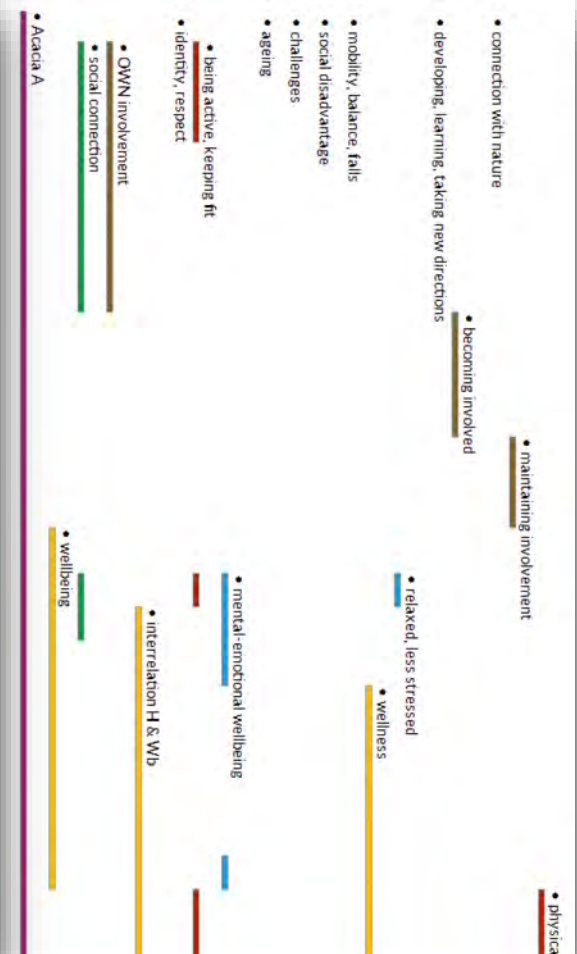
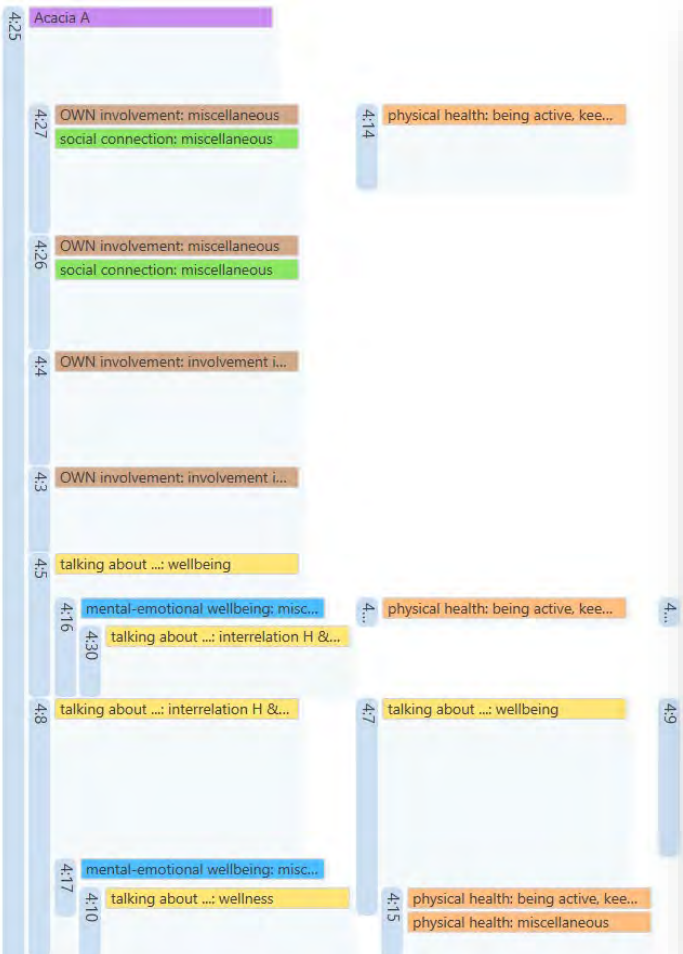


dedoose

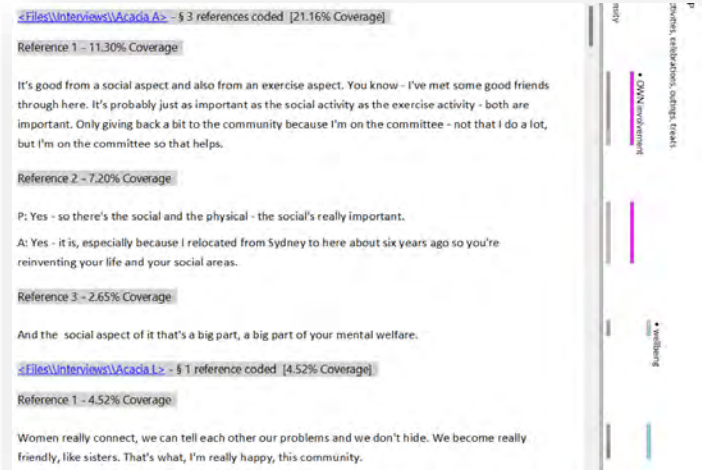
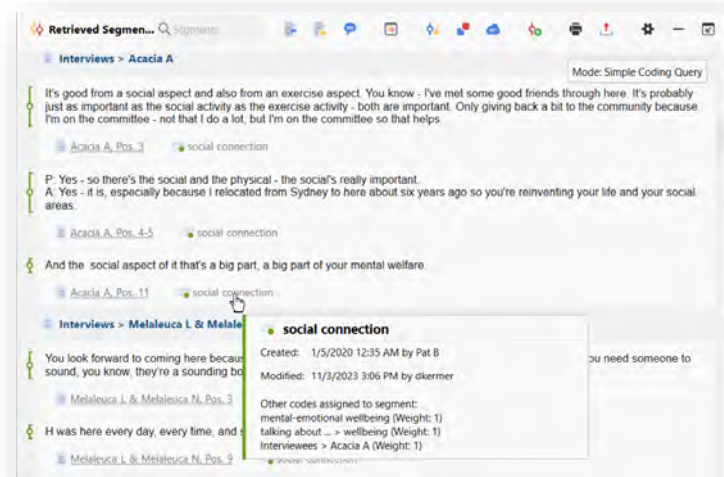
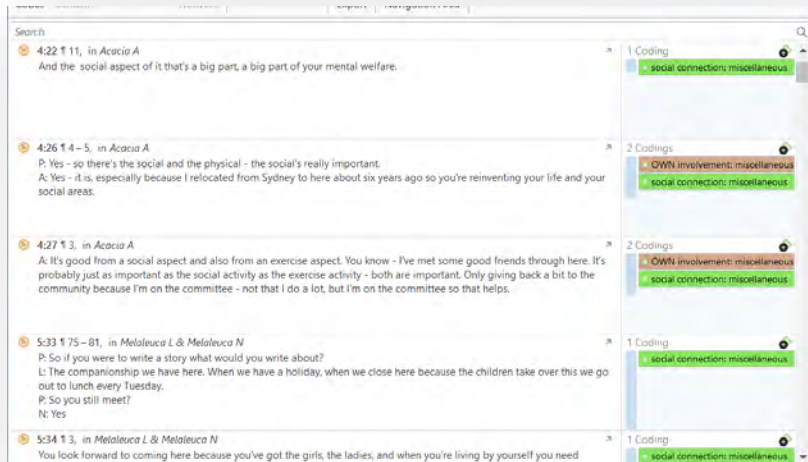




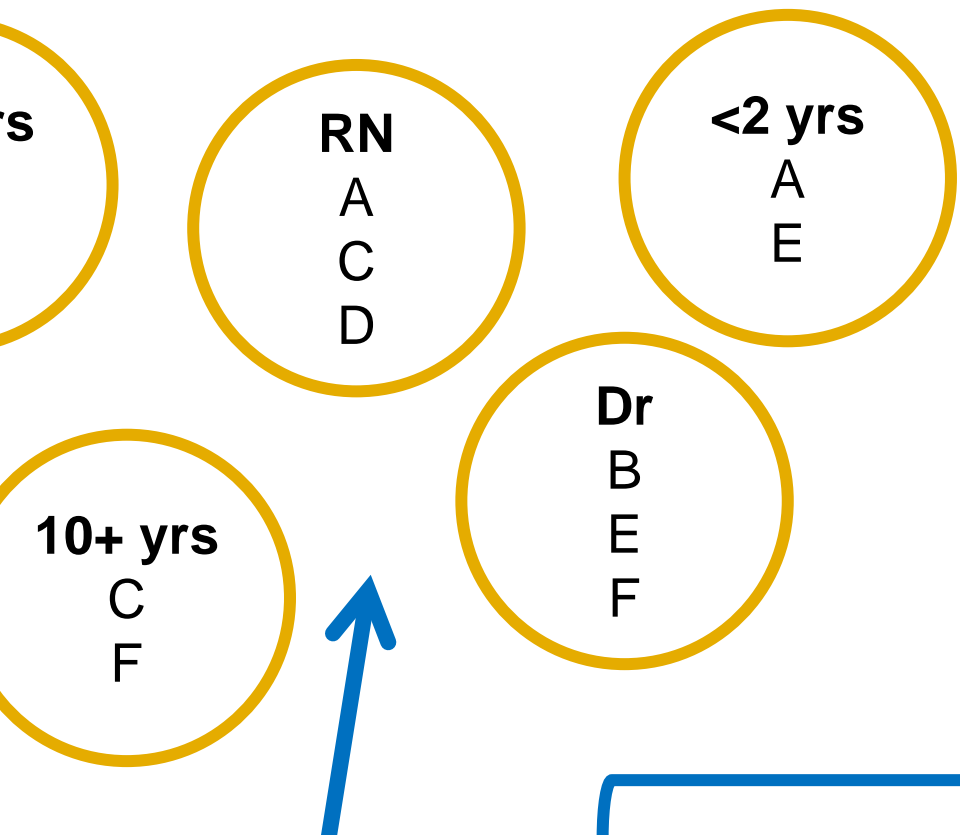
# Viewing Document Coding







# Retrieve, Search, Filter, Query



# Demographic Grouping



ID	Job	Years	...
A	RN	< 2	...
B	Dr	2-5	...
C	RN	10+	...
D	RN	6-9	...
E	Dr	< 2	...
F	Dr	10+	...

 ATLAS.ti	 dedoose	 MAXQDA	 NVIVO
Code Group	Descriptor	Variable	Attribute
	Descriptor Set		Classification

# What Represents a Person?



- Everything in a single document



- Parts of a single document
  - Dedoose: must copy focus group transcripts
  - MAXQDA special tools → Speaker



- Anything in a particular code
  - Not available in Dedoose
  - NVivo special tools → Case



# Matrices

	3: 3_Parentin... 264	4: 4_NYTM: r... 84	5: 5_Happin... 16	Totals
sources of happiness: activities and... 5	1	2	2	5
sources of happiness: attitude 8		3	5	8
sources of happiness: children 8	4			5
sources of happiness: financial securi... 3				3
sources of happiness: personal respo... 9	6			9
sources of happiness: relationships 7	2	1	4	7
<b>Totals</b>	13	9	15	37

<b>Frequencies</b> Absolute: 3 Row-Relative Frequency: 37.500% Column-Relative Frequency: 33.333% Table-Relative: 8.108%
--





  

3 Quotations of "4_NYTM: reader comments" and "sources of happiness: attitude"	
Search 4:21 ¶ 17 in 4_NYTM: reader comments Children, spouses, jobs, houses, cars, money - nothing can 'make' you happy. A happy person is happy, no matter what life throws at them. An unhappy person -if they were given whatever they 'want', whether it's a house full of kids, or a billion dollars - would still be unahppy.	2 Codings Attitude: children are unrelated to happiness sources of happiness: attitude
4:48 ¶ 73 in 4_NYTM: reader comments happiness is something to love, something to do, and something to hope for	2 Codings sources of happiness: activities and experiences sources of happiness: attitude
4:85 ¶ 123 in 4_NYTM: reader comments But, my happiness has nothing whatsoever to do with my kids or my husband.....happiness is a choice. I chose to be happy and continue to choose to be happy. My happiness, or lack thereof should I so choose, is entirely up to me. Thus, if I do not choose happiness, that, too, is mine to own.	3 Codings Definition happiness: is subjective sources of happiness: attitude sources of happiness: personal responsibility

- Code x Code
- Code x Document
- Aggregate either by group (e.g., demographic, parent code)

# Memoing

- **What** can be commented on
- **Separation** of different types of comments (e.g., paraphrase)
- **Visibility** of comments

 ATLAS.ti	 dedoose	 MAXQDA	 NVIVO
Memos, Comments, Quotation Names	Memos	Memos, Comments, Paraphrases	Memos, Annotations, See also links

# Extra Features

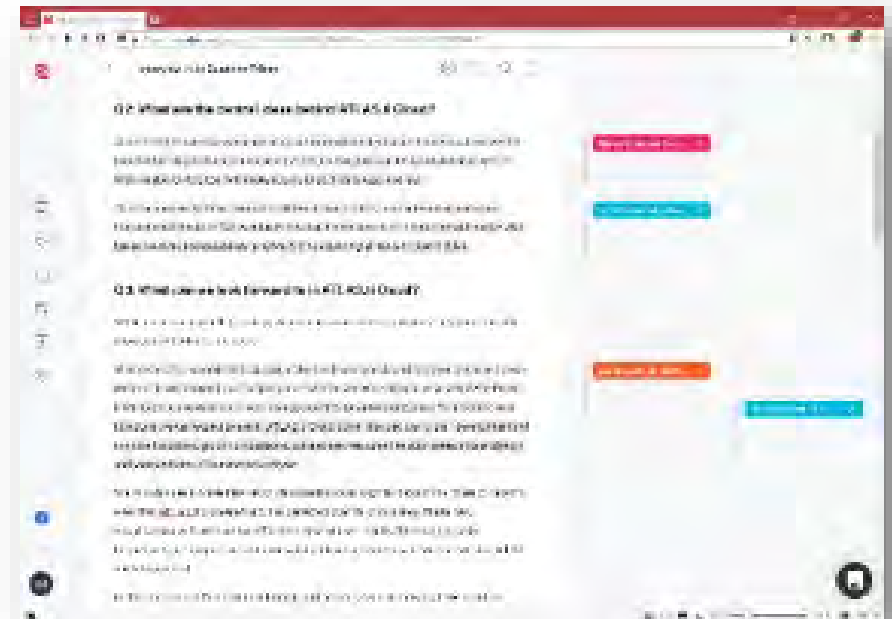
- Networks / Relationships
  - Atlas.ti Desktop = Networks, Relations, Links
  - NVivo = Relationships, Relationship Types, Network Sociogram
- Mind Mapping / Drawing
  - MAXQDA = MAXMaps, Creative Coding
  - NVivo = Project map
- Special Note Taking
  - MAXQDA = QTT – Questions, Themes, Theories
  - NVivo = Framework Matrices

# Software Features & Limitations



# ATLAS.ti Web

- Great choice for simple small projects ( $\leq 20$  text documents)
- Fewer features and thus easy to learn, all the basics
- Monthly pricing, or included with ATLAS.ti Desktop licenses.
  - Students = \$10 / month
  - Faculty = \$24 / month
- Cannot hide others coding.



<https://infoguides.gmu.edu/qual/atlasti-web>



## Unique Features

- Nice dashboard view
- Menu of queries
- Coded text is always colored
- Code weighting

### *Recap*

- Web-based, all OS supported (though requires installation)

## Limitations

- Coded text is always colored
- Must use test feature for multi-coder reliability (kappa)
- No direct import of reference manager articles/data

### *Recap*

- To utilize descriptors for focus groups, must copy transcripts
- Cannot view project without a license





## Unique Features

- Identical on Mac & PC
- Quickest code-document queries with activation
- Colored highlighting and emoji's(!)
- Great for summarizing (+ AI)
- Code weighting

## *Recap*

- Separate paraphrasing, commenting, and memoing

## Limitations

- Overly complicated menus
- Unimpressive visualizations
- Non-standard toolbar and right click menus



## Unique Features

- **Comments** are pervasive
- Straightforward interface
- Good visualizations
- Code Networks and Links
- Most AI features

### *Recap*

- **Free demo mode**, easy to view project w/out license
- Non-student **licenses are multi-user/concurrent**

## Limitations

- Interface can get cluttered
  - Best for grounded theory.
- Cannot choose where project file is stored. Must export.

### *Recap*

- **Grouping limited** to document and code groups and code folders. (no variables)







## Unique Features

- Most grouping options (e.g., folders) for large or combined projects
- Most clean interface
- Selective code aggregation
- Can redo saved searches

### *Recap*

- All data in native form
- Most intuitive characteristics tools (Cases)

## Limitations

- Memos not well integrated
- Promotes 3D Graphs

### *Recap*

- Does not handle RTL Languages (e.g., Arabic, Hebrew)
- Different on Mac & PC
- Expensive, no view only

# Questions?

<https://infoguides.gmu.edu/qual>

<https://dsc.gmu.edu>

[datahelp@gmu.edu](mailto:datahelp@gmu.edu)