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Original Citation

Gibbs, Graham R. (2006) Addressing the quality of analysis using Atlas.ti. In: ESRC Research Methods Festival, 17th - 20th July 2006, St Catherine's College, Oxford. (Unpublished)

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Addressing the quality of analysis using Atlas.ti

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Establishing trustworthiness

	Standard (quantitative) criteria	Constructivist criteria
Truth values	Internal validity	Credibility
Consistency	Reliability	Dependability
Applicability	External validity (Generalisability)	Transferability

Validity/Credibility

Constant comparison

- ☛ Compare text being coded with what has been coded that way before
- ☛ Guard against 'definition drift'
- ☛ Use retrieval to see how coding has been used before
- ☛ Use Document Families and Query tool to look for emerging patterns within coded text.

Completeness

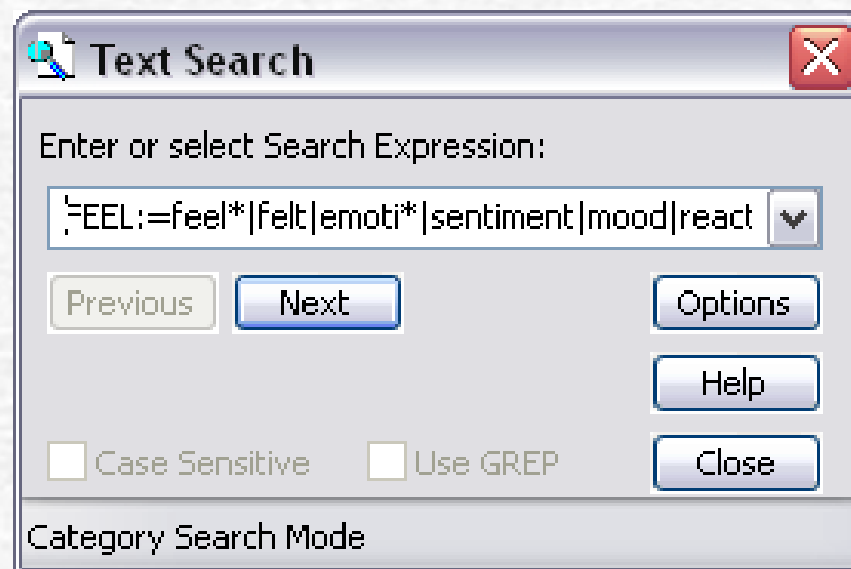
Relies on comprehensive reading, BUT

- Use text search tool to find all occurrences of key words (N.B. won't find all relevant text)**
- Best if specific (e.g. technical) terms used in text. (e.g. 'duty team')**

OR, use thesaurus to include related terms

- e.g. interviews with carers of people with dementia concerned. Wanted to examine their feelings.
- Lexical (text) search
- **FEEL:=feel*|felt|emoti*|sentiment|mood|react*|concern|regard|affection|love|attach*|care|cares|fond|like|suffer|put up with|endure|bear|go through|experience**
- Can save text searches for later reuse

Text search



N.B. problems

- ☞ like – Yorkshire dialect use
 - “I do bowling, like.”
- ☞ care – use in ‘in care’
 - “How many days does she go to day care?”
- ☞ love – used as term of affection
 - “you're having your hair done today, love”
- ☞ False find
 - “feelers”

Searching with GREP

- ✔ Use lexical/text searching and GREP
- ✔ Global Regular Expression Parser
- ✔ Looks for matches (usually in the same paragraph = up to a carriage return) with some use of special characters.
- ✔ Thus can look for one phrase, intervening text and then another phrase.
- ✔ = a way of looking for use of two terms in the same sentence.

GREP example

- ☛ e.g. Climbié corpus an issue was was Climbié treated as a ‘children in need case’ by the ‘duty’ team?
- ☛ Find discussions of this by search for:
 - children in need.*duty
 - duty.*children in need
- ☛ This needs two searches

MR SHELDON: Page 38, please. This deals with the Duty Team specifically, and it says at paragraph 1.16: "The basic grade staff in the Duty Team were all agency staff, who had only worked in Brent for a matter of weeks, and lacked the experience or resources to provide an adequate response to referrals and requests for services for children in need and their families." That was the position in the Duty Team in May 2000. What was the position in the Child Protection Team in May 2000?

Automatic coding

For more complicated combinations

use automatic coding – on paragraph - and then ‘AND’ (^) code search

The screenshot shows the 'Auto Coding Dialog' window. A blue arrow points to the 'Select Code' dropdown menu, which is currently set to 'Children {0-0}'. Another blue arrow points to the 'Enter or select Search Expression' text box, which contains the word 'children'. A third blue arrow points to the 'Create quotation from match extended to' section, where the 'Multi Hard Returns' radio button is selected. The dialog also includes a list of predefined search expressions such as 'ARTIFICIALLIGHT:=' and 'CLOSERELATIVE:=' on the left, and checkboxes for 'Case Sensitive', 'Use GREP', and 'Confirm always' on the right. At the bottom, there are buttons for 'Start', 'Code it', 'Skip it', 'Stop', and 'Close', and a 'Code: Children' label.

Deviant cases or negative cases

- ☞ Comprehensive searching e.g. terms, phrases, +GREG
- ☞ Look for negative cases by code vs family
 - (e.g. Male vs female, child vs adult)
 - E.g. do men not fit the same pattern as women?
- ☞ and code vs code searching
 - e.g. A & C, A & not C
 - Text coded A usually is also coded C. What about text coded A but not coded C (or coded the opposite of C)

Claiming valid conclusions – saturation

- ☞ Are new themes and topics still arising from the more recent data?
- ☞ Check creation dates on codes
 - Use Code Manager to sort codes by creation dates.
- ☞ Use comments to see if recent codes are significantly new in meaning.
- ☞ In Code Explorer, 'Grounded' indicates how many quotations are coded. Small numbers might indicate a duplicated code. Large numbers might indicate a code that could be divided. – Needs to be inspected.

The Code Manager

The screenshot shows the Code Manager application window. The title bar reads "Code Manager [HU: FinalHU(14thHU14thMarch...)]". The menu bar includes "Codes", "Edit", "Miscellaneous", "Output", and "View". The toolbar contains icons for file operations and navigation. The main area displays a table of codes with the following data:

Name	Grounded	Density	Author	Created	Modified
Duty	1300	0	Super	14/07/06 16:52:37	14/07/06 16:52:37
Early coding Files/Rec agree~	*	0	Super	27/04/06 17:12:18	27/04/06 17:12:18
Family Status~	59	0	Super	15/11/04 11:15:03	08/03/05 16:52:58
Files/Records~	1205	0	Super	15/11/04 11:09:14	27/04/06 15:15:26
Gender	0	0	Super	15/11/04 11:04:25	15/11/04 11:04:25
Good practice~	68	0	Super	15/11/04 11:27:11	09/03/05 17:03:50
Guidelines and Procedures~	385	0	Super	15/11/04 11:07:00	27/04/06 14:25:48

Below the table, a text area contains the following text: "Presumptions about Victoria + Kouao, assessment of relationship/ interaction, family responsibilities, private fostering/adoption".

At the bottom of the window, a status bar shows "138 Codes", "Family Status {59-0}~", "All", and "Name - Title".

Audit trails

- The story of how this theory happened and why it should be accepted as a best possible account of this data.
- The query tool automatically records a description of how code searches were made.
- Write a Project Document to record all parts of the research process (make it a PD), write memos for specific aspects, link to the project document.
- Provide links from it to memos and nodes that illustrate/substantiate the process feature or result.
- Do the same thing diagrammatically using Networks.

Audit trails cont.

- ✓ Keep dated snapshots (backups) of whole HU regularly.
- ✓ Record searches (done automatically if super codes created)
- ✓ Keep snapshots of searches (dates kept)
- ✓ Use links and memos to record your thinking at the time. Memos can be date stamped

Reliability

- **Coding consistently**
 - **Over time**
 - **Between coders**

Depends on approach to coding

- Codes as objective identification of content (they are about one theme)
 - Need to avoid idiosyncratic coding
- Codes as identification of material of interest for later examination
 - Form of text mining or exploration – may make into objective codes later.
 - Not concerned with consistency to start with.

Techniques for consistent coding

- ☞ Use code definitions in comments and memos (check occasionally by retrieval of coded text)
- ☞ Use code names with suffix to indicate time period when done or which researcher did it

e.g.

- Supervision (2006.03.22) or
- Supervision_GRG
- ☞ Then compare coding (for dates). E.g. produce code output with quotations
- ☞ or merge HUs (use 'Unify' on codes) and compare coding (can use code query 'OR' on all alternatives)

Results of an 'OR' code query

INTERVIEWER

What do you like about caring for your wife?

BARRY

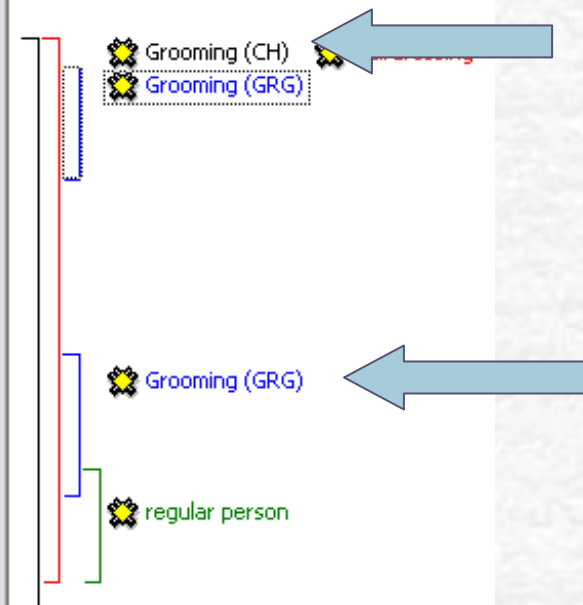
Well I like to see she's nicely dressed and kept clean. I make sure she has her hair done every Wednesday, the lady comes to do her hair for us, so I like to keep her nice and tidy. And I think she appreciates it.

INTERVIEWER

Do you? Do you think that she does know that it's you that is doing all this for her?

BARRY

Yes. I'll say to her on a Wednesday morning, 'you're having your hair done today, love' and she'll say 'yes'. That's it. When I get her over the sink in there she's - I wouldn't say she's awkward or anything like that, but she doesn't like her hair wetting! She's all right, we get through. The girl that does it used to have a shop at the top of Dusthead Lane but she had to give it up and she said she was going to go mobile. So she comes, she's been coming for quite a while.



Coding reliability in teams

Two aspects

1. **agreement about the meaning/definition of code.**
 - Can agree beforehand, or use comments and linked memo for each researcher to record.
2. **Agreement about text that is coded to the same code.**
 - Length of text
 - Do others agree and does it matter (if just a few chars different)
 - Difference might reflect disagreement about code definition.

Coding reliability in teams

If using this for inter coder reliability then:

- Need to agree on quotation length beforehand (sentence, paragraph, Q&A exchange) or
- Have a researcher go through document setting up quotations without coding and share this HU with all coders.

Dependability

- Not biased (see previous slides on completeness)
- Not anecdotal
- Esp. in examples/quotations used.
- Check quotation is typical of similarly coded passages

Using counts and proportions

- Number of cases (or proportion of cases)
- Need to produce code reports to see what cases are involved and count them up
- (Assumes PDs are cases – if not use families to create cases and superfamilies to cluster them)

Generalisability

- Can one generalise/transfer from study of case A to case B?
- Yes, if B is like A in relevant ways
- In terms of characteristics – Survey transferability – this is highly dubious
- In terms of explanatory logic – People who do X tend to do Y (etc)
- = Theoretical generalisation

Conclusions

- ☛ Quality helped by use of software, not guaranteed by it
- ☛ Most of the techniques and procedures for rigour are usable with or without software
- ☛ Some functions (e.g. 'Search') only in s/w
- ☛ Software helps data management and organisation.