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ABSTRACT

The methodology of interpretation of qualitative data was explored using a grounded theory approach to the synthesis of data, examining the construction of categories in particular. The focus is on ways of organizing data and attaching meaning, as research problems embedded in cultural context are explored. A qualitative research training task with 4 groups of 3 to 5 members each (for a total of 27 graduate student subjects) evaluating comic strip culture was used to address the consistency between groups, how groups differ, and how different ways of categorizing data lead to different interpretations of comic strip culture. Intra-group differences and perceptions were pronounced, and group consensus varied considerably from individual reports. Individuals reported more diverse answers than group consensus indicated, and group answers were more simplified and focused on fewer categories than those of individuals. Implications of the research center on the idiosyncratic nature of qualitative research and issues related to generalizability, as well as the relationships between the types of questions being asked and the interpretations and relationships between the knowledge-base of researchers and the interpretation of data. One table presents the categories of cultural values elicited. (Author/SLD)

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INTERPRETING QUALITATIVE DATA: A METHODOLOGICAL INQUIRY

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Presented at the Ohio Academy of Science Annual Meeting
Youngstown State University
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Abstract: The study is a methodological inquiry into the interpretation of qualitative data. It explores a grounded theory approach to the synthesis of data, and examines, in particular, construction of categories. I.e., it focuses on ways of organizing data and attaching meaning, as research problems embedded in cultural context are explored. A qualitative research training task, with 3-5 member groups evaluating comic strip culture, is used. These questions are addressed: 1) What is the consistency between groups? 2) How do groups differ? 3) How do different ways of categorizing data lead to different interpretations of comic strip culture? Implications of the research center around 1) the idiosyncratic nature of qualitative research, and issues related to generalizability, 2) relations between questions/question types being asked and interpretations, based on the same data, and 3) relationships between the knowledge-base of researchers and the interpretation of data.

Introduction

The study is a methodological inquiry into the interpretation of qualitative data. It explores a grounded theory approach to the synthesis of data, examining, in particular, the identification and building of categories, as one part of the coding, categorizing, and thematic development sequence. I.e., it focuses on ways of organizing data and attaching meaning, as research problems embedded in cultural context are explored.

Method

A comic strip culture was used as a common data set for studying the elicitation of categories in qualitative analysis by 1) individuals given the same data, and 2) groups consisting of the individuals who had already processed the data individually. Comparisons were made of 1) individual responses, 2) intra-group responses, and 3) inter-group responses.

Instrument

A qualitative research training task, with 3-5 member groups evaluating comic strip culture, were used. These questions are addressed: 1) What is the consistency between groups? 2) How do groups differ? 3) How do different ways of categorizing data lead to different interpretations of comic strip culture?

A pilot study was conducted with 4 graduate students who served as interviewees after reading comic strip material to be used with a graduate class later. Questions and approach to the cartoon culture simulation were modified on the basis of what we learned in the pilot.

In Week 9 of the semester, twenty-seven students in a graduate course focusing on education in cultural context, participated in a qualitative inquiry into the nature of culture and its analysis through a simulation using ethnographic techniques. Students doing the analysis had not been trained in ethnographic techniques, although they had some general exposure to the topic. They had been exposed over several sessions to characteristics of culture, and a range of concepts associated with culture and sub-cultures.

The class activity was titled **MAKING MEANING: AN EXPLORATION OF COMIC STRIP CULTURE** and resulted in 27 individual and 4 group responses to the following set of questions:

- 1) Who are the main characters (in this culture)?
- 2) Which characters have the most prestige (in this culture)? Why do you think this?
- *3) Describe this culture. What are the cultural values?
- 4) What general reaction and/or miscellaneous observations can you note?
- 5) How familiar are you with this comic strip?
- 6) How long did it take you to read the book?

*This paper focuses on #3.

The task consisted of students individually reading the comic strip book and writing their responses to the above questions outside class. Afterwards, during one class session, approximately an hour and a half, the individual responses were discussed in groups. Each group was asked to reach consensus on a cultural description of this comic strip, following the set of questions they had worked through individually. They were asked to put their group response in writing.

Grouping was by self-selection. In order to make the task more fun, students were assigned to groups of 5-7, on a first-come, first-serve basis, by raising their hands as they agreed with these statements:

- 1) How many have good-looking parents?
- 2) How many consider yourself in poverty?
- 3) How many have a good-looking girlfriend, boyfriend, spouse?
- 4) This is for everybody who did not respond fast enough to qualify for one of the other 3 groups.

Whole class discussion followed, including inquiry into change in their thinking as a result of attempting group consensus, i.e., group description of the culture.

DATA ANALYSIS

Students' written responses to Question #3 were categorized and tallied according to 1) individual answers written before the group session, 2) group answers found by tallying the responses of individual group members, and

3) group answers reported as group consensus by the group's recorder. Nineteen categories of cultural values gathered from the pilot study and preliminary analysis of Group 1 responses were used to examine the frequency of response among the 27 students analyzing the same data. The results are reported in Table 1 (attached).

FINDINGS

Findings were that:

- 1) Intra-group differences and perceptions were pronounced. In no group did everyone select for attention any of the 19 categories, although in some cases attention clustered in certain categories.
- 2) Group consensus varied considerably from individual reports.
- 3) Individuals reported more diverse answers than group consensus indicated, in spite of the fact that most individuals reported no change in attitudes as a result of the experience.
- 4) Group consensus provided responses which were more simplified, and were focused on fewer categories than those of individuals
- 5) Unexpectedly, inter-group comparisons based on consensus yielded little agreement. The closest agreement came with 2 of 4 groups mentioning 2 of the same categories out of nineteen.

DISCUSSION

This data supports a variety of conjectures:

- 1) If we have individuals interpreting culture, we could easily get a perception that is difficult to agree upon because it is based on idiosyncratic analysis of data describing cultural values.
- 2) We might use groups to get data that tend to be more consistent and reliable, but less rich with idiosyncratic differences. However, the tendency toward inter-group agreement was not as strong as we had expected.
- 3) Recent mainstream thinking of qualitative and quantitative researchers suggests that (a) individuals are more likely to give rich, in-depth perceptions, (b) however, that data is less likely to be generalizable to other individuals perceiving this data. Group data may be somewhat more generalizable, but this study suggests a closer look at the process. Also, the group produced less in the way of in-depth perceptions, in this case, fewer and more general categories.
- 4) The results are contrary to recent attempts by some qualitative researchers, such as Pokinghorn, who imply that one can generalize with qualitative research, but that it is a different type of generalization.

- 5) In regards to training observers, we do not know what would happen if this group were trained to observe. However, as "trained" observers, in a trade-off to obtain inter-rater reliability, observers might acquire a **pre-set** and see what they were trained to see, or what they were trained to see as important. It is difficult to understand how one can be trained to observe independently of their own personal experiences and values. Training people might increase the reliability but at the potential cost of validity.

This simulated anthropological study was done to estimate the accuracies and consistencies between individual and group perceptions on a relatively "neutral" culture (with fictitious cartoon characters). As indicated earlier, we wanted to determine the relative consistency between individuals v. groups, and we found that group predictions were somewhat more consistent than individual predictions. This potentially infers that it may be valuable when doing ethnographic qualitative research to have more than one observer looking at the same data. This study supports the importance of different individuals acting in the role of researcher, looking at the same data set, but suggests some potential problems. It suggests that triangulation in the collection and analysis of data may be problematic also.

This analysis supports the contention that different methodologies ask different questions. If you are interested in generalizing from an individual perception to what other individuals' perceptions would be, qualitative research is limited. Quantitative research is more powerful for generalization, while qualitative is more appropriate for description of culture. Good research may mean doing both.

		Table 1																																						
		Categories of Cultural Values Elicited From Respondents Answering Question #C *1																																						
Elicited	Categories *2	Group 1			Group 2			Group 3			Group 4																													
		A	B	C	D	E	F	G	T	Y/N	A	B	C	D	E	F	G	T	Y/N	A	B	C	D	E	F	G	T	Y/N	A	B	C	D	E	F	G	T	Y/N			
	1. ENJO	X	X		X	X		X	2																															
	2. ANTI-MAT	X			X			X	3																															
	3. MINORI	X	X					X	2																															
	4. INDIVID							X	1	Y																														
	5. XENOPH				X	X			2																															
	6. HONEST				X				2																															
	7. POL CORR								0																															
	8. ANTI-INDIV				X	X			2																															
	9. ANTI-FREE				X				1																															
	10. MATERIAL				X				1		X	X																												
	11. WOM EXPL				X				1																															
	12. LABEL PEO				X	X			2					X																										
	13. MEN AGGR				X				1																															
	14. FRIENDSH				X				1	Y				X																										
	15. ENVIRON								0		X	X																												
	16. FAMILY								0					X																										
	17. FUT TIME							X	1																															
	18. IMP GROUP				X	X			2		X	X																												
	19. POL ORG				X				1					X																										
	*1 Question #3 is: Describe this culture (what are the cultural values?)																																							
	*2 Elicited Categories are described more fully below																																							
	*3 Letters indicate individual group members																																							
	*4 Group response is reported by 1) tally of individual group members' written responses prior to group discussion, and 2) indication of YES if the category was included as part of group consensus																																							