Projects and Programmes
in Education

RESEARCH METHODOLOGY IN SOCIAL SCIENCES

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This article will present a selective reading of the research methodology literature, focusing on the issues and ideas that may guide academics involved in researching the value of educational projects. I will discuss primarily issues related to qualitative research.

Status of qualitative research

Researchers agree that qualitative research is concerned with social processes and the meanings which participants attribute to social situations. Qualitative studies are conducted with a view to understanding the way in which participants perceive situations and events, while the meanings people attach to the phenomena under investigation are crucial.

Sayer (1992:30) points out that
'…the crucial point to remember is that social phenomena are concept-dependent. Unlike natural (non-social) objects, they are not impervious to the meanings ascribed to them. What the practices, institutions, rules, roles or relationships are depends on what they mean in society to its members.'

Social researchers have long felt the inappropriacy of applying conceptions of scientific method modeled on the practices of natural sciences to the analysis of qualitative data. Various lines of inquiry in the social sciences argue that human discourse and action are infused by social meanings and therefore cannot be studied with the methods of natural and physical sciences. The social world cannot be understood in terms of causal relationships or by subsuming social events under universal laws (Hammersley and Atkinson, 1995). Apart from considering social phenomena quite distinct in character from physical phenomena, social research recommends fidelity to the phenomena under study rather than to any particular set of methodological principles. Seale (1999), reviewing various post-modern and post-positivist approaches to research, concludes that

'There is a strong sense in which methodological prescriptions – and this has become particularly evident in qualitative social research – have only marginal relevance for research practice, which is fundamentally a craft skill rather than an application of some free-standing rational scheme. Yet, methodological writing, if grounded in research experience, can provide concepts that sensitize researchers to the practical issues they confront in specific projects. These concerns include the problem of trust, which in turn relates to perceptions of the quality of research studies.' (1999: 20).

I have chosen the quote above because I find it important for two main reasons. First, it indicates some of the criteria for judging the value of qualitative research, which can be increased by detailed accounts of the research process and of the way in which the findings were obtained (also Silverman 2000). Then the point of view expressed above indicates what seems to be a major tension in qualitative research: on the one hand accepting that in a postmodern world of fragmented experience locally relevant accounts are valuable, on the other hand the need to 'convince' about the 'truth' of one's findings.

Quality and legitimacy

Qualitative research does not match positivist canons, but neither is it dismissed as lacking scientific rigour because it does not fit those canons. Qualitative research does not need to be 'defended' any more by reference to positivist practices or by trying to convince positivist researchers that qualitative research methods are not any more biased or inaccurate than positivist research methods. The issue of quality in qualitative studies is still paramount, but it deserves attention in its own terms, not as a justification device (Miles and Huberman 1994). Seale (1999) admits that quality matters a lot in qualitative research but validity and reliability *'are no longer adequate to encapsulate the range of issues that a concern for quality must raise. Instead, we need to accept that quality is a somewhat elusive phenomenon that cannot be pre-specified by methodological rules.'* (1999:7).

Most researchers, as shown above, emphasize the importance of data analysis but in the majority of cases the judgment of the researcher has to be relied on for the strength and significance of findings and this is where the issues of quality and legitimacy stem from. Indeed, the strength of qualitative data rests on the competence with which their analysis is carried out and attempting to validate interpretation through a variety of procedures is a key operation in doing research.

Strengths of qualitative research

Miles and Huberman (1994:8) highlight the following features of qualitative data that give the strength of qualitative studies:

- local groundedness, the fact that data were collected in close proximity to a specific situation;
- richness and holism, providing vivid thick descriptions that are nested in real contexts;
- emphasis on people's lived experiences, which helps locate the meanings people place on events, processes and structures of their experience;
- suitability for developing hypotheses, but also a strong potential for testing hypotheses;
- flexibility of data collection times and methods, which increases confidence that we have understood what has been going on.

Experience of field reality is potentially a strength of qualitative research and the issue of the researcher's close involvement and participation in the events that make the object of the research should be carefully considered both in terms of advantages and shortcomings.

Exploring causality

Miles and Huberman (1994) also consider qualitative data suitable for the study of causal relationships, although the study of causality has been a controversial issue.

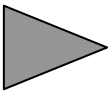
'The fact that such data are collected over a sustained period makes them powerful for studying any process; we can go far beyond 'snapshots' of 'what?' or 'how many?' to just how and why things happen as they do – and even assess causality as it actually plays out in a particular setting.' (Miles and Huberman 1994: 10)

There are various positions about the desirability of causal analysis in qualitative research. Miles and Huberman (1994) do not consider it a stronger form of explanation, while Seale (1999) notes that qualitative research focuses on the *what* and *how* of everyday life and rarely addresses explicitly the issue of *why* things happen the way they do. It is the case that many descriptive accounts contain hidden assumptions about causal relationships. It may be that closeness to the field or immersion in the setting facilitate better understanding of causal relationships but, as Seale (1999) points out, causal reasoning is the product of mind rather than sense data and the accuracy of logical operations is important in validating causal arguments. The case can be thoughtfully made that causality is not a workable concept when it comes to human behaviour which is driven by a complex system of intentions and actions. Miles and Huberman (1994:147) argue very strongly against the conventional view that qualitative studies are suitable for exploratory purposes while strong explanations including causal relationships can be derived only through quantitative studies. They identified the following features of qualitative analysis which make it a very powerful method for explaining why and how things happen:

- Qualitative analysis can identify mechanisms going beyond sheer association;
- It is local and deals well with the complex network of events and processes in a situation;

- It can sort out the temporal dimension showing what preceded what either through direct observation or retrospection;
- It is well equipped to cycle back and forth between variables and processes, showing that 'stories' include underlying variables that have connections over time.

The local dimension comes out strongly again and so does the need to study phenomena in their complexity and entirety. Most phenomena in reality cannot be explained in isolation as they are not artificial situations in a laboratory but practices and relationships among subjects in complex everyday situations. It seems that the study of complex objects does not lend itself to models of cause-effect relationships, but the complex view arising from interaction with the field of study can contribute to increasing the internal coherence of perception which can justify explanation of why things take a certain course.



Presenting an acceptable warrant

Strauss and Corbin (1998) recognize that a state of complete objectivity is impossible and that an element of subjectivity exists in every piece of research, whether quantitative or qualitative. Moreover, they acknowledge the importance of understanding in doing qualitative research. In terms of qualitative research, maintaining an objective stance means

'…hearing what others have to say, seeing what others do and representing these as accurately as possible. It means having an understanding, while recognizing that researchers' understandings are often based on the values, culture, training and experiences that they bring to the research situations.' (43)

We can never be sure that we have represented our respondents' meanings accurately, but we can try to take into account all possible sources of bias. As Miles and Huberman (1994: 277) put it, we admit that '*getting it all right is an unworkable aim'*, but we can still *'try not to get it all wrong'*.

The need for qualitative research to present an acceptable 'warrant' comes up very clearly in the literature.

'…the type of truth which it is appropriate to demand of naturalistic inquiry is that it be a credible version of what happened, both in terms of description and interpretation … It would be counter-intuitive to expect to reach some kind of formulaic end-statement, but it seems necessary to have a position on what is necessary and what is sufficient.'(Edge and Richards 1998: 345)

The need for a warrant is largely due to the lack of a widely recognised and accepted methodological approach in social science:

'…no academic who has carefully read the literature on the history and the philosophy of science can honestly claim that one method to carry the human (social) sciences forward has been found … Positivism, the search for causal laws, the iron-clad generalisation, and the forced choice between either objectivity or subjectivity, have been left behind in the critical approaches to social sciences. (Van Lier 1994: 342)

Centrality of data interpretation

There is wide agreement (Miles and Huberman, 1994; Robson, 1993; Seale, 1999) that in qualitative research analysis is crucial and the value of qualitative data rests on the competence with which their analysis is carried out.

Denscombe (1999:208) emphasises the fact that interpretation gives value and life to the data:

'Qualitative data, whether words or images, are the product of a process of interpretation. The data do not exist out there waiting to be discovered … but are produced by the way they are interpreted and used by researchers.'

The principles of Grounded Theory as developed by Glasser and Strauss (1967) and reinterpreted by Strauss and Corbin (1998) also identify data analysis as the key element of the research process. Theories need to be based on empirical research and their development involves a constant checking of emerging explanations against the findings as well as a constant refinement of concepts during the research process. Although seemingly allowing a lot of freedom for the researchers, the approach was developed with the purpose of adding more rigour to qualitative data analysis.

Building theory, by its very nature, implies interpreting data, for the data must be conceptualized and the concepts related to form a theoretical rendition of reality (a reality that cannot actually be known, but is always interpreted)… The research findings constitute a theoretical formulation of the reality under investigation, rather than consisting of a set of numbers or a group of loosely related themes. (Strauss and Corbin 1998: 24)

It is interesting to point out the relationship highlighted by Strauss and Corbin (1998:22) between quality of data interpretation and building theory. Two elements are essential in the development of theory: building a set of categories and systematically interrelating them through statements of relationship that have an explanatory value. The role of the researcher in the process of interpretation and explanation is to ensure both rigour and creativity.

Researcher creativity

Within the framework of Grounded Theory, creativity is a vital component and it manifests itself in the way the researcher identifies, finds names and establishes connections among categories. The depth of analysis and the conceptual frame that emerges differentiates grounded theory from mere descriptive studies where there is little analysis and the data are presented as speaking for themselves.

Strauss and Corbin point out that the creativity of the researcher is an essential ingredient and the tasks to be performed by the researcher include:

- ✓ Being open to multiple possibilities
- ✓ Generating a list of options
- ✓ Exploring various possibilities before choosing one
- ✓ Making use of multiple avenues of expression (art, metaphors) to stimulate thinking
- ✓ Using nonlinear thinking and moving back and forth around a topic
- ✓ Diverging from one's usual way of thinking to get a fresh perspective

Most of these recommendations are shared by other researchers as well, although Silverman (2001) points out certain shortcomings of Grounded Theory, particularly its failure to acknowledge implicit theories which guide work at early stages as well as the fact that it accounts for generation of theories and less so for testing theories.

'At best grounded theory offers an approximation of the creative activity of theory building found in good observational work, compared with the dire abstracted empiricism present in the most wooden statistical studies.' (2001:145)

This introduces another major issue - the need for researchers to make explicit the way they developed their findings and reached their conclusions (Miles and Huberman 1994; Seale 1999; Holliday 2002). An explicit detailed account of the analysis increases its value and credibility.

Researcher identity

It follows that the identity of the researcher plays a significant role in the interpretation of qualitative data. The issue is whether the researcher's own identity and values endanger the validity of the research and in this respect there seem to be two choices for researchers. One is to try and exercise control over their attitudes so as to avoid the interference of their subjective stance in the analysis of data, the other is to be upfront about their own position and about the way it has influenced their research. These positions lie at the two ends of a continuum but between them there are a variety of possibilities to acknowledge and justify the degree to which the researcher's background affected the analysis of the data. Flick (2002) states that

'Unlike quantitative research, qualitative methods take the researcher's communication with the field and its members as an explicit part of knowledge production instead of excluding it as far as possible as an intervening variable.' (2002:6)

Miles and Hubermann (1994) emphasise the inevitable influence of the researcher's identity in qualitative research. Researchers are no more 'detached' from their objects of study than are their informants, they have their own understandings and convictions as well as conceptual orientations, they are part of a particular culture at a specific historical moment. This highlights the importance of the researcher at both data collection and data analysis stage, but also the challenge for researchers to clarify their stance and be explicit about their methods. Miles and Huberman call for, '*at the minimum explicitness about the inevitable biases that exist*.'(1994:278).

A more detailed discussion of researcher effects is offered by Hammersley and Atkinson (1995) when they outline the concept of reflexivity.

Researcher reflexivity

In connection with the issue of researcher effect, I found the concept of reflexivity as presented by Hammersley and Atkinson (1995) extremely useful. Social researchers are part of the social world they study and there is increased realisation that the orientation of the researchers is shaped by their social, cultural and professional settings. As Hammersley and Atkinson point out,

'*… this is a rejection of the idea that social research is, or can be, carried out in some autonomous realm that is insulated from the wider society and from the particular biography of the researcher, in such a way that its findings can be unaffected by social processes and personal characteristics.*' (1995:16).

There is also the issue of the consequences of social research. Hammersley and Atkinson point out that the production of knowledge, at the very least the publication of research results, can influence the making of political and practical decisions. Miles and Hubermann (1994:277) also share the view that social research takes place in a real world and can have consequences on people's lives, which justifies the striving for shared standards. Ensuring research standards, whatever the research paradigm, is indeed the paramount issue, prevailing over arguments about the superiority of one research paradigm or another. Commenting on the nature of reflexivity as a significant feature of social research, Hammersley and Atkinson (1995) point out that in a sense, all social research is a form of participant observation: we all have certain roles in the social world and we reflect on the results of our participation in it.

The use of common-sense knowledge

The concept of reflexivity as outlined by Hammersley and Atkinson (1995) emphasises the concern for systematic enquiry, while accepting that we cannot avoid relying on common-sense knowledge. Reflexivity derives from human capacity for participant observation – we are actors in the social world and yet able to reflect upon ourselves and our actions as objects in that world. They describe

very well the position of the qualitative researcher and the tensions that exist between common–sense and scientific knowledge.

There is as little justification for rejecting all common-sense knowledge out of hand as there is for treating it as all valid in its own terms: we have no external, absolutely conclusive standard by which to judge it. But we can work with what knowledge we have, while recognizing that it may be erroneous and engaging in systematic enquiry where doubt seems justified; and in so doing we can still make the reasonable assumption that we are trying to describe phenomena as they are and not merely how we perceive them or how we would like them to be. (1995: 18)

Researchers closely involved in educational projects can definitely rely on their common sense knowledge but also need to put it to test in order to increase its trustworthiness. Knowledge cannot be based on some absolute secure foundation but neither can it be considered as entirely valid until we have taken all precautions to verify our findings through a variety of means.

References and bibliography

Denscombe, M. 1999. *The Good Research Guide.* Buckingham: Open University Press.

Edge, J. and K. Richards. 1998. 'May I See your Warrant, Please?: Justifying Outcomes in Qualitative Research', *Applied Linguistics* 19/3 Oxford: Oxford University Press.

Flick, U. 2002. *An Introduction to Qualitative Research.* London: Sage Publications.

Glasser, B. and A.Strauss. 1967. *Discovery of grounded theory.* Chicago: Aldine.

Hammersley, M and P. Atkinson. 1995. *Ethnography*. London: Routledge.

Holliday, A. 1994. *Appropriate Methodology and Social Context*. Cambridge: Cambridge University Press.

Miles, M. B. and A. M. Huberman 1984. *Qualitative Data Analysis.* Beverly Hills: Sage Publications.

Robson, C. 1993. *Real World Research*, Oxford: Blackwell.
Sayer, A. 1992. *Method in Social Science.* London: Routledge.
Seale, C. 1999. *The Quality of Qualitative Research.* London: Sage Publications.
Silverman, D. 2000. *Doing Qualitative Research – A Practical Handbook*. London: Sage Publications.
Strauss, A. and J. Corbin. 1998. *Basics of Qualitative Research – Techniques and Procedures for Developing Grounded Theory*. London: Sage Publications.
Van Lier, L. 1994. 'Forks and Hope: Pursuing Understanding in Different Ways' in *Applied Linguistics*, Vol. 15/3. Oxford: Oxford University Press.

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