

Module ECDA-7003: Research Methodology

Introduction

This is the third module in the MA course Bilingualism and Multilingualism. The aim is to introduce the student to a range of methodologies which can be adopted to conduct personal research in the field of bilingualism and multilingualism. Whereas this 20-credit module, ECDA-7003, can be treated as a discreet component which is designed to introduce students to various theoretical aspects of research methodology widely used in social research generally, it does, however, have a clear *practical* orientation in that it also aims to provide the student with skills which might be necessary to research a chosen topic for the extended essay module required to fulfil Part 2 of the full MA course, ECDA-7002Q.

The *practical* orientation of this module is also reflected in the assignments designed for its assessment. Students are required to complete two assignments which have an equal weighting of 50% of the final mark. In the first assignment, students are asked to **assess and evaluate** a piece of research on the basis of criteria which shall become clear in the course of reading the course materials. Such criteria, for example, include the suitability of the methodology adopted in order to secure two fundamental axioms of research, namely, *reliability* and *validity*. The second assignment requires students to plan a fictional piece of research. Again, the aim is to illustrate the ability to adopt suitable methodology and research instruments which will provide reliable and valid results.

One will have already realised that the two assignments demand different skills which, nevertheless, are two sides of the same coin. The first assignment requires the student to develop *critical* research skills in order to be able to evaluate an *existing* piece of research. Needless to say, developing such skills is dependent on acquiring a wide range of knowledge related to various aspects of research before one can undertake evaluation. The second assignment requires the *application* of such knowledge and skills in order to creatively undertake a research project, albeit fictionally, so that it can be scrutinised and *evaluated by others* according to similar criteria.

The course materials for Module ECDA-7003 consist of two publications in addition to this Guidance Booklet and additional Readings. The two publications are:

Bell, J. & Waters, S. *Doing Your Research Project: A Guide for First-time Researchers*. London: McGraw-Hill Education, 2018 (7th edition).

Dawson, C. *Introduction to Research Methods: A practical guide for anyone undertaking a research project*. London: Robinson, 2019 (5th edition).

These publications are designed to enable the student to gain both *theoretical* knowledge and *practical* skills in a wide range of aspects relating to research. Despite their obvious practical orientation, as indicated by their respective sub-titles (*A guide for first-time researchers* and *A practical guide for anyone undertaking a research project*), these also provide an enlightening balance between theoretical knowledge and practical application.

Research methodology covers a very wide range of aspects which could not possibly be covered adequately by a Guidance Booklet such as this. It is for this reason that Module ECDA-7003 is presented differently from the previous modules by making the two publications and the accompanying Readings the main source of study. The relevant knowledge which is necessary to complete the two assignments and which is comprehensively presented and explained in the two publications makes detailed repetition in the Guidance Booklet superfluous. That, also, would only add unnecessarily to the student's valuable reading time. Students may even benefit from studying both publications simultaneously by making cross-references according to the contents of each, thus reinforcing one's knowledge and understanding of a specific aspect before moving on to another.

Despite the above stipulation that the publications and Readings 1-4 will provide more than adequate sources of information required to meet the academic demands of this module, the following pages will also serve as a basic introduction to some aspects of research, thus providing a general perspective and an understanding which will be further enhanced and enriched by studying the publications provided.

Assessment

The assessment of this module comprises two equally weighted assignments (50% each).

Assignment 1 (50%)

The first will be an evaluation of a published research report; **for example:**

1. Critically discuss the methodology adopted for the research reported in the following article, referring also to any other significant matters which you wish to mention in relation to its reliability and validity:

Naser, I. *Perspectives of Palestinian and Jewish parents in Israel on bilingual education*. International Journal of Bilingual Education and Bilingualism. Vol. 14, No. 3, May 2011, 301-318.

Assignment 2 (50%)

The second assignment will allow students to make use of the knowledge gained from the study of the module in order to design and plan *an intended* piece of research, but without requiring its actual completion; **for example:**

By focusing on a hypothetical area of research within a context familiar to you, consider any related ethical aspects and/ or problems. Critically analyse the main issues connected with the area of the research and consider the most appropriate and practicable research methodology.

What is research?

Research Methods in Education (Open University, 2001: 9) states that:

the term 'research' is not one that has a well-defined meaning shared by everyone. It is used to cover a wide range of activities that differ substantially in all sorts of ways; and there is considerable disagreement about what should and should not count as research.

For example, Hill & Kerber (1967) described the value of *historical* research as being:

- able to discover answers to present problems in the experiences of the past
- able to throw light on present and future tendencies
- able to re-evaluate data in relation to theories and generalisations formulated and held presently about the past.

Langeveld (1965), in relation to *educational* research, maintained that:

Educational studies ... are a 'practical science' in the sense that we do not only want to know facts and to understand relations for the sake of knowledge, we want to know and understand in order to be able to act and act 'better' than we did before.

Although these quotations indicate that research may serve different *functions*, they also clearly reflect its clear *heuristic and utilitarian* dimension.

Howard & Sharp (1983) described research as:

seeking through methodical processes to add to one's own body of knowledge and, hopefully, to that of others, by the discovery of non-trivial facts and insights.

Drew (1980) stated that "research is conducted to solve problems and to expand knowledge." *Research Methods in Education* (2001: 10), however, settles for a rather broad interpretation, namely, "the selection and analysis of data with a view to the provision of valid and useful information."

Regardless of the field of enquiry, however, *all* research is based on a common axiom in that it follows certain acknowledged systematic procedures as opposed to *ad hoc* methods of investigation.

Drew (1980), for example, describes research as a “*systematic* way of asking questions, a *systematic* method of enquiry.”

Regardless of the title of the research being undertaken, therefore, (e.g. investigation, inquiry, study), it is the *systematic approach* which is important with regard to such aspects as planning and data collection.

This means:

- tailoring the scope of the investigation to the resources available
- producing a report or policy paper which incorporates:
 1. justifiable conclusions
 2. a realistic set of proposals

Fundamental principles of research

There are two principles which are fundamental to all research and which are, therefore, considered integral to the research *process*. These are

- validity and
- reliability

Validity

This can be illustrated by asking the following questions:

1. Does the researcher ‘measure’ that which he/ she proposes to measure?
2. Are the criteria adopted ones which would be approved by other professional practitioners?
3. Does what is being researched contribute or add to our knowledge of a specific field of study?

Reliability

This can be illustrated by asking:

1. Would two *independent* researchers achieve the same results or come to the same conclusions?
2. Would a researcher achieve the same results or come to the same conclusions at different times by using the same methodology?

Research Traditions

Various methods of collecting data are often seen as being related to different research ‘traditions’ which are usually referred to as:

- Ethnographic
- Survey
- Scientific or experimental

For example, ethnographic research has historically been associated with participative and non-participative *observational* methods of gathering data, whereas surveys are usually associated with the use of questionnaires and interviews. Scientific research is strongly associated with quantitative (as opposed to qualitative) data and statistical information, and with establishing a causal relationship between tightly-controlled independent and dependent variables. As the accompanying reading material will show, various research ‘traditions’ involving the use of respective research instruments have both their strengths and their weaknesses. These need to be carefully considered before undertaking any project in order that the *reliability* and *validity* of the research can be ensured. However, perceiving various methodologies as being confined to specific ‘traditions’ can often be as misleading as categorising them exclusively as being either *quantitative* or *qualitative* in nature and as a dichotomy. It should, therefore, be emphasised that research projects often make use of *both* quantitative and qualitative research instruments. For example, case study, often seen as being qualitative, can include much statistical data and incorporate a wide range of methodologies involving quantitative techniques. It is for this reason that case-study has been defined as “an umbrella term for a family of research methods having in common the decision to focus an inquiry round an instance.” (Adelman et al.,1977). As will be mentioned later, a case-study often makes use of many techniques to gather evidence which are chosen according to those considered best suited for the purpose e.g.

- questionnaires
- interviews
- participant and/ or non-participant observation
- diaries
- examination of documents

A. The Ethnographic Tradition

The word ‘ethnography’ derives etymologically from ‘ethnos’, the Greek for *people* or *race*, the morpheme ‘*graphy*’ being the *description* of the institutions and customs of people. This tradition originated in the research methods of social and cultural anthropologists in the early 20th century who studied the culture of ‘simple’ societies, mainly in Africa and the Americas. These methods were suitable for small, homogeneous, preliterate societies which shared the same beliefs and customs without the complexity of social stratification characteristic of modern societies and which were ‘simple’ in the technological and sociological sense in comparison with European societies.

The practical requirements of such research gave rise to ‘fieldwork’ as a method of investigation and the *observation* of peoples and their cultures

in their natural habitat. This usually involved learning the language and observing everyday rituals and customs, but with the anthropologist remaining an outsider and endeavouring to overcome the disturbing effects of an 'alien'.

Research based on the methodology of observation, however, is no longer confined to anthropology and the study of simple societies as such methods and principles previously associated with ethnographic research have since been employed by social scientists in modern Western societies. Modern societies, however, are large and complex and methodological considerations comprise a very wide range of factors which can impinge on the reliability and validity of research including, for example, socio- economic, political, religious, familial, occupational and linguistic factors. Today, therefore, ethnographic research can be said to be suitable for the *detailed* examination of small groups within a complex society, but where social stratification is limited and where participant and non-participant observation is an integral methodology.

The advantages of ethnographic methodology are that it:

- is naturalistic, thus allowing people to be studied in their natural settings and the researcher to discern how behaviour and shared meanings amongst individuals and groups involve interaction with others
- is effective in investigating *covert* behaviour since spontaneous social behaviour reveals truths which are impossible to capture by any other method
- clarifies and gives meaning to situations, beliefs and social positions.

However, ethnographic research also has a number of disadvantages, the main ones being:

- its laborious and time-consuming nature
- the need for the researcher to be accepted by the group which she/ he is observing
- the need at times to combine two roles
- the need to keep a role confidential at times for fear of biasing the results (e.g. as a participant observer)
- the need to follow a group for the whole of its natural cycle
- the influences of other extraneous sources on the behaviour under study
- the reliability of the observer's analysis
- the difficulty in recording everything and the need to be selective
- the difficulty in replicating

The last point reflects this research method's fundamental weakness since *reliability* requires another person's use of the same methods on the same group to produce the same results. By the same token, ethnographic research can be weak on *representativeness*, and conclusions cannot be generalised to other situations.

B. The Survey Tradition

1801 was the first 10-year census in Britain, which is a simple example of a social survey research methodology where an interviewer originally questioned respondents according to a fixed schedule (questionnaire). An important rule in surveys is that a question asked to all respondents has the same meaning for each one and that it does not appear to be ambiguous and open to interpretation by various individuals. Although this is not as easy as it may first appear, this requirement is based on the underlying principle of *comparability of response*.

In 1841, the ten-year national census in Britain adopted a *self-completion* questionnaire for rather obvious reasons. Interviewing each eligible person, even if conducted on a family-representative basis, was an extremely laborious and time-consuming exercise and becoming increasingly unmanageable one would imagine as the population increased. However, although the self-completion questionnaire when adopted as part of a survey (or as the only research instrument for a survey) is obviously more efficient in covering a large population or sample and, therefore, cheaper, the interviewer-administered survey is often preferred on the grounds of accuracy and the 'return' or number of completions. This last point is particularly important when participation is voluntary as opposed to a legal obligation.

The Census was the first example of a 100% sample survey in Britain. Conversely, most surveys only involve a fraction of the target population and, if certain conditions are observed, the results from a sample can be used to represent the whole population from which the sample was taken. Sampling (see below) is a process which is again cheaper and a generally accepted norm in survey methodology but must adhere to the principle of *representativeness*. For example, if the population involved is 60% female, then the sample must be 60% female according to criteria or characteristics *relevant to the study*.

Population as a social science term therefore means the category of people for whom the survey results are meant to stand e.g.

- university graduates
- primary school children within a specific area or country.

However, whereas the definition of a ‘population’ is often clear and self-explanatory, it can also be more problematic, thus requiring far greater specificity. Students of the first module of this course would appreciate the difficulties encountered in sampling a population on the basis of being ‘bilingual’, for example.

Like other methodologies, the survey has its specific advantages and disadvantages. These can be summarised as follows:

Advantages:

- It can elicit information which covers a long period of activity, yet can be summarised in answer to a question in a few minutes
- It has the ability to gather much data in a short period of time, many respondents being able to answer many questions
- It is cheap in relation to, for example, the ethnographic method
- With sufficient data, it enables the social scientist to move beyond description to finding patterns and answers to defects.

Disadvantages

- Respondents can colour, exaggerate or even lie
- It is often difficult to keep the interaction between the interviewer and interviewee totally ‘neutral’ e.g. a respondent’s eagerness to please or to be seen in a favourable light
- Questions often fail to register aspects such as the quality, intensity and significance of an answer
- An attempt to produce comparable information can ignore subtler differences in behaviour which are better uncovered by observational methods in natural settings
- There is a tendency to over-simplify responses and to categorise them in order to ‘discover’ (create!) regularities and patterns. However, this ‘simplification’ can be lessened by testing questions on a smaller part of the sample and adopting a less structured and more informal method of questioning which allows deeper probing.

C. The Experimental Tradition

The third research ‘tradition’ is that which is generally associated with the natural sciences, namely, experimental research. This is characterised by extremely rigorous procedures usually based on the principle of ‘cause and effect’ which, by attempting to control all variables which might affect outcomes, establishes a causal relationship between various

components and enables researchers to make precise predictions. Such experiments usually follow procedures such as the following:

1. The choice of two identical groups: an experimental group and a control group.
2. A pre-test to assess the present position with regard to the focus of the research.
3. The application of an experimental treatment to one of the two groups over a period of time but which is withheld from the other.
4. A post-test to measure any difference(s) with the pre-test in order to make comparisons and to draw any conclusions.

The advantages of this research methodology are rather ‘clear-cut’:

- It is usually quite easy to make a causal connection (cause and effect), as between the results of a pre-test and a post-test
- One can avoid any ambiguity or uncertainty regarding the effect of individual variables
- The methodology is appropriate for any experiments which are not politically or socially sensitive and which can be completed in a relatively short time.

However, there are also clear disadvantages:

- It is a difficult methodology to use in the social sciences since planned, deliberate, social changes for experimental purposes are impossible and sometimes unethical
- Social causes do not work singly in a ‘cause and effect’ direction but can be subject to a multitude of variables. The complex interaction of these would require isolating each variable and setting up an experiment each time to ensure reliability, thus being extremely impracticable.

Choosing a ‘tradition’ as an initial course of action does not prohibit a researcher from moving away from methods associated with a particular style. What is important is that the methodology is *fit for purpose*, based on an assessment of the advantages and disadvantages of each. Yet, although specific such research methods or instruments associated with some traditions are not exclusive to others, nevertheless, some lend themselves more readily according to the practical demands of the task in hand. The fundamental principle of planning effective research is to match the research design to the resources available for its completion in terms of:

- time
- human resources

It can, therefore, often become a compromise between what is desirable and what is possible to achieve.

Selecting a research methodology

One should always guard against making decisions too early about the research instruments to be adopted. When considering a research methodology, the question is not “Which methodology?” but:

“What do I need to know and why?”

“What is the best way to collect this information?”

“When I have this information, what shall I do with it?”

“How will I analyse it and classify it? (a question which, despite arising at a much later stage, needs to be an early consideration).”

The main methods of data collection

In any research project, the following can be said to be the *main* sources of research data:

1. Documents
2. Questionnaires
3. Interviews
4. Observation (participant and non-participant)

1. Documents

These can include both published and unpublished documents e.g. official and unofficial reports, minutes of meetings, policy documents and official statistics.

2. Questionnaires

Questionnaires are seen as being part and parcel of the survey style of research. However, the decision regarding the use of questionnaires should be made after all the planning and consulting has been done. In accordance with the need to guard against making decisions too early about the research instruments to be adopted, one must ask whether or not it is suitable for the purpose and likely to yield usable data. Is it likely to be a better way of collecting information than interviews or observation, for example? As the study materials show, there are issues to be considered, such as:

- planning
- question writing
- questionnaire design
- piloting
- distribution
- return

As with all research instruments, the adoption of a questionnaire has its disadvantages as well as its advantages (see also Survey Tradition above):

Advantages

- It is a relatively quick and cheap method of gathering information
- The format allows data to be readily analysed

Disadvantages

- Assembling questions without thinking what can be done with the data when returned can result in problems of analysis. Consideration of data analysis is, therefore, essential at the point of creating the questionnaire and before distribution
- Piloting is essential to evaluate the instructions, the questions and the response systems. Efforts to eradicate any possible ambiguities by piloting at an early stage are essential in order to ensure *comparability of response*. For example, one needs to consider:
 - Are the instructions clear?
 - Is there any ambiguity?
 - Were any answers in a form not anticipated?
 - Is the information usable?
 - Does the layout create problems for the respondents?
 - Can the data be easily analysed?
 - Is it too long and daunting for the respondents?

Postal questionnaires

The use of postal questionnaires can present its own advantages and disadvantages. For example, one needs to think ahead in good time in order to get a positive response since respondents are doing the researcher a favour. Practical considerations also include avoiding using postal questionnaires at Christmas time, for example.

Sampling

Sampling is a method adopted to select a number of individuals who are *representative* of a specific population related to a particular area of research when efforts to contain the total population would be unrealistic and impracticable. The emphasis then, usually, is on ensuring the *representativeness* of the sample.

Creating or choosing a sample can be problematic. Whereas too few respondents can be unrepresentative, even hundreds can be unrepresentative unless selected carefully. There are, therefore, different means of sampling, the basic difference being between:

- probability sampling
- non-probability sampling

Cohen and Manion (2003) in Reading 1 describe probability sampling as instances where the probability of selection of each respondent is known and non-probability sampling where the probability of selection is unknown. Reading 1 also describes a range of sampling procedures in both categories, however, those most commonly adopted are:

- opportunity samples (also called *convenience* or *accidental* samples)
- random samples and
- stratified samples

Opportunity samples : these are respondents for whom it happens to be convenient to participate or whom the researcher happens to come across.

Random samples : this gives “everyone” (theoretically) the opportunity to participate e.g. in a survey of school children, individuals could be chosen from a classroom register according to a set pattern of numbers such as 2,5,8,11,14,17 etc. However, this could produce more girls than boys, for example, which *might be* a valid consideration in terms of being representative of the whole population.

The answer, therefore, is to create a **stratified sample**. This is done by:

- establishing which sub-groups of the total group are important (based on previous research or professional experience)
- selecting individuals according to the principle that every sub-component is a representative percentage of the whole.

Figure 1 provides a simple (or over-simplified) illustration of how a researcher would create a representative sample of pupils aged 11-16 in a secondary school. There could well be valid reasons for applying additional criteria to the selection e.g. speakers of specific languages, or for including more girls than boys. However, one should beware of over-stratifying. One must consider what is *valid* and what can ensure the *reliability* of the data collected. Perhaps the following criteria might be considered valid considerations for example:

- socio-economic group
- IQ
- geographical location
- race

But, would eye-colour?

Figure 1:

	Boys	Girls	Total
Year 7	10	10	20
Year 9	10	10	20
Year 11	10	10	20
Total	30	30	60

3. Interviews

The interview as a research instrument has been described simply as “a conversation between interviewer and respondent with the purpose of eliciting certain information from the respondent.” (Moser & Kalton, 1971). However, interviewing is far more complicated than this statement might suggest. Cohen (1976:82) adopts the ‘fishing expedition’ analogy:

Like fishing, interviewing is an activity requiring careful preparation, much patience and considerable practice if the eventual reward is to be a worthwhile catch.

However, one must again ask, is it the best method to gather the required data? Could a questionnaire be more suitable?

The interview, however, is also useful as a supplementary means of seeking further information or greater depth of information from participants and of putting extra flesh on the bones of data collected by means of a questionnaire, for example; in which case, those interviewed may not be fully representative of the criteria adopted for the original sample. Sampling procedures can apply equally to the interview methodology, but usually in relation to fewer numbers of participants.

Advantages of interviewing

Amongst the advantages of adopting the interview as a research method one can emphasise its adaptability, especially in terms of the ability to follow up leads, probe responses, investigate motives and feelings in ways which the questionnaire cannot do. Facial expressions, the tone of

voice and such things as hesitations are very telling and usually require further clarification which can often result in additional significant data. Further advantages include, as previously mentioned, the ability to put flesh on the bones of questionnaire responses and, furthermore, the opportunity to clarify and eradicate any remaining ambiguities.

Disadvantages of interviewing

However, interviewing is obviously more time-consuming than using questionnaires and covers fewer participants, thus providing a more limited sample. A fundamental weakness often referred to, however, is its highly subjective nature and the danger of bias in:

- questioning and
- interpretation

Analysis can be problematic unless the interview is rigidly structured (see below) to enable comparison of data across respondents, in which case the wording of questions can be as demanding for interviews as it is for questionnaires. High volumes of qualitative data can result in the onerous task of transcription and, if not careful, large amounts of material which can be irrelevant.

Types of interview

Grebenik & Moser(1962) placed a typology of interviews on “a continuum of formality”, those being:

- the structured interview
- the semi-structured interview:
- the unstructured interview

The structured interview is often no more than an ‘oral questionnaire’, the same questions being asked to all respondents. This is a ‘straight-jacket’ approach which often does not allow sufficient flexibility to some responses e.g. Do you believe in corporal punishment? Yes or No.

It may, therefore, be said to be useful when asking a range of questions which are unlikely to be controversial and when the interviewee does not feel uncomfortable with providing short answers.

The semi-structured interview: this may be described as a series of structured questions again carefully worded but combined with the flexibility which allows respondents to elaborate and to respond to further investigation and probing from the interviewer. This is the model mostly favoured by researchers since it allows responses from interviewees to be quite comprehensive but also enables the interviewer to keep to a structured path without wandering aimlessly.

The unstructured interview: This allows the interviewer to discuss various issues at length with individual respondents without any need to necessarily make comparisons with other participants. It is often used for seeking and probing perceptions in terms of gathering qualitative rather than quantitative data which reflects a particular individual role within an organisation for example.

This may be seen as a method of discovering and gathering information or perceptions not possible any other way. Since it can last a few hours on occasions, it is, therefore, very time-consuming and not a model to be adopted without serious thought being given since it often requires psychological skills. Psychotherapists, for example, receive specific training in certain interviewing techniques. It is, therefore, not recommended for the inexperienced researcher who is not totally 'au fait' with the area being researched or any other professional or political complexities.

The more standardised the interview, the easier it is to aggregate and quantify the results and present data in a form which can be empirically tested by other researchers. However, it is not always possible or desirable to quantify data since intensive interviews can yield richer material.

Interviewer bias: response effect

A significant aspect of interviewing which deserves a special mention is that of interviewer bias and response effect. This is a phenomenon which can apply as much to the structured interview as well as to the less formal interview (or even a questionnaire!). Interviewer bias and response effect may be described as the mutual effect the interviewer and the respondent may have on each other and of which the researcher needs to be aware.

This may appear in different guises such as:

- the respondent's eagerness to please the interviewer
- a tendency to provide answers according to what is acknowledged as 'best practice'
- a vague antagonism between the interviewer and respondent
- a tendency for the interviewer to seek out answers which support preconceived notions.

This alerts us to the danger of interpreting the results of a single researcher. Shipman (1972), for example, warns that "the eager researcher will get the answers he wants." Such bias may surface in the analysis where there is a team of interviewers but may go unnoticed where one researcher conducts a number of interviews.

Research being very much a practical as well as an academic activity, some researchers draw our attention to other considerations when preparing to conduct interviews. These highlight the need to be aware of circumstances which can significantly affect the respondent and, consequently, the validity and reliability of the data collected. Reading 4, for example, mentions some very practical issues with regard to aspects of interviewing. The following provides a skeleton of some of the issues which can be complemented by the Readings themselves.

Where to interview

The environment is important. For example, respondents may well seek privacy in order to be as open as possible, especially when disclosing sensitive data. On the other hand, too much privacy can often be counterproductive and seen as intimidating. Sitting behind a desk also, for example, can give a message that the interviewer is in a position of authority and to which the respondent may react negatively.

The researcher (in agreement with the respondent) needs to decide on a setting according to the circumstances and the ‘nature’ of the interview. Some would describe this as an effort to keep a balance between ‘nervousness’ and over-confidence in the interviewee or between friendliness and objectivity in the interviewer in order to ensure that the information gathered is as reliable as possible.

When to interview

The timing of interviewing can be crucial. For example, it is often maintained that an interview needs to take place as near to significant events as possible so that a respondent’s perceptions and recollections are clear and reliable. However, a respondent’s *emotional* response to an immediate event may well ‘colour’ its reality, thus making it unreliable. As well as choosing an appropriate time, there are also other practical issues to be considered regarding when to interview. These include:

- ensuring valid access
- explaining the nature of the research and the purpose of the interview as a part of it
- allowing the interviewee to ask any relevant questions (at the start and at the end)
- ensuring the interviewee that the content of the interview is totally confidential

Some researchers allow the interviewee to provide further information later or to correct or modify the content by providing a subsequent

transcription of the interview. This is often a matter for the individual researcher.

4. Observational studies

Observation... is not a 'natural' gift but a highly skilled activity for which an extensive background knowledge and understanding is required, and also a capacity for original thinking and the ability to spot significant events. It is certainly not an easy option. (Nisbet, 1977:15)

As the quotation makes clear, observation is not an easy option for collecting research data and requires practice to get the most out of this technique. It can, nevertheless, reveal characteristics of groups and individuals in a way which is not possible to discover by any other means. It is a very time-consuming process and an outside investigator needs time to familiarise with a situation.

One should emphasise that adopting this method is not a matter of impressionistic description but that it requires reflection, analysis and generalisation from data gathered *systematically* whilst being a temporary or permanent member of a community or organisation.

There are two main types of observation:

- participant observation
- non- participant observation

In adopting the role of a non-participant observer, the researcher distances himself / herself from the group being observed. Zimmerman & Wieder (1977) have described this as being a "spectral presence". This happens when the researcher, for example, sits in a room and, as objectively as possible, observes the behaviour or activities of the focus of the research. In the case of a participant-observer, however, the researcher *takes part* in the activities being observed.

Lacey (1976: 65) has defined participant observation as "the transfer of the whole person into an imaginative and emotional experience in which the field worker learned to live and understand the new world."

A major concern with this methodology, however, is the ability of the participant-observer to be able to detach himself / herself sufficiently in order to provide an objective perspective, especially when the 'experience' is long term. Familiarity (or over-familiarity) can make it easy to overlook certain aspects of behaviour which would, possibly, be immediately apparent to a non-participant observer.

The observation of meetings, for example, can involve a range of issues including:

- the content
- the *processes* by which decisions are reached
- the behaviour of the participants

This raises the question of how data should be gathered and analysed. Some form of classification of data will, therefore, be necessary in the case of both types of observation by the adoption, for example, of grids and checklists. Again, one needs to be aware of issues which might affect the validity and reliability of the data, such as:

- the subjective and idiosyncratic nature of the technique
- the problems of recording the interactions, emotions, tensions and micro-political processes involved
- the possible lack of objective accounting in participant observation
- the time-consuming process

Case Study

As previously mentioned, case study has been defined as “an umbrella term for a family of research methods having in common the decision to focus an inquiry round an instance” (Adelman et al., 1977:139-150). It adopts many techniques to gather evidence chosen according to those considered best suited for the purpose e.g.

- questionnaires
- interviews
- participant and non-participant observation
- examination of documents
- diaries

However, case-study requires the same systematic approach as any other form of research. Despite requiring different techniques from those required for large-scale statistical surveys, these methods are as equally demanding in terms of the systematic gathering of evidence.

The object of case study is to investigate a specific case or instance, thus providing an in-depth account which aims to identify the unique features of interaction within that instance. It therefore has the possibility of identifying significant and influential variables which may well not be discernible by more statistical methods such as a survey, for example. Whereas the survey attempts to identify elements which are common to a number of individuals and may, therefore, lead to generalisations (although this is often questionable), it can also fail to identify any key factor(s) which may play a crucial role in the interaction of other

variables and provide significant additional data. As Adelman et al. (1977) state, case studies recognise the 'embeddedness' of social truths. By adopting a range of research instruments, a case study provides a researcher with the flexibility to follow leads as it develops. Since it aims to present the 'reality' of a particular situation like a documentary, its strength is that it can be more widely understood beyond the professional research community. It is also a style of inquiry which lends itself readily to an individual researcher.

In terms of being *macro* and *micro* approaches to research, a case study can precede a survey in order to raise issues which may deserve wider investigation, or follow on from a survey in order to test conclusions by examining specific instances in greater depth.

The problem of generalisation

Nevertheless, case study also has a number of weaknesses. As previously mentioned, being the study of a single event, it is not possible to generalise from one case to another.

The ability to make generalisations is one of the characteristics usually associated with the scientific or experimental research tradition since independent and dependent variables are closely controlled in order to establish a cause-effect relationship in the data. The aim, therefore, is to ensure that an experiment carried out by one researcher can be replicated in a different experiment by the researcher himself as well as by others at any time, thus ensuring the reliability of the research data.

However, the social sciences are continually subject to the unpredictable influence of a multitude of variables which they cannot possibly control, thus making the establishing of causal relationships very difficult and impossible. Attempts to control such variables would be considered unethical in most cases. It is for this reason that case study methodology lacked status amongst the research community for many years. Being a study of a single event and unable to make generalisations from one case study to another, it was considered of limited value and suffered from a lack of recognition for not being 'proper research'.

In the meantime, however, there was a reaction in the social sciences to relying too heavily on the experimental research tradition and on statistical analysis. In education, for example, Glaser & Strauss (1967) argued that theory should be grounded in observation and should *result* from research study rather than precede it. Consequently, there is now a greater acceptance of a more 'open' style of research which can compliment more traditional styles.

In 1975, Cronbach, who had previously been renowned for his research in the experimental tradition, proposed a more open approach to research:

Instead of making generalization the ruling consideration in our research, I suggest that we reverse our priorities. An observer collecting data in one particular situation is in a position to appraise a practice or proposition in that setting, observing effects in context. In trying to describe and account for what happened, he will give attention to whatever variables which were controlled but he will give equally careful attention to uncontrolled variables.

Nisbett & Watt emphasise the importance of the phrase “observing effects in context” since “the context performs an integrating function, and it cannot be ignored, because each context is unique.”

Bassey (1981), with reference to educational research in particular (but which applies equally to other areas of social science), has argued that one should eschew the pursuit of generalisations and that a case-study by researching, describing and evaluating single events can make a valid and worthwhile contribution to ensuring improvement. Bassey, therefore, distinguishes between the *reliability* of a research-project and its *generalisability*:

I submit that an important criterion for judging the merit of a case study is the extent to which the details are sufficient and appropriate for a teacher working in a similar situation to relate his decision-making to that described in the case study. The reliability of a case study is more important than its generalizability.

Triangulation

Since a case-study can adopt a variety of research methods for data collection, a basic principle adhered to is to check the data against more than one method, a process called *triangulation*; for example, data gathered by interviewing or examining documents against data collected by observation. Whereas interviews can reveal what people believe (or say) happens and documents what should happen, observation can reveal what actually *does* happen, and the difference can be significant.

Planning a research project

Johnson (1984) states that “the fundamental principle of planning effective research is to match the research design to the resources available for its completion”. Since it is no use starting a research project which cannot be completed, one has to give due consideration to:

- the time required
- the human resources available

As previously stated, this often makes a research project a compromise between what is desirable and what is possible.

Johnson (1984) also provides a useful framework for conducting small-scale research which is organised in 11 stages:

Eleven stages of a research project

1. Establishing the focus of the study
2. Identifying specific objectives
3. Selecting appropriate methodologies
4. Arranging access
5. Developing the research instruments
6. Collecting the data
7. Pulling out of the investigative phase of the study
8. Ordering the data
9. Analysing the data
10. Writing up
11. Enabling dissemination

Hypothesis or objectives?

Verma & Beard (1981:184) define a hypothesis as:

a tentative proposition which is subject to verification through subsequent investigation. It may also be seen as the guide to the researcher in that it depicts and describes the method to be followed in studying the problem. In many cases hypotheses are hunches that the researcher has about the existence of a relationship between variables.

Ethnographic research tends to use a hypothesis only as a general rule whereas some survey and experimental research tends to require a more precise, statistical interpretation. Some qualitative research studies evolve as they go along; therefore, they will not devise detailed procedures before they begin. The study itself, therefore, structures the research rather than the other way around. For instance, whereas both survey and

case study involve the formulation of a hypothesis, however, rather than specify a hypothesis at the start of a research project as in a survey, a case-study may allow a hypothesis to emerge as the research develops. However, gathering huge quantities of data without any idea of what to do with it can be dangerous and one needs to control the tendency to collect everything in sight, hoping that some kind of pattern will eventually emerge. Hypothesis or no hypothesis, it is essential to decide what is and what is not worth investigating and to have an idea of how the investigation will proceed. Objectives can be modified as the research proceeds, but they need to be specified at the outset, otherwise appropriate methodology cannot be decided.

Background reading and literature search / The Literature Review

A research review can influence the formation of the objectives of a study. It is a critical review of relevant literature to inform the reader of the existing state of knowledge in the area being investigated. It is not intended as “a furniture sale catalogue” as one author has commented, but is used rather to inform the researcher about the work of others in similar areas so that he/she can place the research being undertaken in context and draw on sources of support. It is, therefore, important that information is meticulously recorded. For this purpose the Harvard system of referencing is adopted on this MA course, and a handbook is available for that purpose

Ethical issues

Researchers are expected to adhere to strict procedures in carrying out any research which involves issues of an ethical nature. At university, for example, students are usually expected to present any proposed research projects to a special committee for approval. Similarly, various professional groups have their own ethical guidelines and codes of practice which are easily available on the internet. In all cases the onus is placed on the researcher to meet the highest ethical standards set by the relevant professional body. The Code of Practice of one of these professional bodies, namely the British Educational Research Association (BERA) is contained in this document as Appendix 2 and the website addresses of others are provided in Appendix 3.

Conclusion

The above has provided a summary of aspects of research methodology on which the student can expand by studying the additional material provided. These aspects have included an introduction to various research ‘traditions’ and research instruments as well as other more general issues. It has aimed at going some of the way in enabling the student to evaluate

the strengths and weaknesses of various methodologies which is an essential prerequisite to effective research. Whereas this module does not require actual research to be undertaken for assessment purposes, nevertheless, as stated at the beginning, it should also serve the student well in providing the skills that will be required for module ECGE-7002 and the completion of Part 2 of the MA course.

Appendix 1

Professional Bodies: Ethical Codes of Practice

- Economic and Social Research Council
<http://www.esrc.ac.uk/about-esrc/information/research-ethics.aspx>
- British Educational Research Association
<http://www.bera.ac.uk/publications/guidelines>
- Association of Social Anthropologists
<http://www.theasa.org/ethics/guidelines.shtml>
- Social Research Association
<http://www.the-sra.org.uk/guidelines.htm>
- British Sociological Association
<http://www.britisoc.co.uk/equality/Statement+Ethical+Practice.htm>
- Royal Anthropological Institute
<http://www.therai.org.uk/about-the-rai/governance/ethical-policy/>
- The British Psychological Society
http://www.bps.org.uk/the-society/ethics-rules-charter-code-of-conduct/code-of-conduct/code-of-conduct_home.cfm
- RCUK Policy and Code of Conduct on the Governance of Good Research Conduct
<http://www.rcuk.ac.uk/documents/reviews/grc/goodresearchconductcode.pdf>

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