

# The Advantages of using Qualitative Research Methods

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Essay from Masters Study**

## Introduction

As a species, human beings are very curious. We want to know about the world, how it (and we) evolved and how it works. We strive to understand, to change our world and to predict events and human behavior. This curiosity is mirrored in popular culture as depicted for example in television 'soaps'. Watch any version of Eastenders and the line "What's going on?" will inevitably be spoken by one or other of the characters.

Along with this curiosity is a need expressed by many individuals to find frameworks, measurements or maps to help them make sense of the chaos of the world. To this end people, both as individuals and groups create for themselves structures, theories and what might be termed rules. That is; the way things are, or the way things could be if such an action took place or such an event occurred. As an instrument of measurement, research can be a very valuable tool.

Research comes in many different formats. The television soap question "What's going on?" perfectly illustrates a common desire for information, clarification. Essentially, it is an excellent research question. Information is usually sought so that the person asking the question can consider a choice of action when they receive the answer. This is an example of a type of informal research. Most story lines however rely on the excitement of the answer being misunderstood, misinterpreted so that the consequent action is chaotic, which makes for good television. A more disciplined approach to research will give a less chaotic and more effective result.

The two most familiar modes of research are quantitative and qualitative research methods. Both methods seek to help answer questions, or to confirm knowledge, to address issues and shape thinking for future action or non-action. Qualitative research takes an in-depth approach to the phenomenon it studies in order to understand it more thoroughly.

When a piece of research is undertaken, there are many factors that need to be considered en route to determining which method or methods will most suitably reveal the information or experience sought. The work of Social Science Professor Chenail (1997) describes how important it is get the right method for the right research query. He bases this observation on his own past experience.

My father had an expression that he was fond of saying on our dairy farm which I think is pertinent here. He used to say, "You tell me what it is and I'll tell you what to feed it!". In the case of research, "You tell me what the data are, and I'll tell you with what to study it!" (Chenail 1997, p.3).

He also outlines how important it is to keep things focused and to review from time to time what you are doing compared with what you think you are doing.

A common question is, Where did we come from? Who are we descended from? The work of Sykes. (2001), Professor of Human Genetics at the University of Oxford, has done much to answer this question. Describing a long period of research into human DNA he says;

My research over the intervening decade has shown that almost everyone living in Europe can trace an unbroken genetic link, way back into the remote past, to one of only seven women. These seven

women are the direct maternal ancestors of virtually all 650 million modern Europeans (Sykes, 2001, p.8).

Sykes' scientific research gave him answers, but the way in which he chose to present his data captured the imagination and made his findings come to life. Based on his DNA findings, which had enabled him to trace the time period that these seven women lived in, Sykes went on to write a fictional life history, or story of each woman. Although fiction, (backed up by known facts in relation to the time frame of the life in question) Sykes nevertheless presents the life histories in a convincing manner.

Starting from scientific data, Sykes successfully mimics this qualitative research method to bring to life his work.

### **Professional Development**

Most professions depend on research for development and 'professionalising', making the 'product' of the profession more helpful or accessible to those the profession seeks to inform or aid. In their paper on research methodologies, Bird, Nicholls and White (1995) point out, research can:

provide the evidence needed to make informed decisions about changes in practice and/or provide the information required for informed debate on a topic. p. 510.

Frequently, although not invariably, it falls to individuals, or groups within the profession, to undertake and produce research. The question then arises of what kind of research is going to benefit the profession. What is the appropriate criteria for the profession (or question)? Clearly the choice of research method is one that merits serious consideration.

Professions that could be described as person centered or client centered, such as Occupational Therapy, the Health Sciences, aspects of Medical Practice and The Alexander Technique [F1] will, by the nature of what is practiced within that profession require a departure from traditional numerical and statistical research analysis. Such methods may have some use, but will tend to reveal only a part of the issues studied.

Qualitative research methods serve to provide a bigger picture of a situation or issue and can inform in an accessible way. Although doctors used case studies for many years, even this art has been re-evaluated and to a certain extent, re-invented. The work of Guba & Lincoln (1985) discussing naturalistic enquiry, was concerned to emphasize the importance of the case report as a vehicle for communication.

The case report is ideal for providing the 'thick description' thought to be so essential for enabling transferability judgments. The case report is, at its best, a 'portrayal' of a situation. (Guba & Lincoln, 1985 p.214).

Plummer (1995) mentions life histories reported as case studies from the 1930's and 1940's. What is emerging is a more systematic method of undertaking this kind of research, leading to more in-depth studies.

### **Traditional Methodologies: numbers and percentages**

Qualitative research paradigms and methods are relative newcomers to the research scene in the arena of Health Sciences. Quantative methods were the more familiar tools for exploration, and numbers and percentages were powerful arguments to drive change, predict events and determine

action. This mindset is referred to by Cant (1997) as 'numbers and stamp collecting'. The obsession with numbers, which tends to be the outcome of quantitative research inquiries, can be misleading because the full picture is not revealed.

It can also lead to completely incorrect assumptions as to the issue studied. Cant cites the case of the medical profession being reluctant to change their minds about what caused peptic ulcers.

They [the medical profession] thought they knew what caused ulcers. Quantitative research was important in persuading doctors the H.pylori was implicated in the development of ulcers, although it was qualitative research which initially identified the importance of the bacteria. p.15.

In this instance, the two methods, qualitative and quantitative were used in tandem to provide a full picture of peptic ulcers and their cause. The two methods are quite different, both in their inquiry methods and their resulting material. In certain instances, it is the combination of the two methods that will prove effective in revealing a bigger picture of an issue.

The idea that research produces numbers that predict action or desired action is so deeply embedded in our consciousness that we often fail to question its reliability at all. The advertising industry, in recognition of this phenomenon, widely uses the concepts of numbers, percentages and research to persuade us to buy various goods and services

BUPA are currently attempting to cash in on the lucrative care homes market. To persuade us of their solid reliability they inform us, using the sombre tones of a concerned spouse, that research (that magic, infallible God) has shown that 80% of people over 50 years old are concerned about care in later life. Thus they hope to stimulate a response of anxiety from the listener. 'Here is a problem-what shall I do? What is the answer?' The actor's voice lightens and brightens as he presents to us the happy solution that BUPA, because they have done this research, can provide us with the ideal care home of our choice and we, or our loved elders, can end our days in sunset valley.

### **Suiting the Method to the Study**

Qualitative research methods are appropriate for particular types of research. They can convey a richness and intensity of detail in a way that quantitative research can not. Qualitative research methods allow for much more detailed investigation of issues - answering questions of meaning, who is affected (by the issue) why, what factors are involved, do individuals react or respond differently to each other. More and more recognition is being given to the individual in the process, not just the observable effect of 'treatment' upon a 'patient,' particularly in studies that involve health practices. Qualitative methods such as semi-structured interviews, case studies and narrative can ultimately reveal more about the effectiveness (or otherwise) of a form of therapy on an individual.

It is important to acknowledge a distinction between measurable effects of treatment and more subjective effects of treatment, particularly in relation to The Alexander Technique as a form of pain management. Reports by Nicholls (1989) on clients undertaking lessons because of limb pain caused by Repetitive Strain Injury (RSI), revealed that for many such clients, lessons did not significantly diminish the limb pain. The clients in question had their lessons funded by the Australian Workers' Compensation Board, a government body that dealt with people injured at work. This body required written reports on all clients. Pain levels, as assessed by the clients, did not diminish significantly from a numerical viewpoint, but the lessons enhanced the clients' well-being and attitudes to themselves and their pain levels so significantly that the RSI was no longer considered

(by the client) to be a dominating problem. If such reports were solely assessed on a pain scale basis, these significant benefits would not be revealed. Although not the subject of formal research, these reports, written by the Alexander Teacher, were analyzed for common themes and the client/teacher language mapped out for comparison. The results clearly indicated that a more inclusive view point, such as qualitative research would take, gave a significantly more informed picture. These findings were then communicated to the Workers' Compensation board, which continued to fund lessons for the clients so that each client received a total of 40 lessons before being asked to self-fund. Many clients at this point were in part time employment and continued with lessons to further enhance their well-being.

The nature of these reports was as follows:

Client attends with self-assessed pain scale of 6/8 on a scale of 1-10.

Alexander Teacher, by case study interview, assesses whole history, not just of limb pain but of the effect on mobility, well being, life style & employment (most were on disability benefits)

A course of lessons was undertaken and a report written for the funding body (Workers' Compensation Council, Australia ) in respect of each individual client.

Client reassesses pain using same scale as before. Reports slight decrease, i.e.4/6. This is not considered low enough for the client to be re-employable or significantly improved judged by pain scale alone.

Reports reveal a significant improvement in other areas outside of the pain scale indicators. In four out of the six cases, clients were able to undertake part time employment, in a different field from their previous occupations that had caused the problems in the first instance.

From the point of view of the funding body, the intervention method (Alexander Technique lessons) was considered a failure.

From the point of view of all the clients, including the two who were still unemployed, the intervention method (Alexander Technique lessons) was considered a valuable management tool for the limb pain, self and quality of life.

### **Differences in Methods**

Research projects using qualitative measures have smaller sample sizes than quantitative studies. This in itself leads to a different approach when it comes to utilizing the data collected. As Gifford (1996) points out in her paper on qualitative research:

While the computer has greatly assisted investigators in managing large volumes of data, the core of qualitative analysis is interpretation. p.59.

The larger sampling available to quantitative research methods enables findings to be generalized from the research sample to the population at large. In qualitative research, such generalisability is not a relevant criterion. Qualitative research seeks to deal with human experience and, as such is more concerned with transferability as a way of validating findings. Guba (1981) describes this in the following manner.

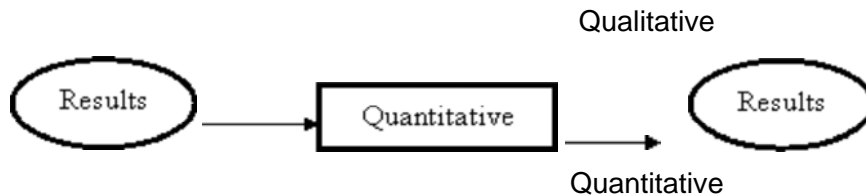
Research meets this criterion [transferability] when the findings fit into contexts outside the study situation that are determined by the similarity or goodness of fit between the two contexts. p.216.

### **Examples of utilizing both Qualitative and Quantitative research methods**

On first sight, it may appear that qualitative and quantitative methods are very different creatures that are not easily harnessed together. However, used intelligently, the two can compensate for each other's weaknesses and compliment each other's strengths. There are various ways in which these methods can be used in tandem to produce full and informative results. The work of Stekler et al (1992) offers various models that show how such a duality of methods could work.

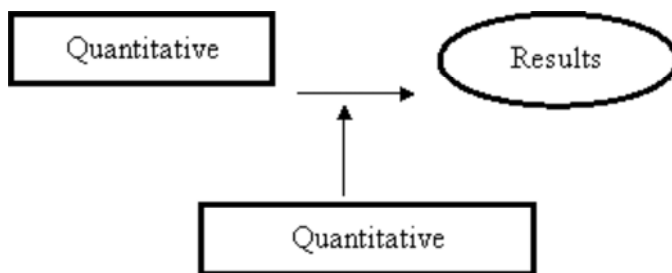
Model 1

Qualitative methods are used to help develop quantitative measures and instruments.



Model 2

Qualitative methods are used to help explain quantitative findings.



### A New Back-Pain Study

Currently researcher Professor Paul Little from Southampton University , School of Medicine , is running the pilot phase of a research project on the effectiveness of The Alexander Technique on back pain, compared with massage and exercise. The trial is government funded and considered a priority study because back pain is one of the commonest causes of lost working days and consequently cost both the NHS and Industry a great deal of money. This trial represents a synthesis of quantitative and qualitative research methods that together will give a full and vivid picture of what results were obtained, how these results were perceived by different parties involved in the trial and recommendations to the medical profession based on the analysis of the various findings. The project is organized along the lines of model two outlined by Stekler (1992).

Participants are selected by past history and their experience and 'level' of back pain assessed using the Roland Morris disability scale [F 2]. This, whilst a quantitative assessment in so much as if a patient ticks four boxes, they are deemed to have a back problem, nevertheless consists of statements about back pain that relate to the experience of it rather than a measurement of it. They also partake in a semi-structured interview both before and after participating in the trial, and fill in questionnaires as to their experience of the therapy offered.

Alexander teachers giving lessons to participants are also required to keep records that will contribute towards the research question. These records relate both to procedural activities and experience of learning. They are couched largely in qualitative terms.

The huge amount of data thus collected will ultimately be assessed partly by statistical means but also by a summary of case studies.

This research quite properly fits its methods to that which it is studying. It will provide 'numbers' where numbers are significant and can reveal effectiveness of treatment, particularly in relation to cost. It will use qualitative measures to gain insight into experience of treatment, which is a different issue.

Clearly then, what is important is that the choice of methods allows the research room to 'breathe' in a way that is not necessarily predicable from the outset. Qualitative methods are, by their nature, more suited to the type of research that is likely to be undertaken in the fields of health sciences, occupational therapies, humanistic psychology and related fields. These methods do not 'reduce' experience and individuals too neatly into boxes. They are painting with a broader brush stroke and revealing more of the whole picture than even the most sophisticated of number crunching can do.

### A Creative Process

Qualitative research has often been described as, and likened to a creative act. Whilst there are many different methods that can fit under the umbrella of qualitative research, all methods have similar territory to cover, and the approach is recognizable as a creative inquiry. Higgs & Titchen (2001), take a refreshingly open view of human creativity both in professional practice and research. Describing creativity as an integrative factor, they say;

Our being, the self we bring to professional practice, is a creative entity, meeting individual needs with individual solutions. p. 14.

The process of qualitative research may be compared to the process of photography. If one wishes to create a satisfactory image, there are steps one needs to take to secure it. In outlining the steps, it is useful to bear in mind that each step relates to each other step. Although they appear to be sequential, they all inform and bear upon each other. It is rather like a live jigsaw puzzle whose pieces can be arranged in many different ways, but which nevertheless, must be joined together to make a coherent picture. Here, I have outlined the two processes of photography, which I studied to degree level, with qualitative research, to which I am a newcomer.

### A Comparison of Creative Processes

Photography	Qualitative Research Project
An idea for an <b>image</b> is considered	An area of <b>curiosity</b> is identified
<b>Ways</b> of acquiring that image are considered. i.e. location, still-life, etc.	<b>Ways</b> of addressing that area are considered. i.e. What are my questions? What do I want to know about this area of curiosity?
<b>Technicalities and practicalities</b> are considered. i.e. What type of film is used? What are the light meter readings, speed of shot? what angle is selected? Is this the right day? Are these the best conditions? How is this image framed (by the camera?)	<b>Technicalities and practicalities</b> are considered. i.e. What type of research methods used? Where will I do this? With whom? Are these the best conditions? How do I formulate the framework of this inquiry? Ethical considerations.

The image is taken: A moment frozen in time, a representation of the first idea.	The research is undertaken: a sampling of the area of curiosity, a representation of the first idea.
The negative of the image is developed. The image appears with colours reversed. Nevertheless it is possible to appreciate texture, contrast, tone and composition. Density of negative is identifiable.	The data is collected. It can appear confusing; it is unorganized, unprocessed, but obviously rich in detail, intensity and 'thickness of description'.
Technicalities of development are considered. Timings, choice of photographic paper, choice of light filters and chemicals all affect the final image. Trial sample images may be tried.	Technicalities of data processing are considered. What to include, what to put to one side. How to present the data (what is the product?) These choices all influence the outcome. Different ways of interpreting or presenting the data may be tried.
The negative is developed. The image begins to appear, aspects both foreseen and unforeseen emerge. As the image develops the eye sees more and more detail. What appears as shadowy outline at the beginning of the development becomes dense, rich and full. Skill is required to decide when the image is 'finished'.	The research is developed. In the process of putting it together aspects both foreseen and unforeseen emerge. Skill is required to decide when the research is 'finished'
The image is shown to others, scrutinized both by self and other photographers.	The research is shared and scrutinized both by self and other interested parties and peers.
Decisions may be taken about further images, based on the process of producing this one. This could include reviewing any of the above steps.	Decisions may be taken about further research, based on the experience of undertaking this one. This could include reviewing any of the above steps.

## Conclusion

If, in undertaking research to inform your practice, either as a means of self reflection, or as a means for improvement, you require a vivid picture. The question is; how will that vivid picture be obtained? And, most importantly, how will such a picture be evaluated and be useful as a tool either in its own right or to inform further research? There are key questions that require answering if this picture is going to be allowed to develop:

What is being researched?

Why is this research being undertaken?

How is this research being undertaken?

What anticipated directions might this research lead to?

Is there scope for the unforeseen to emerge?

How will the research data be presented?

Will this research withstand the gaze of a peer group?

In conclusion, the advantages of qualitative research methods are that they allow the human in the process space to be seen, and heard. They are suited for sensitive issues that might require probing for more information and ideal for generating an hypothesis that might then be tested using

quantitative methods. They can be used to pre-test some material to find out what a target audience thinks about it. This in turn helps inform decision making in a rounded and holistic way.

#### Footnotes :

**F1. The Alexander Technique.** A technique involving psycho-physical integration, improving breathing, balance and co-ordination by means of manual guidance and verbal instruction from a specialist. Used by sufferers of bio-mechanical conditions as well as actors, singers and musicians.

**F2. Roland & Morris Disability Questionnaire.** A self-report, self-completed questionnaire designed to assess the degree of functional limitation in patients consulting with low-back pain in primary care. Twenty-four items selected from the Sickness Impact Profile with the term "because of my back" added to each to make it LBP-specific.

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