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Research Philosophy and Research Design

Introduction

In the introductory chapter, developing self-awareness was a key process outlined and it was stated that it is possible you have assumed that the way you view the world is the same as the way that everybody else views the world. The term 'common sense' was used in this discussion. We noted then, you could believe it is common sense that the way you look at the world is the same way that others look at it. However, we also saw earlier that one person's common sense is not necessarily the same as another's! If we accept that there are likely to be differences between people's view of the world, it may not come as a surprise that the way some researchers view the world, is very different from other's views.

Research philosophies

The idea that there are different views of the world, and the processes that operate within it, is part of what is known as philosophy. Philosophy is concerned with views about how the world works and, as an academic subject, focuses, primarily, on reality, knowledge and existence. Our individual view of the world is closely linked to what we perceive as reality. On a day-to-day basis outside of your academic work, it would be unusual to think often about the way you perceive reality and the world around you. However, in relation to your dissertation, it is very important to realise how you perceive reality. Your individual perception of reality affects how you gain knowledge of the world, and how you act within it. This mean that your perception of reality, and how you gain knowledge, will affect the way in which you conduct the research in your dissertation.

■ Qualitative and quantitative paradigms

The key term relating to the way of looking at the world is 'paradigm'. The researcher Kuhn introduced the concept of the existence of different paradigms (see Kuhn, 1970). The major reason this concept is important is that the paradigm we use to view the world, on a day-to-day basis, is very likely to influence how we conduct research. Attempting to summarise Kuhn's ideas on paradigms, Long (2007: 196) stated:

a paradigm is a pre-requisite of perception itself – what you see depends on what you look at, your previous visual/conceptual experience (the way you have been taught to think) and how you look.

As a way to start to think about what comprises the concept of a paradigm, consider the following brief example. In the early years of the 21st century, a major world bank ran a series of adverts about how it was important, when 'doing business', to understand cultural differences in a number of countries. One set of adverts had the meaning of, what at first glance, appeared to be the same word in several different languages, to indicate cultural differences, while another set of adverts had a photograph of an insect, a relatively large cricket. Three of the different ways of seeing/viewing this cricket were as follows: a pest, (in parts of the USA, some crickets are regarded as garden pests); a food item (crickets are eaten as snacks in Mexico); a pet (the Chinese and Japanese have kept them as pets for centuries). So the way you 'see' a cricket can vary greatly from country to country, culture to culture and will also depend on your individual world view.

Although each individual has a different view of the world to other individuals, there are not an infinite number of different views. In relation to research, it has become clear over the past one hundred years or so, that there are really only two major ways of 'looking at the world'. One view regards the world as largely objective (there is only one truth or a limited number of universal truths) and measurable in terms of the use of numbers. The other view suggests that the world is largely subjective (open to several interpretations) and numeric measurement is not always possible, or desirable and hence words are able to indicate nuances more accurately. In summary, these are usually referred to as the quantitative and the qualitative paradigms, respectively.

When comparing paradigms there are three important questions:

- What is real (ontology)?
- How can we know anything (epistemology)?
- What methods should we use to conduct research (methodology)?

■ **Ontology**

The question, 'What is real?' is concerned with the concept of ontology, and in relation to this there are two possible responses, depending on the specific paradigm. In one paradigm, the response to the question: 'Is there a single objective truth/a knowable reality affected by a consistent set of laws?' would be a 'Yes'. From the perspective of the other paradigm, the answer to the question is that everything is relative, there is no such thing as one objective truth or even universal truths, but merely a number of subjective truths.

Those who believe there is a single objective truth are usually referred to as 'positivists' (there is more discussion of this term below). Such people believe there are universal truths that are waiting to be discovered. While those who believe there is no reality other than what individuals create in their heads are known as 'constructivists' or 'interpretivists'. The term constructivist has emerged as those who use this approach and who believe, in relation to research, that there is no objective reality, but that reality is constructed by each individual. Therefore reality is subjective. Phenomenology is the term given to the research approach of such researchers (there is more discussion of phenomenology below).

■ **Epistemology**

The response to the question 'What is real?' affects the way in which knowledge is obtained. So, following on from the question 'What is real?' is 'How do we know anything about the world?' What we perceive of as reality has an effect on our knowledge of the world. Hence, each of the two different paradigms not only has a different perception of reality, but a different perception of knowledge about the world. In other words, what we think of as real, affects the way we gain knowledge.

If we perceive the world as having a number of universal truths, then these truths can be 'discovered' by carrying out 'objective' research, in which the researcher does not interact with what is being researched. In

this context, neutral, objective research will be the appropriate way to gain unbiased knowledge. However, if we see the world as having multiple, contextualised ‘realities’, rather than objective, universal truths, then an appropriate way to gain knowledge would be for the researcher to interact with those being studied, in an attempt to reveal their attitudes and behaviour in relation to whatever is being studied. In summary, the way we perceive reality influences how we believe knowledge is gained and the process of obtaining that knowledge as a researcher. The key new concept here is ‘epistemology’ which is concerned with how we gain knowledge.

■ **Methodology**

If we accept that our understanding of reality affects the way we gain knowledge of reality, then we need to accept that this will affect how we actually conduct research about reality (or what we term the ‘methodology’).

The links between the important concepts of ontology, epistemology and methodology are neatly summarised by Taylor and Edgar (1999:27):

‘the belief about the nature of the world (ontology) adopted by an enquirer will affect their belief about the nature of knowledge in that world (epistemology) which in turn will influence the enquirer’s belief as to how that knowledge can be uncovered (methodology).

Teddle and Tashakkori (2009) summarized the contrast between each of the two conventional paradigms. When discussing epistemology, Teddle and Tashakkori indicated that, in terms of the relationship between ‘the knower and the known’ (in other words the researcher and what the researcher is researching), in the quantitative approach, the researcher and what is being researched are viewed as independent of each other, whereas in the qualitative approach, they are interactive and inseparable. Teddle and Tashakkori also stated that in terms of ontology, quantitative researchers believe that reality is single and tangible, whereas qualitative researchers view reality as constructed and hence multiple. These differences in ontology and epistemology mean that different research methods have been employed, with quantitative researchers using deductive approaches, whereas, in contrast, qualitative researchers have tended to use inductive approaches.