

Analysis of Research Methods on Foundations, Assumptions and Praxis

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Abstract: It is important for people to understand the philosophical grounding of the two paradigms as these assumptions highlight the strengths and weaknesses of both approaches. Therefore, there are three sections in this paper. In the first section, the philosophical assumptions which underpin the methodology and methods will be introduced and the relationships between them will be explained. Secondly, an alternative way will be highlighted to improve upon the original methods provided in the article. Finally, the ethical problems and challenges will be listed; and the suggestions regarding such ethical issues provided.

1. Introduction

There have been a number of debates which have taken place regarding positivism and interpretivism (Steup and Sosa, 2005) [1]. The former has observed and measured human behaviour (Thomas, 2009) [2]; and has argued that reality is made up of 'what is available to the senses', and that both the essential and human sciences share the same logical and methodological principles which deal with facts and have the tendency to be quantitative. Thus such principles generally reject the importance of peoples 'opinions (Gray, 2009) [3]. However, interpretivism provides a different paradigm which changes the complication of human behaviour (Gray, 2009) [3]. Interpretivism has many forms and argues that people are not simply objects. The collection of data collated from the viewpoint of the participants is then interpreted by the researcher in an attempt to uncover meanings, perspectives, and explanations (Gray, 2009) [3]. Therefore, it is important for people to understand the philosophical grounding of the two paradigms as these assumptions highlight the strengths and weaknesses of both approaches. In addition, it can help people to clearly understand the epistemological differences and foster awareness of appropriate different kinds of knowledge for different aims (Hathaway, 1995) [4]. Moreover, it can enable a consideration of their arguments and assumptions regarding how we can understand the social world and the properties it actually contains (May, 2001) [5].

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2. Ontology and Epistemology

Ontology is the study of peoples' view of reality and being. It is focused on studying 'what is', with the nature of existence. According to Grix (2004, p. 59) [6] the definition of ontology is "about the nature of social reality, claims about what exists, what it looks like, what units make it up and how these units interact with each other." It means that people study what they mean when they say that something exists. Epistemology also offers a philosophical grounding for determine what sort of knowledge is legitimate and adequate (Gray, 2009, p. 17) [3].

Maynard (1994, p. 10) [7] has also explained that epistemology is focused on offering a philosophical background for 'deciding what kinds of knowledge are possible and how people can make sure that they are adequate and legitimate.' For instance, in this article, the researcher has

attempted to explore the views of students and teachers with regards to cross-gender aggression. The perspectives of both parties have been achieved through the process of interview in order to achieve the required goals. This is because of the fact that the methodological approach of the researcher can reflect specific ontological, epistemological and research methods which are adopted in a study (Grix, 2004) [6]. Thus different research strategies can be derived from a different ontological and epistemological position.

2.1 Constructivism

Constructivism as one of the epistemological stances which has four particular features:

First, constructivism argues that there is a real world which is based on what people can experience. However, reality is local and there are several realities.

Second, human's mind has symbols by perceiving and interpreting the world.

Third, people's thought is imaginative and develop out of perception, sensory experiences and social interaction.

Fourth, meaning is a result of an interpretive process and it depends on the experiences of individual (Cobb, 1994) [8].

In this article, the author has regarded constructivism as the major philosophical and epistemological assumption which underpins the research. For instance, in order to investigate explanations for cross-gender aggression in schools, the researcher has investigated the perspectives of four school students who have talked about their own experiences of peer aggression (Owens, Shute & Slee, 2005) [9].

2.2 Theoretical Perspectives: Interpretivism

Interpretivism is included within anti-positivism which helps in the understanding and explaining of social and human reality. Crotty (1998, p. 67) [10] has noted that the interpretivist approach seek 'culturally derived and historically situated interpretations of the social life-world.' This approach is based on the philosophical doctrines of idealism and humanism. It maintains that the view of the world that we see around us is the schema of the mind. Walliman (2011, p. 22) [11] says that 'this does not mean that the world is not real, but rather that we can only experience it personally through our perceptions which are influenced by our preconceptions, beliefs and values; we are not neutral, disembodied observers but part of society'. Interpretivism assumes that there are some differences between natural reality and social reality, therefore it requires different kinds of method (Gray, 2009, p. 21) [3]. Interpretivism is closely connected with constructivism within epistemology (Gray, 2009, p. 21) [3]. In this article, boys, girls and teachers need to share their experiences and opinions regarding cross-gender aggression, and subsequently the author has interviewed them in order to collect data. This is because it is thought that understanding their individual experiences will be as important as concentrating upon their explanations (Silverman, 2006) [12]. Therefore, interpretivism is regarded as the theoretical foundation of this article.

Interpretive research is generally inductive in nature and is often associated with qualitative approaches to data gathering and analysis. The following section will analyse the phenomenological approach in the article.

2.3 Methodology-Phenomenological Research

Phenomenology is concerned with how we experience the world rather than the ideas and concepts about how the world actually is (Newby, 2010, p. 36) [13]. The core of phenomenological study is comprised of individual and collective experiences of what many refer to as the 'life-world'. The world that is explored by research is perceived as an experienced world (Newby, 2010, p. 36) [13]. In this article, the author has used the semi-structured interview to provide an in-depth analysis of the phenomena. For example, the researcher has selected students and teachers from four schools and has used the thematic analyses to gather in-depth information. The qualitative method, as part of the phenomenological approach, advocates the study of direct experiences taken at face value (Cohen & Morrison, 2007) [14]. It offers the prospect of authentic accounts of complex phenomena and it is deemed suitable for small-scale research; as well as the description of

experiences which can tell an interesting story (Denscombe, 2007) [15].

In summary, there is an interrelationship which exists between the theoretical stance adopted by the researcher, the methodology and methods used, and the researcher's view of ontology and epistemology. Interpretivism, constructivism and phenomenology provide the assumption through which this small-scale research is underpinned. It can help people to explore the phenomena in greater detail and find suitable solutions to resolve it.

3. An Alternative Way

The phenomenological approach can enable the researcher to study the experience from the perspective of both students and teachers. It can also be an alternative way to improve the research project. Gray (2009) [3] has stated that it is often the case that mixed methods will be used in practice. One reason is that research projects usually have different research issues, and therefore a research method appropriate for one question may be inappropriate for another. Another reason is that it can enable triangulation to be used (Gray, 2009) [3].

Firstly, the author has used the deductive process to carry out the research. Thus, quantitative methods could have been added in this study. To be more specific, the researcher could have handed out 200 questionnaires (or more than this number) from Grade 7 to Grade 9. Since the purpose of this research project was attempting to investigate reasons for teenage bullying in schools, the semi-structured questionnaire has been used to explore the answers pertaining to the research questions. For instance, the whole questionnaire has been comprised of two parts; the first part of which has included close-ended questions. The questions have included those such as: 'Are you male or female? Therefore this type of question could enable researchers to select the different gender of interviewees. Have you personally experienced aggression? (Choose yes or no). A question such as: How and what kinds of aggression have you ever experienced? was asked during the first part of the questionnaire. The second part of the questionnaire has used open-ended questions to explore phenomenon in order to gather more information.

Secondly, the inductive process was also used in this study and the semi-structured interview was adopted. For example, when the students and teachers completed their questionnaire, researchers were able to select the participants according to the answers. Specifically, the article has used five elements to obtain the results from the interview. Hence, the five topics (types of boy-to-girl aggression; effects on girls; explanations for this aggression; characteristics of victims; girls' responses to boys' aggression and views on interventions) all of which can be regarded as the standard to select interviewees based on the questionnaire.

In addition, due to ethical issues participants should have been interviewed separately rather than in a group (Cohen & Morrison, 2007) [14]. Finally, in accordance with the questionnaire and interview transcripts, researchers should have been able to collect the most reliable and valid data.

The advantages of the methods (semi-structured interview) used in the article is that it can help researchers to measure attitudes and experiences of informants because they can provide understanding about participants' views and provide an in-depth inquiry as well as a moderately high measurement validity (Drever, 2004) [16]. The alternative method of adding the semi-structured questionnaire to narrow down the research questions could also help the researchers as they could capture the specificity of a particular case and become more focused on the research question (Cohen & Morrison, 2007, p. 321) [14]. However, the weakness of such an alternative way is that the questions can overlap in both the questionnaire and interview. It is also considered to be time-consuming to utilise both a questionnaire and select participants.

4. Ethical Issues

Ethics pertains to how the individual thinks about the inquiry and this particular research project. Ethics are principles of conduct about what is considered to be right and wrong (Thomas, 2009, p. 146) [2]. In this article, it has been considered beneficial that the researchers have named the four schools. For example Balton, Hyland, Hills and Valley (Owens, Shute, and Slee, 2005) [9].

Therefore, the author has been able to carry out the principle of anonymity (Cohen and Morrison, 2007, p. 64) [14].

However, there are still some ethical challenges and problems which exist in this research project. Firstly, the article has described the fact that the participants were randomly selected from the schools; whilst the researchers did not ask the participants whether they wanted to participate in the study to share their experiences of aggression. Thus there is a situation whereby some boys and girls may not have talked about their experiences of aggression; and the author has not mentioned this factor in the article. This is because Cohen and Morrison (2007) [14] have stated that the right to privacy may be easily violated in the investigation or 'denied after it has been completed. At either point the participant is vulnerable.' In addition, the group interview had certain ethical challenges.

Thus in small groups, especially for students who have shared their experiences of cross-gender aggression, they may subsequently experience retribution from other members of the group. Cohen and Morrison (2007) [14] have noted that researchers should consider the 'confidentiality of participants' identities, and that any violations should be made with the agreement of such participants. The essence of anonymity is that information provided by participants should in no way reveal their identity'.

5. Suggestions

Before facilitating such a study, researchers could have used an ethical check list to carry out the ethical principles. According to Cohen and Morrison (2007) [14] when researchers facilitate educational research, they can use the 'Ethical principles for the guidance of action researchers' to help them to avoid ethical dilemmas. In addition, research should consider privacy and protect people from unwarranted interference in their affairs (Cohen and Morrison cited from Strike, 1990).

Conclusion

In summary, this paper has used Crotty's framework to analyse the assumptions and reasoning which underpins the methodology and methods because of its consistency. There is a close interrelationship between the philosophical grounding and approaches. To be more specific, constructivism determines the stance of interpretivism; whilst the phenomenological approach determines the qualitative methods used in the research project (Crotty, 1998) [10]. Since the article has attempted to gather data from the viewpoint of both students and teachers the interview has been considered an essential method to facilitate a more in-depth study. However, the single method may have been insufficient to determine the truth behind the reality and therefore mixed-methods have been mentioned in the paper. The improvements associated with the methods have attempted to help the researcher to collect reliable data. In addition, the ethical issues have played a crucial role in the research project as this has been related to how inquiry has been considered as well as respect for others (Thomas, 2009) [2]. Therefore, it reminds every researcher that they should consider the ethical problems and avoid ethical dilemmas which can result within the research process.

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