

## Chapter 5

# Social Science Philosophy Behind Data Analysis With Special Reference to Philosophical Perception

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### **ABSTRACT**

*Philosophy is a science of knowledge, and it concentrates on epistemology, ontology, axiology, and methodology. However, researchers have understated the role of philosophy, even though it is very interwoven with research. This chapter is to position data analysis in philosophy and show its epistemological and ontological underpinnings using the philosophy of perception. The methods are a desk study, literature reviews, and lecture notes. Traditionally, the definition of knowledge is ‘justified true belief’ (JTB). The JTB is placed in the context of empiricism, rationalism, and/or dualism. These are further linked to ontological materialism, idealism, and dualism. The chapter has tried to draw a relationship with perception’s direct realism, indirect realism, and dualism respectively. In conclusion, knowledge is justified by good evidence (empiricism) and reason (rationalism). The chapter recommends researchers utilise the philosophy of the sciences in order to improve on their research.*

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## **1. INTRODUCTION**

In practice, on the one hand, the social sciences carry out their duty simply as science. The duty includes the use of ontology, epistemology, axiology, and, methodology. On the other hand, by the nature of the social sciences, human beings, their occupied environments, and, activities are the targets of study. Hence, when it comes to the application of scientific methods in the sciences, there are divided opinions in the social sciences. One school of thought believes that the social sciences should use the same scientific methods and quantification just as the natural sciences; and, the other school of thought disagrees and advocates the use of qualitative/language methods (Gerring, 2001). Yet, there is a recent movement in the social sciences that uses mixed methods (combined quantitative and qualitative scientific methods) (Gerring, 2001; Giddings, 2006; Pelto, 2015).

The complexities and diversities within the social sciences are many and deep (Gerring, 2001). A further division is the one between the materialists (physical data) and idealists (mental data) (Rose & Brown, 2015). This particular dichotomy is more often than not a major challenge to students of post-graduate research. For instance, the written and submitted post-graduate theses contain pieces of evidence of the confusion of students. Moreover, during the oral defence of the post-graduate thesis (viva voce), the presentations and responses to questions show the frustrations of students. During such difficulties, students find refuge in the term “it is perception studies”.

Therefore, this paper is an attempt to contribute to the solution to this problem. This paper argues that perception is first about perceived reality. Going forward, it is the nature of this reality, that is contentious. The argument, according to Rose and Brown (2015), is as to whether we perceive material reality (materialism) or mental/immaterial reality (idealism). Secondly, there is the standpoint of pragmatic realism, which is the usefulness or necessity in a situation and not necessarily a hybrid (Putman, 2020).

## **2. EPISTEMOLOGY OF DATA ANALYSIS - WHAT IS KNOWLEDGE?**

An epistemology is a scientific study of knowledge; the study of the theory of knowledge; or the science of knowledge. It deals with the main issue of mind possession of knowledge. The root words of epistemology are in Greek “episteme” meaning knowledge, and “logia [logos]” referring to science, study, doctrine, or giving an account (Steup & Neta, 2020; Kivunja & Kuyini, 2017). Epistemology tries to answer the most critical question in philosophy, that is, how do we know

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