Positivism Research Philosophy

It has to be acknowledged that the doctrine of positivism is difficult to be explained in a precise and succinct manner because there are vast differences between settings in which positivism is used by researchers. The number variations in explaining positivism may be equal to the number of authors who addressed the **area of research philosophy**. Nevertheless, in its essence, positivism is based on the idea that science is an only way to learn about the truth. The text below explains positivism with the focus on business studies in particular.

1. Positivism: Introduction

As a philosophy, positivism adheres to the view that only "factual" knowledge gained through observation (the senses), including measurement, is trustworthy. In positivism studies the role of the researcher is limited to data collection and interpretation through objective approach and the research findings are usually observable and quantifiable.

Positivism depends on quantifiable observations that lead themselves to statistical analysis. It has been noted that "as a philosophy, positivism is in accordance with the empiricist view that knowledge stems from human experience. It has an atomistic, ontological view of the world as comprising discrete, observable elements and events that interact in an observable, determined and regular manner"[1].

Moreover, in positivism studies the researcher is independent form the study and there are no provisions for human interests within the study. Crowther and Lancaster (2008)[2] inform that as a general rule, positivist studies usually adopt deductive approach, whereas inductive research approach is usually associated with a phenomenology philosophy. Moreover, positivism relates to the viewpoint that researcher needs to concentrate on facts, whereas phenomenology concentrates on the meaning and has provision for human interest.

Researchers warn that "if you assume a positivist approach to your study, then it is your belief that you are independent of your research and your research can be purely objective. Independent means that you maintain minimal interaction with your research participants when carrying out your research."[3] In other words, studies with positivist paradigm are based purely on facts and consider the world to be external and objective.

The five main principles of positivism philosophy can be summarized as the following:

1. There are no differences in the logic of inquiry across sciences.

2. The research should aim to explain and predict.

3. Research should be empirically observable via human senses. Inductive reasoning should be used to develop statements (hypotheses) to be tested during the research process.

4. Science is not the same as the common sense. The common sense should not be allowed to bias the research findings.

5. Science must be value-free and it should be judged only by logic.

The following are a few examples for studies that adhere to positivism research philosophy:

- A study into the impact of the global economic crisis of 2007 2009 on the brand equity of US-based listed companies
- An analysis of effects of foreign direct investment on GDP growth in Vietnam
- A study of relationship between diffusion of innovation of mobile applications and saturation of applications in a country

2. Science as an Underlying Ground for Positivism

Positivism often involves the use of existing theory to develop hypotheses to be tested during the research process. Science can be specified as a cornerstone in positivism research philosophy. Specifically, positivism relies on the following aspects of the science.

1. *Science is deterministic*. Scientific approach is based on assumption that X causes Y under certain circumstances. The role of researcher when following the scientific approach is to discover specific nature of cause and effect relationships.

2. *Science is mechanistic*. Mechanical nature of scientific approach can be explained in a way that researchers develop hypotheses to be proved or disproved vi a application of specific research methods. This leads to the fact that

3. *Science uses method*. Chosen methods are applied mechanically in order to operationalize theory or hypothesis. Application of methodology involves selection of sample, measurements, analysis and reaching conclusions about hypotheses. Therefore,

4. *Science deals with empiricism*. In other words, science only deals with what can be seen or measured. From this perspective, science can be assessed as objective.

3. Differences between Positivism and Interpretivism

The key features of positivism and social constructionism philosophical approaches are presented in the following table by Ramanathan (2008)[4].

	Positivism	Social Constructionism
The observer	Must be independent	Is part of what is being observed
Human interests	Should be irrelevant	Are the main drivers of science
Explanations	Must demonstrate causality	Aim to increase general understanding of the situation
Research progresses through	Hypotheses and deductions	Gather rich data from which ideas are induced
Concepts	Need to be operationalised so that they can be measured	Should incorporate stakeholder perspectives
Units of analysis	Should be reduced to simplest terms	May include the complexity of 'whole' situations
Generalisation through	Statistical probability	Theoretical abstraction
Sampling requires	Large numbers selected randomly	Small numbers of cases chosen for specific reasons

Alternatively, the differences between positivist and phenomenology paradigms are best illustrated by Easterby-Smith et al. (2008)[5] in the following manner:

	Positivist Paradigm	Phenomenology paradigm
Basic notions	The world is perceived as external and objective Independency of the observer Value-free approach to science	The world is perceived to be socially constructed and subjective Observer is considered a part of the object of observation Human interests drives science
Responsibilities of researcher	Focusing on facts Causalities and fundamental laws are searched Phenomenon are reduced to the simplest elements Hypotheses formulation and testing them	To be focusing on meanings Aiming to understand the meaning of events Exploring the totality of each individual case Ideas are developed by induction from data
Most suitable research methods	Concepts have to be operationalized	Using several methods in order to different aspects of phenomena
Sampling	Samples have to be large	Small samples are analyzed in a greater depth or over longer period of time

4. Shortcomings of Positivism

Positivism as an epistemology is associated with the following set of disadvantages:

Firstly, positivism relies on experience as a valid source of knowledge. However, a wide range of basic and important concepts such as cause, time and space are not based on experience.

Secondly, positivism assumes that all types of processes can be perceived as a certain variation of actions of individuals or relationships between individuals.

Thirdly, adoption of positivism in business studies and other studies can be criticized for reliance to status quo. In other words, research findings in positivism studies are only descriptive, thus they lack insight into in-depth issues.

[1] Collins, H. (2010) "Creative Research: The Theory and Practice of Research for the Creative Industries" AVA Publications, p.38

[2] Crowther, D. & Lancaster, G. (2008) "Research Methods: A Concise Introduction to Research in Management and Business Consultancy" Butterworth-Heinemann

[3] Wilson, J. (2010) "Essentials of Business Research: A Guide to Doing Your Research Project" SAGE Publications

[4] Ramanathan, R. (2008) "The Role of Organisational Change Management in Offshore Outsourcing of Information Technology Services" Universal Publishers

[5] Easterby-Smith, M, Thorpe, R. & Jackson, P. (2008) "Management Research" 3rd ed, SAGE Publications Ltd., London