The Research Philosophy Dilemma for Postgraduate Student Researchers

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Abstract: - **Every postgraduate study calls for the declaration of research philosophy approach and paradigm on which the research being carried out is based. This often gives a challenge to many postgraduate novice researchers in all fields of study. This paper attempts to explore the essential values of research philosophy and Paradigm, demonstrate the position of the key researches on the matter, elucidate the philosophical and research paradigm concerns, the ontology, epistemology and understanding the application of various theories and practices as used in a research study. In application of academic literature review, generalization and systemization coupled with modeling methods in the study. The key pillars of research philosophy and paradigm are highlighted with clear direction to adoption of one and application in an academic research.**

Key words: - Critical realism, Interpretivism, Positivism, Postmodernism, Pragmatism

I. INTRODUCTION

Research philosophy is elucidated as the system of beliefs and assumptions about the development of knowledge [25. When a researcher embarks on the research process, he/she is on a journey of developing knowledge in the particular field or area of study that may lead to a new theory, answering a specific problem for a particular institution that is all in all developing new knowledge [4].

In the research process many assumptions are made whether in awareness on not [17]. These are the axiological assumptions that deals with the role of values and ethics of a researcher applied to the whole research process that explains how the researcher deals with his/her values in the research to culminate into credible findings. Epistemological assumptions about human knowledge that explains what is acceptable, valid, and legitimate knowledge and how it can be transferred to others [11], [18]. The ontological assumptions about the nature of realities and these shapes the way you see and study your research objects [6], [22].

A research paradigm defines the research philosophy. The researcher's clear worldview or vision about the paradigms provides the philosophical, theoretical, instrumental and methodological foundations [5]. Thus the research paradigm is wide structure comprising beliefs, awareness of different theories and practices used to carry out research in a particular discipline [2], [15].

A research design is the process by which a researcher chooses a research technique [5], [15]. A research technique is

a set of methods, tools, algorithms used to perform a specific research inquiry [17], [25]. .Research methodology deals with the general regulations and principals for organizing a research activity [16], [15], [5]. The overall universal research activity corresponds with the research philosophy [9], [1], [18]. This can further be elucidated by the Mark Saunders, Philip Lewis and Adrian Thornhill research onion model, 2016 below.

FIGURE1.1 THE RESEARCH ONION MODEL
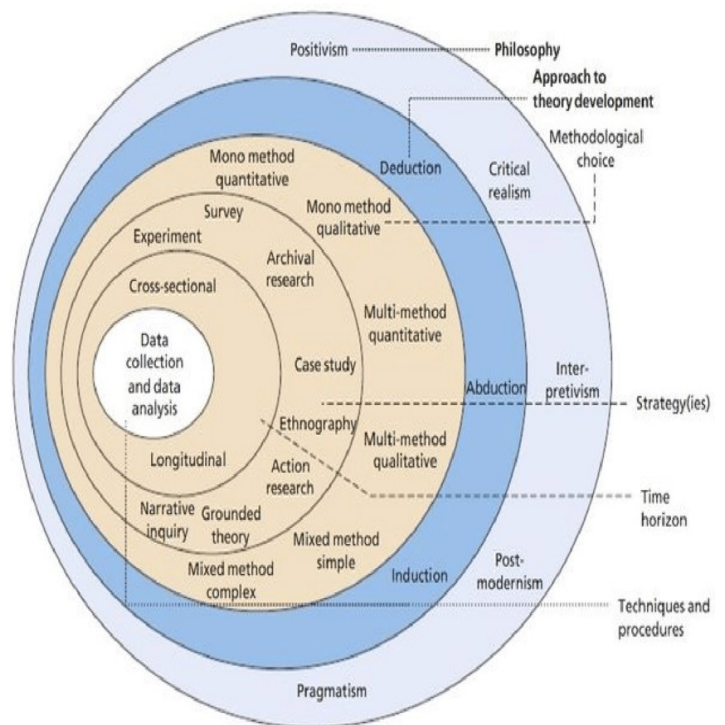
Source:

Adapted from Mark Saunders, Philip Lewis and Adrian Thornhill, 2016

II. RESEARCH PHILOSOPHY

There are a number of research philosophies that research can be aligned, the five major research philosophies are compared in table 1 below.

TABLE1. COMPARISON OF FIVE KEY RESEARCH PHILOSOPHIES

Paradigm: The whole of theoretical and methodological assumptions	Ontology: (nature of reality or being)	Epistemology: (what constitutes acceptable knowledge)	Axiology: (role of values)	Research methods: Systematic ways, procedures, and tools used for data collection and analysis
Positivism	Real, external, independent One true reality (universalism) Granular (things) Ordered	Scientific method Observable and measurable facts Law-like generalisations Numbers Causal explanation and prediction as contribution	Value-free research Researcher is detached, neutral and independent of what is researched Researcher maintains objective stance	Typically deductive, highly structured, large samples, measurement, typically quantitative methods of analysis, but a range of data can be analysed (Survey, experiment, quasi-experiment
Interpretivism	Complex, rich Socially constructed through culture and language Multiple meanings, interpretations, realities Flux of processes, experiences, practices	Theories and concepts too simplistic Focus on narratives, stories, perceptions and interpretations New understandings and worldviews as contribution	Value-bound research Researchers are part of what is researched, subjective Researcher interpretations key to contribution Researcher reflexive	Typically inductive. Small samples, indepth investigations, qualitative methods of analysis, but a range of data can be interpreted (Case studies, interviews, ethnography)
Critical realism	Stratified/layered (the empirical, the actual and the real) External, independent Intransient Objective structures Causal mechanism	Epistemological relativism Knowledge historically situated and transient Facts are social constructions Historical causal explanation as contribution	Value-laden research Researcher acknowledges bias by world views, cultural experience and upbringing Researcher tries to minimise bias and errors	Retroductive, in-depth historically situated analysis of pre-existing structures and emerging agency. Range of methods and data types to fit subject matter
Postmodernism	Nominal Complex, rich Socially constructed through power relations Some meanings, interpretations, realities are dominated and silenced by others Flux of processes, experiences, practices	What counts as 'truth' and 'knowledge' is decided by dominant ideologies Focus on absences, silences and oppressed/ repressed meanings, interpretations and voices Exposure of power relations and challenge of dominant views as contribution	Researcher is as objective as possible Value-constituted research Researcher and research embedded in power relations Some research narratives are repressed and silenced at the expense of others Researcher radically reflexive	Typically deconstructive – reading texts and realities against themselves In-depth investigations of anomalies, silences and absences Range of data types, typically qualitative methods of analysis
Pragmatism	Complex, rich, external 'Reality' is the practical consequences of ideas Flux of processes, experiences and practices	Practical meaning of knowledge in specific contexts 'True' theories and knowledge are those that enable successful action Focus on problems, practices and relevance Problem solving and informed future practice as contribution	Value-driven research Research initiated and sustained by researcher's doubts and beliefs Researcher reflexive	Following research problem and research question Range of methods: mixed, multiple, qualitative, quantitative, action research Emphasis on practical solutions and outcomes

Adapted from Mark Saunders, Philip Lewis and Adrian Thornhill, 2016

Positivism relates to the philosophical stance of the natural scientist and entails working with an observable social reality to produce law-like generalizations [12]. It promises unambiguous and accurate knowledge and originates in the works of Francis Bacon, Auguste Comte and the early twentieth-century group of philosophers and scientists known as the Vienna Circle. The label positivism refers to the importance of what is 'posited' – i.e. 'given'. According to [5], [7], the positivist focuses on strictly scientific empiricist method designed to yield pure data and facts uninfluenced by human interpretation or bias [14].

Critical realism focuses on explaining what we see and experience, in terms of the underlying structures of reality that shape the observable events. Critical realism originated in the late twentieth century in the work of Roy Bhaskar, as a response to both positivist direct realism and postmodernist nominalise and occupies a middle ground between these two positions [20], [23].

Interpretivism emphasises that humans are different from physical phenomena because they create meanings. Interpretivists study these meanings [19]. Interpretivism emerged in early- and mid-twentieth-century in Europe, in the work of German, French and occasionally English thinkers, and is formed of several strands, most notably hermeneutics, phenomenology and symbolic interactions [5].

Postmodernism emphasises the role of language and of power relations, seeking to question accepted ways of thinking and give voice to alternative marginalised views [24]. It emerged in the late twentieth century and has been most closely associated with the work of French philosophers Jean-François Lyotard, Jacques Derrida, Michel Foucault, Gilles Deleuze, Félix Guattari and Jean Baudrillard. Postmodernism is historically entangled with the intellectual movement of post structuralism [8].

Pragmatism asserts that concepts are only relevant where they support action [10], [3], [13]. Pragmatism originated in the late-nineteenth–early twentieth- century in the USA in the work of philosophers Charles Pierce, William James and John Dewey. It strives to reconcile objectivism and subjectivism, facts and values, accurate and rigorous knowledge and different contextualised experiences. It does this by considering theories, concepts, ideas, hypotheses and research findings not in an abstract form, but in terms of the roles they play as instruments of thought and action, and in terms of their practical consequences in specific contexts. Reality matters to pragmatists as practical effects of ideas, and knowledge is valued for enabling actions to be carried out successfully.

III. CONCLUSIONS

In all disciplines of study, a research philosophy is paramount for a post graduate researcher to align the study to suitable research philosophy that governs the whole study. It will inform the choice of the research design, the approach and methods for the data collection and analysis study and indeed the whole chapter of methodology will revolve around the selected research philosophy. The key research philosophies that one can align the research study are Positivism, Interpretivism, Critical realism, Postmodernism, Pragmatism each having its notations of which a researcher should always be aware of the choice and implications to the whole research study.

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