

Mixed Research Methodology: Justification for Selection

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ABSTRACT

Research in different disciplines and varying situations, demands for different research methodologies. The basic two research methods; quantitative and qualitative, are often found non-applicable in many cases. Rather than sticking on a single research method, it is often very easy to adopt mixed research methods to answer the solve the research problems.

KEYWORDS: Quantitative, qualitative, mixed research methods, philosophical consideration.

Whether quantitative, qualitative, or mixed research methods are chosen, all must be justified with the scopes and conducts of the research [4], [5], and of course maintain the reader's interest [6].

It has been argued that research methodology also refers to the systematic solutions to research problems [7], therefore, to overcome this problem, a quick look on philosophical considerations might help in deciding the selection of appropriate research approaches, research design and research methods. So, it was the first and foremost task to examine this research context through philosophical considerations.

I. INTRODUCTION

The research methodology encompasses research approaches (plans and procedures ranging from broad hypotheses towards methods for collecting and analyzing data), research design (philosophical assumptions and inquiry procedures), and research methods (collecting, analyzing and interpreting data) to solve the research problems or to satisfy the research question and objectives [1].

Therefore, this paper is not only concerned with the selection of research method(s), but it also includes the research approaches and the research design with the appropriate research method(s) to answer the research question and to satisfy the research objectives.

Scholars find that research methodology is a logical procedure that comprises all the actions engaged in executing the research, ranging from collecting data to analyzing data for achieving a conclusion [2]; and the research paradigm [3] and the research design [4] both are interrelated and are very important for reaching the research outcomes.

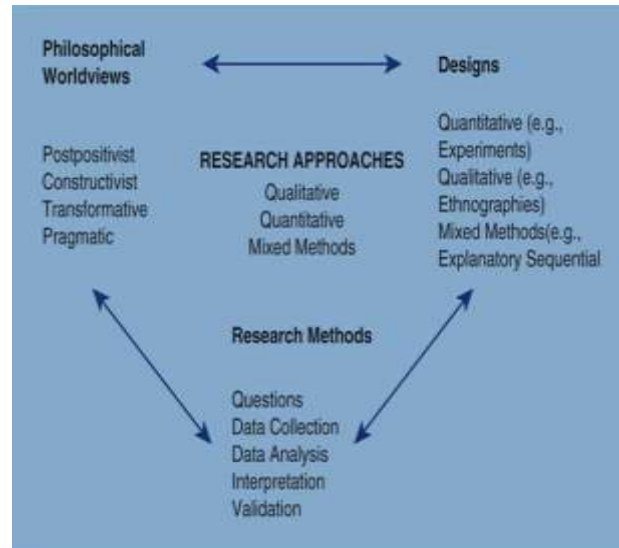
II. PHILOSOPHICAL CONSIDERATION

Though a few scholars have identified conflicts between philosophical and methodological considerations [8], [9]; most of them have argued to go through the philosophical considerations [10], [11], [12], [13], [14]; since it helped in developing a structured and logical research methodology, especially, under critical and unstructured circumstances.

To begin with, philosophical considerations directly influence the research practice though these remains hidden in the research [15] and scholars have suggested to prepare explicit research plans with philosophical exposure [1].

In his book, John W. Creswell, has termed philosophical considerations as philosophical worldviews which was an orientation towards general philosophy considering the nature of research that researchers convey to studies [1].

To be more specific, the universal research framework is shown in the diagram below



(Figure –01 : Research Framework [1])

Research approaches, research designs and research methods described later in this chapter. Meanwhile, it is necessary to clear the philosophical views and to recognize the philosophical stand of the research.

The postpositivist worldview considers traditional research arrangement holding more justification for quantitative research than qualitative research, while the constructivist view, often termed as social constructivism, refers to usual qualitative research approach [1]. On the other hand, transformative worldview is engaged in confronting societal coercion through embracing research investigation required for entwined politics and political revolution schemas, while the pragmatic worldview rises out of activities, circumstances and concerns rather than predecessor situations and is worried for applications that work towards problem-solving adopting both quantitative and qualitative research methods [1].

In fact, to answer the research question and satisfy the research objectives, a mix of both qualitative and quantitative research methods might be the best way towards the solutions.

III. METHODOLOGICAL ORIENTATION

The research, aiming at identifying some critical factors or forces which might have been proven a new phenomenon targeting to attain innovative perceptions. Therefore, it seems to be an exploratory research [7] in nature. Furthermore, it would be a self-explanatory research [1], which developed a unique measure for assessing the

presence of the factors of innovative capabilities in water sector's service delivery.

After ensuring the philosophical orientations, it was also necessary to think about methodological deliberations, which were essential for building the logical sequences towards the research approaches, research design and research methods [11].

IV. MIXED RESEARCH METHODOLOGY

Research approaches include plans and processes that narrow-down wide assumptions into specific method for collecting, analyzing and interpreting data (Creswell, 2014) and selection of research approaches totally related and reliant on the nature of research problems.

The research, for example, aimed to identify the factors or forces or drivers and their impact on particular activity or outcome or put, and if there are not sufficient prior research, it becomes impossible to answer the research question through a single research method. So, that research should be executed through few stages in multiple methods.

The basic research methods are qualitative, quantitative, and mixed method, and in this research, mixed research method integrates components of both qualitative and quantitative approaches (Creswell, 2014) and directs towards research design analysis through merging, connecting or implanting the data that provide a solid insight of the research question and research objectives (Creswell, 2014).

Primarily, for example, as in the first study, using qualitative approach to develop a model (McCusker and Gunaydin, 2015) with related factors

or drivers would be huge troublesome and time consuming and therefore a qualitative method, for example, focus group would be effective, comparing to other qualitative methods of research.

Then, in the second stage of the research, mixing qualitative method with quantitative survey and analyses would ensure the better explanation of thoughts (Mavhura et al., 2013), (Hooli, 2016), (Phu and De, 2016), (McMillen et al., 2017). Thus, the mixed research approaches would be justified and appropriate for the research under such critical and varying situations.

V. CONCLUSION

It has found that scholars/researchers, specifically in the social-science domain, recurrently implement a mixed-methods approach, exploiting the significant effects for methodology and outcomes (Onwuegbuzie and Leech, 2005).

Though the conception of knowledge best suited to qualitative methods, but the research becomes stressed in incorporating varying views and opinions and relating them with the real filed data. Thus, adopting a mixed methodology yielded superior justification for identifying factors or forces or drivers and their impacts (Mavhura et al., 2013), (Hooli, 2016), (Phu and De, 2016) and (McMillen et al., 2017).

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