

Research Designs in the New Normal: A Brief Overview

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Abstract

In the advent of the current pandemic that everyone struggles to adapt and move forward, research nevertheless is not spared but has its own worth during the pandemic period. Thus, this article tries to refresh the context of the different designs that researchers used in the field. This article also showed a brief perspective on the different research designs and their practical application in the field especially for those novice researchers, under graduate students, graduate school students etc. Finally, the article also intends to help researchers choose the best research design for their prospective projects especially this time of “new normal”.

Keywords: Quantitative Research, Qualitative Research, Mixed-Methods Research, Research Design, New Normal

1. Introduction

Writing research in the “new normal” is never that easy. Although there are many ways and techniques that have been introduced and practiced, with such critical situation like the pandemic that we are experiencing right now created some innovative perspectives in writing manuscripts or articles for everyone to read. Researchers struggled to find ways to keep abreast with the latest innovations and development regarding the current pandemic situation. They exhausted all means to produce manuscripts which can impact the whole society. As to Blair et al (2019) posited that researchers need to select high-quality research designs. Choosing the best research design is very important since this decision spells out acceptance or failure among publishing journals. Bian and Lin (2020) provided a perspective regarding the trends

in research design during the pandemic. On the other hand, Vindrola-Padros, et al. (2020) reflected on the emerging lessons from COVID-19 pandemic research. These two literatures showed some ideas which came from the previous year's height of COVID-19 pandemic. It showed remarkable results and quite intriguing at some point. Nevertheless, it does not change the point that research still progressed and continued even during the time of pandemic.

In another perspective, due to the different government interventions regarding protecting the community from the spread of virus, research became difficult especially those that involve the population. For most research endeavors, sampling a population or a representative from a certain community is essential to create a manuscript. Although, there are other means and designs for research intended for non-human exploration, this unprecedented event caused some challenges for researchers. Researches that focused on exploring the different methods, types, and designs includes the articles of Logan et al. (2017), Schoonenboom and Johnson (2017), Royal (2018), Bangdiwala (2019), Bloomfield and Fisher (2019), Goerres et al (2019), Piccioli (2019), Turhan (2019), Fryer and Dinsmore (2020), Glasofer and Townsend (2020), Le and Schmid (2020), Kumatongo and Muzata (2021) and Little and Pepinsky (2021) among others. These papers/ articles in one way or another showed some of the most common and in-demand type or method of research. It is important to note though, that these papers have different contents and propositions that in one way or another contrast or agree with other notions available with other book-based research design ideas. Nevertheless, it continued to enrich the argument behind each and every possible framework at hand in dealing with the proper research design.

In this article, the author would like to reiterate and provide a concise discussion of the different research designs that are commonly used for research projects and other research-related endeavors. It also provides some important information and other essential ideas that comprise each research design. In the long run, hopefully, it will help beginners in the field of research decide the best choice of research design intended for their particular work. This may also serve as a sort of reference for other novice researchers out there who intends to enter the realm of research and maximize its potential.

2. Major Types of Researches

In this section, it provides some basic discussions regarding the three major types of researches: the quantitative, the qualitative, and the mixed-methods. This paper essentially restates and simplify some ideas regarding the three major types of researches that sometimes, novice researchers, undergraduate students, and even graduate students fail to recognize and get confused regarding their actual, proper, and appropriate use. Sometimes this is the main

reason why research papers, articles, and theses get rejected or revised all throughout. As a reviewer of some known international journals indexed in prestigious databases like Scopus and Web of Sciences, one thing that most reviewers do usually is to check-up the research design that researcher(s) used in their research manuscripts. Using an appropriate research design maximizes the potential of the research paper and the data that was gathered. This will also spell out the success of the research work and of course in the long run, acceptance for publication to different journals. Let us discuss them one by one.

2.1. Quantitative Research Methods

In this particular research, it involves understanding certain characteristics of a phenomenon or sample of population in terms of numerical representation. Here, quantitative research usually uses statistical tools/ instruments, either descriptive and/ or inferential to deal with the gathered data from the samples involved in the study. Quantitative research also involves certain numbers of respondents (in terms of sample) that will represent a definite population for the study. As Johnson and Christensen (2014) defined quantitative research as a research which relies on quantitative data collection. To add, Boncz (2015) posited that quantitative research tends to be deductive and verify hypothesis. In layman's term, this type of research is intended to measure or study a research problem by means of "quantity" and use this to analyze the results of the gathered data. Another definitive concept for quantitative research is that it is intended for "theory-testing". This means that in quantitative research, a theory is being tested against a population to see if it concurs or disagree with the established idea or concept. This can create a research gap in the process which can be a source of different assessments and analysis for future researchers. To be more specific, there are also different types of research design involved for the quantitative research. A brief discussion for each is enumerated below:

a) Survey Design

According to Creswell (2014), this type of research design includes numeric description of trends, attitudes, or perspectives of a population by means of studying a sample of it. Furthermore, it has two basic kinds namely cross-sectional (which only measure a certain period of time) and longitudinal (which has longer duration).

b) Experimental Design

In this type of design, this one determines whether a particular treatment impacts an outcome (Creswell 2014). Again, experimental type of research has two kind which includes true experiments (random designation of subjects to treatment conditions) and quasi-experiments (nonrandomized assignments and single-subject designs only).

c) **Non-Experimental Design**

This design involves starting from the effects to trace the cause (Kumar, 2011). In this particular design, it has two basic kinds (Johnson & Christensen, 2014): causal-comparative (relationship between one or more categorical independent variables and one or more quantitative dependent variables) and correlational research (relationship between one or more quantitative independent variables and one or more quantitative dependent variables)

2.2. Qualitative Research Methods

Unlike quantitative researches, the qualitative type of research is quite the opposite. We can observe a whole new paradigm in dealing with this type of research. Qualitative studies basically involve a deeper understanding towards a phenomenon based on the analyzing and interpreting the meaning of an individual's personal experiences. It involves less sample; however, this study maximizes every aspects and inferences that comes from the particular experience shared by an individual or group. In contrast further with quantitative researches, this particular research type is "theory-building" in its basic premise. As Leavy (2017) discussed, qualitative researches rely on inductive designs aimed at creating meaning and producing abundant, descriptive data. In addition, Creswell (2014) specified that qualitative methods rely on text and image data and possess unique steps in data analysis and drawing diverse designs. Just like quantitative researches, it also has different types of research designs suitable for every situations and circumstances.

a) **Field Research (Ethnography)**

This form of qualitative research design is the oldest type which originated way back to cultural anthropology. Field research takes place in natural settings (Leavy, 2017) while ethnography refers to writing about culture.

b) **Interview**

In this design, it is the most common one used across the different disciplines. Several interview methods are available like in-depth, semi-structured, oral history, biographic minimalist, and focus groups (Leavy, 2017). In addition, interview methods generally, use conversation as a learning tool.

c) **Unobtrusive Methods (Content Analysis)**

A qualitative design also known as document analysis is a method for methodically examining texts (Leavy, 2017). Some say it is a way of studying documented human communications.

d) **Case Study**

This qualitative design is dominantly qualitative but is also available for quantitative research. According to Kumar (2011), in this type of design, one should consider that the case that a researcher selected becomes the basis of a thorough, holistic, and in-depth exploration of the aspect(s) that you want to investigate. The different types of case studies which a researcher can choose from ranges from illustrative, pilot, or critical case study.

2.3. Mixed-Methods Design

For the third type of research, mixed-method, by the term itself simply means the combination of the two major types of research which is quantitative and qualitative approaches. This type of research emerged few decades ago and incorporated different elements, processes, purposes and philosophy. Earliest definition of such research method dates back from 1989 where emphasis on the mixing of methods and the unravelling of methods and philosophy. The basic premise of this research design includes using quantitative analysis first and qualitative discussion after or vice-versa. To provide better discussion, listed below are three (3) mixed-methods designs commonly used in the field (although there are also some other special mixed-methods design which were not presented here).

a) **Convergent Design**

This is a popular approach of mixed-method research. Scholars consider this as the first design that comes to mind when a research involves mixed-method design. Initially, it was conceptualized as triangulation design where two different methods were used to obtain triangulated results on a single research topic (Creswell & Plano, 2018). Nevertheless, convergent design intends to collect and analyze two separate data (quantitative and qualitative) and merge them together for the purpose of comparison of results.

b) **Explanatory Sequential Design**

In this type of mixed-method research, the research begins by conducting a quantitative phase and followed up on specific results with a subsequent qualitative phase to help explain the quantitative results (Creswell & Plano, 2018). The primary intent on this design is to utilize a qualitative strand to explain the initial quantitative results.

c) **Exploratory Sequential Design**

In the discussion of Creswell & Plano (2018), this type of research design consisted of three phases. First the researcher starts collecting and analyzing qualitative data. Then, the researcher, in the development phase, translates the qualitative findings into an approach or tool and test it quantitatively. The participants then test the approach or tool. The intent of this design is to develop and apply a quantitative measure, survey, intervention etc. and the qualitative data is the foundation.

3. Conclusions

In conclusion, the different types of research methods that this article discussed commonly appears in many research papers in the world wide web. It is just simply dependent on the author(s) on how are they going to use it in their field. At the same time, a variety of considerations implores a researcher to think about the most appropriate approach and method that will suite their study. Thus, this article provides a general prescription and desired idea of the different types of design available in the research field. Making the most significant of all the data available out there especially this time of pandemic where doing research posed significant changes in gathering data and treating them in accordingly.

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