**Research Methodology**

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**1.0 Introduction**

The field of natural sciences deals with the study of physical world, while the field of social science studies human behavior, views, correlation, and as well as institutions. The fact that some refers to social sciences as a soft science is unrelated to absence of objectivity in the field but rather the object under inquiry is the social life of human which is difficult to observe and give accurate measurement (Neuman, 2014). The inquiries into the social life of man, “understanding exactly how it is that we know what we know”, focusing on the means social scientists get to identify social truths can be ascertained through social science research methodology (Blackstone, 2018). Though there are several sources of knowledge, but social science researchers are dependent on organized procedure to ascertain social facts and these organized structures are otherwise known as research methods (Blackstone, 2018).

**2.0 Research**

Research is a well-structured inquiry about phenomenon, for the purpose of ascertaining facts and innovation of logical conclusions. Research in social science context is designed for, around and undertaken by human.

**2.1** **Types of Social Research**

Neuman (2014) stated that the type of social research is dependent on the dimension of the research, and the dimension consist of how we apply research results and the main users, the reasons for conducting such research, how we study the number of issues at hand, time integration, and as well as selection of techniques to employ in data gathering. This basically resulted to the two types of social research as *basic* and *applied research*.

Basic research that is otherwise refers to as “fundamental research”, “pure research” or academic research is the progenitor of virtually all scientific ideas and principles (Neuman, 2014) because it primarily focuses on the establishment and advancement of novel ideas, principle and theories about phenomenon (National Science Foundation, as cited in Mansfield, 1980).

Applied research is an inquiry conducted to proffer solutions to certain issues and the results are targeted at influencing decisions.

The clear distinction between the basic and applied research as presented by Neuman (2014) and Surbhi (2018) in a tabular format is hereby given below:

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| Comparison Table of Basic & Applied Research (Neuman, 2014; Surbhi, 2018) |
| **Basis for Comparison** | **Basic Research** | **Applied Research** |
| Definition | It’s a research that focused on the expansion of current scientific acquaintance. | It’s developed to proffer solutions to certain problems. |
| Nature | It’s theoretical | It’s practicable |
| Primary Audience | Scholars | Non-researchers |
| Utility | It’s universal. | It’s limited to the issues that the research is purposely designed for. |
| Research consistency | There’s high level of consistency. | There’s variation and moderation in the consistency.  |
| Assessors  | Fellow researchers are responsible for evaluation. | Administrators and experts are responsible for the evaluation. |
| Purpose | To establish logical and verifiable body of knowledge | To establish tools and techniques for solving problems |
| Impact | Academic writing and publications | Direct application in proffering solutions to problems |
| Goal | To provide additional knowledge to the current ones | To solve practical issues. |

**2.2 Research Methodology**

The terms methodology and methods are two similar and codependent terms; people use the two terms interchangeably but it will be worthy of note to differentiate the two concepts for better clarification. Neuman (2014) refers methodology as the big structure that houses methods and this scholar went further to give an all-encompassing definition of the two terms:

Methodology means understanding the entire research process-including its social-organizational context, philosophical assumptions, ethical principles, and the political impact of new knowledge from the research enterprise. Methods refer to the collection of specific techniques we use in a study to select cases, measure observe social life, gather and refine data, analyze data, and report on results. (p. 2)

**2.2.1 Levels of Social Science Research**

Despite the fact that social researchers have some general beliefs on the values of inquiries and acquaintance of human social activities, there exist three likely levels that social scientists may conduct their research (Blackstone, 2018). These levels are *micro, meso,* and *macro*.

Under micro-level, social researchers investigate the lowest levels of engagement and it includes personalized interaction, social engagement with friends or couples. Research conducted with meso-level approach study interaction between groups e.g. an inquiry into the variation in the ethics of a particular field to another, while macro is concerned with investigation of social structures and institutions and as well as international comparative analysis of social issues among nations e.g. the social effects of global warming.

**2.3 Quantitative Research**

Quantitative research is regarded as the organized inquiry about phenomenon through collection of numerical data and execution of statistical, mathematical or computational techniques. The source of quantitative research is positivism paradigm that *“calls for methods grounded in statistical analysis and include such techniques as inferential statistics, hypothesis testing, mathematical analysis, experimental and quasi-experimental design randomization, blinding, structured protocols, and questionnaires with limited range of predetermined responses”* (Lee, as cited in Slevitch, 2011, p. 76).

**2.3.1 Features of Quantitative Research**

* Data is collected via organized research instruments like questionnaires, polls etc.
* Outcomes are dependent on large sample sizes that serves as representatives of the entire population under investigation.
* Research questions to provide answers to are clearly stated by the researcher.
* Hypothesis and theories are tested

**2.3.2 Types of Quantitative Research**

1. Descriptive Research
2. Correlational
3. Quasi-experimental and
4. Experimental

**2.3.3 Pros and Cons of Quantitative Research**

* Pros of Quantitative Research
1. *Simplicity of Analysis*: Data analysis under quantitative research is fairly easy to analysis due to the fact that data gotten are in numerical and statistical format.
2. *Consistency*: There’s extremely high level of reliability of research instruments that can be ascertain via statistical calculations like Cronbach Alpha Coefficient and others.
3. *Generalization of Results*: Findings of quantitative research are meant for the purpose of generalization. Samples are carefully selected through sampling methods like convenience sample, non-probability sampling, random sampling etc from the entire population and the results are reported for the whole population.
* Cons of Quantitative Research

**2.4 Qualitative Research**

Qualitative Research deals with gathering and interpretation of non-numerical data for the purpose of understanding human and social environment. It usually targeted on the micro-level of social engagement. The source of qualitative research can be traced to anthropology, philosophy, psychology, history, and sociology, its main objective focused on the systematic description and interpretation of phenomenon while it has also been seen to be have been gaining addition consideration in the field of tourism and hospitality management (Mohajan, 2018 and Slevitch, 2011). Ashley (2019) stated that qualitative research is structure to disclose the meaning that form actions of the people and their relationship with others.

**2.4.1 Features of Qualitative Research**

Despite that qualitative research doesn’t have peculiar theory or paradigm, coupled with no differentiated group of techniques to itself (Denzin & Lincoln, as cited in Mohajan, 2018), the following are the features of qualitative research.

* It has research questions just like other research, but incorporate variety of topics. Answers to research questions are provided for with the exception of hypotheses.
* It places concentration on participants’ understanding of meanings and social life in a particular context.
* There exists a direct relationship between the objectives and theoretical structures of researcher.
* It is fully grounded in an all-inclusive approach and final results that are not primarily meant for generalization.
* Data gotten and analyzed inductively are descriptive in nature. Data are gotten from interview notes, observation papers, and documents like brochures, pamphlet, leaflets etc.

**2.4.2 Types of Qualitative Research**

Though qualitative research methods naturally cover observations and interviews, and sometimes survey (open-ended survey) inclusive, it is a canopy that include the following types of qualitative research methods;

1. Narrative Research
2. Phenomenology Research
3. Grounded Theory
4. Action Research
5. Case Study
6. Ethnographical Research
7. Historical Research, and
8. Content Analysis

**2.4.3 Pros and cons of Qualitative Research**

According to Regoli (2019), there are uniqueness in both merits and demerits of qualitative research, and this uniqueness are; techniques employed by the researcher for data gathering, the type of data collected and researcher’s unique observations that are liable to affect information.

* Pros of Qualitative Research
1. *Flexibility*: In qualitative research, the researcher can easily change mechanisms provided the data available doesn’t seem to be suppling results.
2. *Human Experience & Observation*: Qualitative research is basically designed to complement the two operating system of human mind. It embraces both the subconscious means of operation that covers instinctive observations and the other that is interested in assessment of the sources of data prior to decision making.
3. *Open-ended Process:* The emotional reaction that frequently determine or influences the decision and or behavior of human can easily be gotten via the open-ended process of qualitative research.
4. *Creativity:* It embraces freedom of the respondents by encouraging participants to be free to express themselves and by so doing, it leads to creativity on the side of the responds and increase the degree of accuracy of data.
* Cons of Qualitative Research
1. *Extreme Subjectivity of Data*: Data gathering under qualitative research is dependent on personal mental activity of the researcher as undisputable.
2. *Time Wastage:* Due to the large number of data collected in qualitative research, the collation and sorting activities done by researchers in order to extract the main points is always time consuming.
3. *Disappearance of Unseen Data:* The unseen large size of data supplied by respondents rely on the ability of researchers for effective management and in a situation whereby the researcher cannot perform these responsibilities efficiently, another round of qualitative process begins.

**3.0 Discussion**

It is important to note that studies comparing quantitative and qualitative researches possessed a general problem of focusing on methods as techniques, not methodologies as logic of justification, while some frequently employ these terms interchangeably (Slevitch, 2011).

Though the structure of qualitative research has been mostly restricted to the methods adopted for collection of data, while forgetting the important roles of data analysis (Fielding & Lee, as cited in Slevitch, 2011), while in quantitative research, there are vibrant rules and procedures to be adopted by researchers for the purpose of analyzing data and generalization of findings.

As the larger size of sample is important in quantitative research to stand-in as adequate representative of the entire population due to the purpose of generalization of the research findings, qualitative research emphases more on idealism perspective that negate *“single reality but multiple realities based on one’s construction or interpretation of reality*” (Smith, as cited in Slevitch, 2011 p. 77).

**4.0 Conclusion**

Having considered the features, types, pros and cons of the two research approaches under investigation, it has been established that suitability and or peculiarity of each approach is dependent on the objectives or purpose of each inquiry as outlined by researchers.

Quantitative research best provides answers ‘what’, ‘when’ and ‘who’ questions and the findings are generalizable, while its counterpart on the other hand best answer ‘how’ and ‘why’ questions and the findings are not for generalization.

The fact that the comparative analysis of the two research methods focusses on techniques of data collection does not negate the combination of the two research methods (i.e. qualitative and quantitative research) in a single research. The combination of qualitative and quantitative research is what some scholars refer to as mixed method or triangulation.

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