Understanding the Literature Review

Omotosho Olawale, Oluwatobi Balogun* and Oyebode Aduragbemi

Department of Computer Science Babcock University, Nigeria

ABSTRACT

Research has over time played a pivotal role in mankind's quest for knowledge and technological advancement. In all spheres of human existence, research and its further application have over time been able to show the obvious, and yet sometimes hidden unity of science and the philosophical and sociological settings in which everything operates. Essentially, research has helped man to explore once thought of as bizarre phenomena and afforded man the opportunity to draw a fine line between opinions and facts towards gaining maximum benefits from the research's orientation (Williams, 2007). Too frequently, research is viewed as a formalized process of applying a rigid sequence of steps to the solution to a problem but in actual fact, research in itself entails flexibility in order to maximize scientific methods. This paper explains the concept of literature review in research and how a literature review is done in other to enhance the quality of the research work produced.

*Correspondence to Author:

Oluwatobi Balogun
Department of Computer Science
Babcock University, Nigeria

1.Introduction

Research can simply be described as the search for knowledge (Kothari, 2014), the term research is derived from the French word *"researcher"* a compound word which means *"to search again"* or *"to go about seeking"* (Pandey & Pandey, 2015)*.* Research can further be analyzed as the act of carrying out a scientific investigation on a subject matter which is done in a systematic and logical way, which includes clarity of purpose, ethical considerations and also detailed analysis and adequate presentation of results obtained. Researches perceive research as a voyage of some sort, a journey from the unknown to the unknown, through which pertinent questions and solution are resolved.

Research is an important tool not only in academics but in all aspect of human civilization. Various organizations partake in some form of research, governments, private businesses even down to individuals all partake in some form of research. Research gives relevant answers to the pertinent question and also through research we can make accurate predictions about future occurrences, which shows the important research in everyday life. Also, research can be viewed as a way of thinking, viewing events and occurrences critically, understanding the principles behind these events and also proposing new ideas and theories that can contribute to the positive impact of these events on governments, business organizations and also individuals (Kumar, 2011). As put by Osuala (2005), the answer to scientific problems must come from systemic research while applying disciplined common sense.

The statement above makes it crystal clear that research in most cases cannot be done in isolation of previously known and widely accepted knowledge. Although in some instances, in finding a solution to a problem, there have been breakthroughs, which were themed novel in their fields, a deeper scientific look will show that the strength of such discoveries is often drawn from what has been done/previously discovered.

How does a researcher then make sure his work is based his work on the strengths of well thought out scientific methodology? The answer to that is the topic of this write up i.e. Literature Review.

2.Formal Definitions

The Literature review page of Wikipedia describes it as a scholarly article which includes current knowledge and substantive findings as well as theoretical and methodological contributions to a topic. (Wikipedia, 2018). The Writing Center (2019) refers to literature review as the discussion of published information in a particular subject area, and sometimes information on a particular subject area within a certain period of time while combining summary[1] and synthesis[2]

Both definitions take cognizance of information, the area of study/interest and time. It shows that the literature review might give a new interpretation of old materials or combine new with old interpretations.

Therefore we can say that Literature review helps the researcher to understand the gains of the past in a particular field and help in mapping out a procedure for a better solution for the future while being mindful of its impact within a time period.

Usually found in the second chapter/section of scholarly writeups, the literature review's aims are to:

Enlighten would be readers on a particular topic

Act as a springboard for the researcher to gain insight into the subject area

Ensure the quality, uniqueness, and authenticity of the research

Identify inconsistencies, gaps, and contradictions in the literature review

Provide a holistic overview of all the methods used in solving a particular problem of

a research area

In general, the literature review helps to set the

theoretical base for the research and to set the current research into perspective so as to show the "state of the art" solutions to problems. It compels the researcher to work into the theoretical base of writings and research in the selected field.

In most cases, the literature review is directly related to the theoretical framework of the problem statement. It helps by showing how the present research will bridge the gap of knowledge in the scheme of things by surveying research previously done and evaluate what they were able to achieve in finding a solution.

This helps the researcher not only to report the findings appropriately but to critically research the methodologies in line with well-established standards for solution finding

3.Research Philosophy

The idea that there are diverse views of the world and also different processes that operate within these views, is a part of science which we know as philosophy (Mason, 2014). Philosophy is fundamentally the study of knowledge, reality, and existence when viewed from an academic point of view but philosophy in itself can be described with the study of how the world works. Research philosophy simply describes the various views on how research can be conducted.

The research philosophy a researcher adopts gives critical assumptions on how the researcher views the subject matter and these will show the overall research strategy and also the research methods employed. Also, the practical applications of research work could determine what philosophy is employed by the researcher. The practical consideration alone is not enough to dictate the type of philosophy to be adopted, the major influence to the choice of philosophy is mainly down to how the researcher view knowledge on the subject matter and the various processes involved. For instance, a researcher undertaking research on the influence of tobacco on life expectancy would have a different view and also a different philosophy

from a researcher doing research on the influence of tobacco on a nation's gross domestic profit (GDP). There will not only be a difference in philosophy, but there will also be a major difference in the strategy and methods used in both research cases.

4.Types of Literature Review

According to USCLibraries, (2018), the following are the types of Literature review **Argumentative Review**: This form examines literature selectively in order to support or refute an argument, deeply embedded assumption, or philosophical problem already established in the literature. The purpose is to develop a body of literature that establishes a contrarian viewpoint. Given the value-laden nature of some social science research [e.g., educational reform; immigration control], argumentative approaches to analyzing the literature can be a legitimate and important form of discourse. However, note that they can also introduce problems of bias when they are used to make summary claims of the sort found in systematic reviews.

Integrative Review: Considered a form of research that reviews, critiques, and synthesizes representative literature on a topic in an integrated way such that new frameworks and perspectives on the topic are generated. The body of literature includes all studies that address related or identical hypotheses. A well-done integrative review meets the same standards as primary research in regard to clarity, rigor, and replication.

Historical Review: Few things rest in isolation from historical precedent. Historical reviews are focused on examining research throughout a period of time, often starting with the first time an issue, concept, theory, and phenomena emerged in the literature, then tracing its evolution within the scholarship of a discipline. The purpose is to place research in a historical context to show familiarity with state-of-the-art developments and to identify the likely directions for future research.

Methodological Review: A review does not

always focus on what someone said, but how it was said. This approach provides a framework of understanding at different levels (i.e. those of theory, substantive fields, research approaches, and data collection and analysis techniques), enables researchers to draw on a wide variety of knowledge ranging from the conceptual level to practical documents for use in fieldwork in the areas of ontological and epistemological consideration, quantitative and qualitative integration, sampling, interviewing, data collection

and data analysis, and helps highlight many ethical issues which we should be aware of and consider as we go through our study.

Systematic Review: This form consists of an overview of existing evidence pertinent to a clearly formulated research question, which uses pre-specified and standardized methods to identify and critically appraise relevant research, and to collect, report, and analyze data from the studies that are included in the review. Typically, it focuses on a very specific empirical question, often posed in a cause-and-effect form, such as "To what extent does A contribute to B?"

Theoretical Review: The purpose of this form is to concretely examine the corpus of theory that has accumulated in regard to an issue, concept, theory, phenomena. The theoretical literature review help establishes what theories already exist, the relationships between them, to what degree the existing theories have been investigated, and to develop new hypotheses to be tested. Often this form is used to help establish a lack of appropriate theories or reveal that current theories are inadequate for explaining new or emerging research problems. The unit of analysis can focus on a theoretical concept or a whole theory or framework.

5 Sources of Literature

Selecting sources for investigating a given problem is a pivotal consideration for the research because being able to bridge the gap of knowledge requires a thorough understanding of the basic methods previously used to solve

the problem. More importantly, a researcher must acknowledge in what era of time the problem is centered.

Sourcing for literature, before the advent of the internet, was domiciled in the realm of library research which required top-notch organizational skills. Because of the tons of readily available literature today, a researcher's proficiency consists of the ability to source and locate useful materials and more importantly, to be able to browse through multiple sources quickly to get relevant information.

The University of La Verne (University of La verne|Wilson Library, 2018) shows that literature sources can be categorized into primary and secondary sources.

Primary sources embody all that is original and provide first-hand information that is closest to the object of study while secondary sources provide non-original or second-hand data or information.

Secondary sources are mostly written on primary sources and usually entails research summary in textbooks, magazines, newspapers, journals etc.

More Examples of Primary and Secondary Sources		
	Primary Source	Secondary Source
Art	Original artwork	Article critiquing the piece of art
History	Diary from an immigrant from Vietnam	Book analyzing the various writings of Vietnam immigrants from the 1970s
Literature	Poem	Article on a particular genre of poetry
Political Science	Treaty	Essay on Native American land rights
Science or Social Sciences	Report of an original experiment	Review of several studies on the same topic
Theater	Video of a performance	Biography of a playwright

Literature sources categorization (University of La verne|Wilson Library, 2018)

6.Referencing and Bibliography

Referencing is the standardized style of acknowledging the source of information used in the write up of a research project (UCOL, 2017). It saves a researcher from being accused of stealing others work i.e. plagiarism which could result in legal actions. Its major advantage is that it helps in checking and validating information that a researcher has included in his work and

shows that a researcher has been diligent during the course of the research.

Within a write-up, referencing comes in the form of citing and bibliography (or Reference list). Citing is used to acknowledge where information is gotten from a reference list while the bibliography is made up of a list of all the works that were referenced in the write-up.

Generally, referenced titles should contain the following information

Names(s) of author(s)

Title of the document

Edition, publisher, date of publication, year

Number of pages

Online source and date accessed.

Citing can also come in the form of quoting and paraphrasing what an author said but it is suggested that this form should be used sparingly and only where necessary.

Osuala (2005) writes that a Bibliography containing more than thirty titles should be subdivided into categories. Categorization can be by Book, periodicals, government publications, unpublished materials etc. Reference lists of less than 30 can also be subdivided or left as it is.

In conclusion, it is suggested that materials related to the study that would make the write up unnecessarily bulky should be placed in the appendix of the writeup

Referencing styles also come in different formats. Some of which include

Abbreviation	Full Name
ACS	American Chemical Society
AGLC	Australian Guide to Legal Citation
AMA	American Medical Association
AMJ	Academy of Management style
APA	American Psychological Association
Chicago	Chicago Manual of Style
CSE (CBE)	Council of Science Editors/Council of Biology Editors
Harvard	
IEEE	Institute of Electrical and Electronics Engineers
MLA	Modern Language Association of America
Vancouver	

Referencing styles (The University of Queensland Library, 2019)

References

1. Osuala, E. (2005). *Introduction To Research Methodology* (3rd ed.). Onitsha, Nigeria: Africana-First Publishers Ltd. Retrieved January 24, 2019

2. Southern Cross University. (2019, January 2). *Evaluative Literature Review*. Retrieved from Southern Cross University: https://online.scu.edu.au/unit-evaluative-literature-review/

3. The University of Queensland Library. (2019). *Referencing style guides*. Retrieved from The University of Queensland Library: https://web.library.uq.edu.au/research-tools-techniques/referencing-style-guides

4. The Writing Center. The University of North Carolina at Chapel Hill. (2019, January 1). *Literature Reviews.* Retrieved from The Writing Center: https://writingcenter.unc.edu/tips-and-tools/literature-reviews/

5. UCOL. (2017). *A guide to APA Referencing style 6th edition* (6th ed.). Retrieved January 24, 2019, from http://student.ucol.ac.nz/library/onlineresources/Documents/APA_Guide_2017.pdf

6. University of La verne|Wilson Library. (2018, November 27). *Literature Review Basics*. Retrieved from University of La verne|Wilson Library: https://laverne.libguides.com/c.php?g=34942&p=222059

7. USCLibraries. (2018, November 6). *Communication Studies * The Literature Review*. Retrieved from USCLibraries: http://libguides.usc.edu/c.php?g=234974&p=1559473

8. Western Libraries. (2009). *Literature Reviews, Introduction to Different Types of*. Retrieved from Western Libraries: https://www.lib.uwo.ca/tutorials/typesofliteraturereviews/index.html

9. Wikipedia. (2018, 11 26). *Wikipedia*. Retrieved January 24, 2019, from Wikipedia: en.wikipedia.org/wiki/literature_review