

Presentation and Analysis of a Research Work

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ABSTRACT

Research is an integral part of academics as well as innovation as new grounds cannot be achieved except through research work. It is imperative that a research work must be properly analysed and presented so as to enable readers and researchers have an adequate understanding of the work. This study will examine research as an important component of any discipline which is critical to the growth and development of any profession or discipline. It will provide and produce knowledge which is needed for understanding and combined with skills to lead to effective action. It is also a systematic, objectives analysis and record of controlled observation that may lead to the development of generalization, principles, theories resulting in prediction and ultimate control of many events that may have consequences or causes of specific activities. Through a survey research approach, combining the analysis of a research work, the study will adopt a cross-sectional survey research description and the sample size will be based on the concept of data collected and the data analysed. Various techniques of data collection will be examined and the study will further examine various methods or techniques of data analysis and various methods of presenting data received and processed in the course of the research work with the sole aim of contributing towards the body of the knowledge. The research will be carried out

in higher institutions in the south-western part of Nigeria.

Keywords: Research, research methodology, analysis of research work, data analysis

INTRODUCTION

Research is an important component of any discipline which is critical to the growth and development of any profession. It provides and produces knowledge which is needed for understanding and combined with skills to lead to effective action.¹ It is also a systematic and objectives analysis and record of controlled observation that may lead to the development of generalization, principles, theories resulting in prediction and ultimate control of many events that may have consequences or causes of specific activities.²

Before a research work can be presented for the public consumption, such research work must be analyzed and before a research can be analysed, the researcher must have gathered relevant data using suitable methods or techniques. Data collection is an indispensable prerequisite for the actualization of any purposeful research. A

¹ G. C. Umunnakwe, P. Iroeze & J. U. Eze, "Evaluation of Questionnaire as a Reliable Research Instrument in Library and Information Science: Case Study of the Library Staff, Federal University of Technology, Owerri, Nigeria." *International Journal of Advanced Research*, [2013] Vol. 4, (8). P.788.

² J.W. Best & J.V Kahn, *Research in Education*. (Allyn and Bacon. 1998.)

research work is analyzed based on the data obtained from the field.

It is important to note that presentation and analysis of a research work is very essential to a research in that it shows the richness, uniqueness and value of such research and how useful it is to the targeted audience or general public. It is on this backdrop that it is important for a research to be grounded in data analysis and presentation so as to showcase the richness and uniqueness of the data obtained on the field.

Much as this is important, a researcher cannot successfully analyze and present a research work without relying on data obtained from the field. Data collection is very essential to data analysis and presentation. It is worthy of note that only data successfully collected can be analyzed and presented.

In examining the above topic, this paper will examine the concept of data collection and data analysis. Various techniques of data collection will be examined. The paper will further examine various method or techniques of data analysis and various methods of presenting data.

LITERATURE REVIEW

The natural man is a curious creature. This is not to say that other creatures are not curious but only humans are worried and curious about reasons and causes for things. Only humans really ask the question 'why'? Man's curiosity goes together with his capacity to think and reason which makes him a problem solving being. Man's curiosity helps him to make inquiry, ask questions and investigate his habitual beliefs. One of the significance of human curiosity is that without it and its ability to enable the investigation of our habitual beliefs, man will never achieve the capacity of serious thinking. In other words, man's reasoning focus on the danger of becoming a routine. It is such curiosity that began the philosophical enterprise as Plato noted. It is also what eventually leads to the evolution of rational inquiry. The word 'inquiry' refers to the process of seeking for truth,

knowledge or information. It is also a synonym for research and investigation. The National Science Education Standards (NSES) defines inquiry as a multi-faceted activity that involves making observations, posing questions, examining books and other sources, planning investigations, using tools to gather, analysing and interpreting data, proposing answers, explanations and prediction and communicating results.

Research in a simple term can be defined as systemic investigation towards increasing the sum of human knowledge and as a process of identifying and investigating a "fact" or a 'problem' with a view to acquiring an insight into it or finding an apt solution therefore Redman & Mory define research as a systematized effort to gain new knowledge. Slesinger & Stephenson perceived the term research as the manipulation of things, concepts or symbols for the purpose of generalizing to extend, correct or verify knowledge, whether that knowledge aids in construction of theory or in the practice of an art.

According to Encyclopedia Britannica, research is *the act of searching into a matter closely and carefully, inquiry directed to the discovery of truth and in particular, the trained scientific investigation of the principles and facts of any subject, based on original and first hand study of authorities or experiment. Investigation of every kind which has been based on original sources of knowledge may be styled research and it may be said that without research, no authoritative work has been written, no scientific discoveries or inventions made, no theories of any value propounded.*

From the above definitions, research is a process of findings or a means of justifying a particular hypothesis through diligent investigation with the sole aim of contributing towards the body of knowledge.

Research in law is governed by three key principles: knowing and finding the law, reading the law and applying the law to solve societal problems.

The term research instrument refers to any tool that you may use to collect or obtain data, measure data and analyse data that is relevant to the subject of your research. It varies from questionnaire, surveys, interviews, observation, focus group, etc. Data in a research is a form of evidence which justifies how researchers reach a decision and apply a particular strategy to a marketing campaign.

According to Munir, research instruments are the fact finding strategies and tools for data collections. He further posited that the researcher must ensure that the instrument chosen is valid and reliable. The validity and reliability of a research project depends to a large extent on the appropriateness of the instruments.

Concept of Data Collection

Data Collection is the process of gathering and measuring information on variables of interest in an established systematic fashion that enables one to answer stated research questions, test hypothesis and evaluate outcomes.³ Data Collection is one of the most important stages in conducting research and the goal for all data collection is to capture quality evidence that then translates to rich data analysis and allows the building of a convincing and credible answer to questions that have been posed.⁴

Regardless of the field of study or preference for defining data (quantitative or qualitative), accurate data collection is essential to maintaining the integrity of a research. There are several tools and techniques used in data collection depending on the nature of the research topic and what the research set out to achieve. Tools for data collection are: Observation, Interview, Questionnaire, Focus Group Discussion, Case Study, Diaries Method and Sampling. These tools are employed in the course of the research depending on the nature of data to be

³ S.M.S. Kabir, *Basic Guidelines for Research: An Introductory Approach for all Disciplines*. (Book Zone Publication, 2016) P.201.

⁴ Ibid.

collected. A suitable data collection tools will further enrich the research work.

Techniques Used in Data Collection Observation

Observation, particularly participant observation, has been used in a variety of disciplines as a tool for data collection about people, processes and cultures in a qualitative research. It has been the hallmark of anthropological and sociological studies.⁵

Observation is a way of gathering data mostly in qualitative research by observing the behavior, events or noting physical characteristics in their natural setting. It can be overt (i.e everyone knows that they are being observed) and it can be covert (no one knows that they are being observed and the observer is concealed)⁶

Observational studies are sometimes referred to as natural experiments or quasi experiments. The term quasi experiment is often used to suggest a design in which certain structural features are added in an effort to provide information about researcher's hidden biases.

According to Creswell,⁷ observation is an activity in which the researcher observing several issues relating to the research which was examined at the scene of the issues directly. Marshall and Rossman define observation as the systematic description of events, behaviours and artifacts in the social setting chosen for study.⁸

Observation can be classified into various types. It includes:

⁵ B. B. Kawulich, "Participant Observation as a Data Collection Method." *Forum Qualitative Social Research*. [2005] Vol. 6, No. 2. P. 1

⁶ P. U. Ekka, "A Review of Observation Method in Data Collection Process." *International Journal for Research Trends and Innovation*. [2021] Vol.6 No.12. P.17.

⁷ J. W. Creswell, *Research Design: Qualitative, Quantitative and Mixed Methods* (4th Ed) (Thousand Oak, CA: Sage, 2014)

⁸ C. Marshall & G. B. Rossman, *Designing Qualitative Research*. (Newbury Park: Sage Publisher. 2007).

Participant and Non- Participant Observation.

Structured and Unstructured Observation

Direct and Indirect Observation

Controlled and Un-controlled Observation.

Scientific Observation.

Interview

An interview is a qualitative research method that relies on asking questions in order to collect data. Monday defines interview as the verbal conversation between two people with the objective of collecting relevant information for the purpose of research.⁹ It is a way of collecting data as well as to gaining knowledge from individuals.

According to Kvale, interview is an interchange of views between two or more people on a topic of mutual interest, sees the centrality of human interaction for knowledge production, emphasize the social steadfastness of research data.¹⁰ Interview is expected to broaden the scope of understanding investigated phenomena, as it is more naturalistic and less structured data collection.¹¹

In addition, interview is a systematic way of talking and listening to people and another way to collect data from individuals through conversation. The researcher or the interviewer often uses open questions. It is worthy of note that a researcher who intends to conduct an interview must have the following skills and abilities in order to conduct a viable and useful interview. They are:

Ability to listen

Ability to be non judgmental

A good memory

Ability to think on his/her feet.

⁹ T. U. Monday, "Impacts of Interview as Research Instrument of Data Collection in Social Sciences." *Journal of DIGITAL SCIENCE*, [2019] Vol. 1(1), P.1.

¹⁰ S. Kvale, *Interviews: An Introduction to Qualitative Research Interviewing*. (SAGE, 1996.)

¹¹ A. Hamza. "Interviewing as a Data Collection Method: A Critical Review." *English Linguistic Research*. [2014] Vol. 3(1), P. 39.

Importance of Interview in Data Collection

The following are the importance of interview. They are:

Opportunity for feedbacks

Probing complex response

High participation of the respondent

It guarantees high personalized data.

Types of Interview

There are various types of Interview. They are:

Personal Interview

Structured Interviews

Semi Structured Interview

Unstructured Interviews

Non- Direct Interview.

Telephone Interview

Clinical Interview

Focused Group Interview

Questionnaire

Questionnaires are frequently used in quantitative marketing research and social research. It is a series of questions asked to individuals to obtain statistically useful information about a given topic. When properly constructed and responsibly administered, questionnaire becomes a vital instrument by which statement can be made about specific groups of people or entire populations.¹² It is a valuable method of collecting wide range of information from a large number of individuals often referred to as respondents.¹³

It is simply a form composed to present statements or questions about some attributes or relationships and provision for the respondent to write his reaction to each statement or question.¹⁴ This entails that a questionnaire must be articulated, written and distributed from which the response can be gathered. Questionnaire simply suggests a collection and or a form containing a set

¹² S. Roopa & M.S. Rani, "Questionnaire Designing for a Survey." *The Journal of Indian Orthodontic Society*, [2012] Vol. 46(4) P.273.

¹³ Ibid.

¹⁴ P.C. Nkwocha, *Educational Research Process Made Easy*. (Chinasa- Hop Publisher, 2009)

of questions addressed to a statistically significant audience for which responses (information) are elicited for a survey.¹⁵ Historically speaking, questionnaire was invented by Sir Francis Galton, a British anthropologist, explorer and Statistician in late 1800¹⁶

Types of Survey Questions
Contingency Questions
Matrix Questions
Closed Ended Questions
Open- Ended Questions

Sampling

Probability/ Random Sampling: this means that every item in the population has an equal chance of being included in sample. One way to undertake random sampling would be if a researcher was to construct sampling frame first and then use a random number generation computer program to pick a sample from the sampling frame.¹⁷ This kind of sampling can be further divided into: Simple Random Sampling, Systematic Sampling, Stratified Random Sampling and Cluster Sampling.

Data Analysis

Data analysis is the process of bringing order, structure and meaning to the mass of collected data. It is a messy, ambiguous, time consuming, creative and fascinating process. It does not proceed in a linear fashion; it is not neat. Data analysis is a search for answers about relationships among categories of data.¹⁸ It is the ways in

which the researcher moves from a description of what is the case to an explanation of why what is the case is the case.¹⁹

Data analysis is the process of cleaning, changing and processing raw data and extracting actionable, relevant information that helps businesses make informed decisions. It helps reduce the risks inherent in decision making by providing useful insights and statistics, often presented in charts, images, tables and graphs

Importance of Data Analysis

The purpose of analyzing data is to obtain usable and useful information. The analysis irrespective of whether the data is qualitative or quantitative, may:

- Describe and summarize the data
- Identify relationship between variables
- Compare variables
- Identify the differences between variables
- Forecast outcome.
- Provides more accurate data
- Better problem solving method
- Plays a key role in distilling this information into a more accurate and relevant form, making it easier for researchers to do their job.
- Offers researcher better data and better ways to analyze them.

Types of Data Analysis

Data Analysis can be categorized into four namely:

Diagnostics Analysis: this answers the question why did this happen. Analysts use diagnostic analysis to identify patterns in data. Ideally, the analysts find similar patterns that existed in the past, and consequently, use those solutions to resolve the present challenges hopefully.

Predictive Analysis: this answers the question, “what is most likely to happen?”

¹⁵ M.S. Afolayan and A.O. Oniyinde, “Interviews and Questionnaire as Legal Research Instruments.” *Journal of Law, Policy and Globalization*, [2019] Vol. 83. P.56.

¹⁶ J. Horvat, *Questionnaire*. In M. Lovric. (eds) International Encyclopedia of Statistical Science. (Springer Reference, Berlin, 2014)

¹⁷ H. Taherdoost, “Sampling Method in Research Methodology; How to Choose a Sampling Technique for a Research.” *International Journal of Academic Research in Management*. [2016] Vol. 5 (2). P. 18.

¹⁸ C. Marshall & G.B. Rossman, *Primary Data Collection Methods Designing Qualitative Research*. (Los Angeles, CA: Sage Publication, 2011)

¹⁹G. Hitchcock and D. Hughes, *Research and The Teacher: A Qualitative Introduction to School-Based Research*. (2nd Ed) (Melbourne, Australia: Routledge, 2002)

By using patterns found in old data as well as current events, analysts predict future events. While there is no such thing as 100% accurate forecasting, the odds improve if the analysts have plenty of detailed information and the discipline to research it thoroughly.

Prescriptive Analysis: this type mix all the insights gained from the other data analysis types, and you have prescriptive analysis. Sometimes, an issue can't be solved solely with one analysis type, and instead requires multiple insights.

STATISTICAL ANALYSIS

Statistical analysis answers the question, "what happened". This analysis covers data collection, analysis, modeling, interpretation and presentation using dashboards. The statistical analysis breaks down into three sub categories:

Descriptive: this works with either complete or selections of summarized numerical data. It illustrates means and deviations in continuous data and percentages and frequencies in categorical data.

Inferential: it works with samples derived from complete data. An analyst can arrive at different conclusions from the same comprehensive data set just by choosing different sampling.

Text Analysis: it is also called data mining. It uses database and data mining tools to discover patterns residing in large datasets. It transforms raw data into useful business information. Text analysis is most arguably the most straightforward and the most direct method of analysis.

Data Analysis Methods

The term "data analysis method" and "data analysis techniques" are used interchangeably. Although there are many data analysis methods available, they can all be categorized into: Qualitative Analysis, Quantitative Analysis and Mixed Method.

Qualitative Data Analysis: Qualitative research is a process of naturalistic inquiry that seeks an in- depth understanding of social phenomenon within their natural setting. It focuses on the "why" rather than the "what" of social phenomena and relies on the direct experiences of human beings as meaning-making agents in their everyday lives.²⁰ Rather than by logical and statistical procedure, qualitative researchers use multiple system of inquiry for the study of human phenomena including biography, case study, historical analysis, discourse analysis, ethnography, grounded theory and phenomenology. Qualitative research involves the collection and analysis of data through methodologies such as interviews, focus groups or ethnographies.²¹

Qualitative research is collecting, analyzing and interpreting data by observing what people do and say. Also, qualitative research refers to the meanings, concepts, definitions, characteristics, metaphors, symbols and descriptions of things.²² Qualitative research emphasized on the linguistic data that identify issues from²³ the study participant's perspective considering a particular area. The researcher is expected to understand the meanings and interpretations of the responses obtained through the participants of the study regarding their behavior, events and objects.

The qualitative data analysis method derives data via words, symbols, pictures and observations. This method does not use statistics. Commonly used qualitative methods include:

Content Analysis: usually use for analyzing behavioral and verbal data.

²⁰ A. A. Abuhamda. Understanding Quantitative and Qualitative Research Methods: A Theoretical Perspective for Young Researchers. [2021] Vol.8(2). P.71.

²¹ Ibid.

²² M. Faheem. Research Methods and Methodology. *Polish Journal of Natural Sciences*. [2010] Vol.2(2).

²³ W. A. Alamri. "Effectiveness of Qualitative Research Methods: Interviews and Diaries." *International Journal of English and Cultural Studies*, [2019] Vol. 2(1). P. 65.

Narrative Analysis: for working with data culled from interviews, diaries, surveys.

Grounded Theory: for developing causal explanations of a given event by studying and extrapolating from one or more past cases.

Quantitative Data Analysis: This is the dominant research framework in the social sciences. It refers to a set of strategies, techniques and assumptions used to study psychological, social and economic processes through the exploration of numeric patterns. Quantitative research gathers a range of numeric patterns.²⁴ The collection of quantitative information allows researchers to conduct simple to extremely sophisticated statistical analyses that aggregates the data. Quantitative research includes methodologies such as questionnaire, structured observations or experiment and stand in contrast to qualitative research.²⁵

By definition, measurement must be objective, quantitative and statistically valid. Simply put, it is about numbers, objective hard data. The sample size for a survey is calculated by statisticians using formula to determine how large a sample will be needed for a given population in order to achieve findings with an acceptable degree of accuracy. Quantitative research refers to counts and measure of things

Statistical data analysis methods collect raw data and process it into numerical data.

Quantitative analysis methods include:

Hypothesis Testing: for assessing the truth of a given hypothesis or theory for a data set or demographic.

Mean or average determines a subject's overall trend by dividing the sum of a list of numbers by the number of items on the list.

Sample Size Determination uses a small sample taken from a larger group of people and analyzed. The results gained are considered representative of the entire body.

Mixed Methods: this approach combines both qualitative and quantitative research data, techniques and methods within a single research framework. It encompasses multi faceted approaches that combine to capitalize on strengths and reduce weaknesses that stem from using a single research design. This approach may assist to increase the validity and reliability of the research. Mixed methods are useful in highlighting complex research problems such as disparities in health and can also be transformative in addressing issues for vulnerable and marginalized population or research which involves community participation.²⁶

Some of the common areas in which mixed methods approaches may be used include:

Initiating, designing, developing and expanding interventions

Evaluation

Improving research design; and

Corroborating findings, data triangulation or convergence.

Data Presentation

Data presentation is a process of comparing two or more data sets with visual aids, such as graphs. Data presentation is defined as the process of using various graphical formats to visually represent the relationship between two or more data sets so that an informed decision can be made based on them.

Types of Data Presentation

Oral Presentation: this is a traditional method where you deliver your research findings verbally to an audience. It typically involves creating slides or using visual aids to support one's presentation. Platform such as PowerPoint or Prezi may be used to structure the content and engage the audience.

Poster Presentation: it involves the use of a visual poster to summarize a research. The

²⁴ Ibid.

²⁵ Ibid.

²⁶ S.M.S. Kabir, *Basic Guidelines for Research: An Introductory Approach for all Disciplines*. (Book Zone Publication, 2016) P. 201.

poster typically includes key information such as the research question, methodology, results and conclusion.

Conference Presentation: research conferences provide a platform to present one's work to a specialized audience. These presentations are often more formal and structured. It is usually followed by a question and answer session.

Panel Discussion: this involves a group of researchers or experts discussing a specific topic.

Data Presentation Techniques

There are various techniques used in data presentation. The choice of data presentation depends largely on the nature of the data obtained, the objectives of the research and the audience at which the data is to be presented to. It is often helpful to consider the strengths and limitations of each method and select the one that suit the presentation. These techniques can be broadly categorized into three main groups. They are:

Textual (Descriptive)

Tabular

Diagrammatic (Graphical)

Textual: Textual presentation of data means presenting data in the form of words, sentences and paragraphs. This allows the researcher to present qualitative data that cannot be presented in graphical or tabular forms. According to In and Lee, text is the principal method of explaining findings, outlining trends and providing contextual information.²⁷ This type of presentation is useful when we intend to supplement qualitative statements with some data

Merits

It is very helpful in presenting contextual data.

It helps researcher explain and analyze specific points in data.

It helps researcher to interpret data more elaborately during the presentation.

It allows the researchers to present qualitative data that cannot be presented in graphical or tabular form.

It helps in emphasizing some important points in data.

It allows the researcher to explain data in contextual manner and the reader can draw meaning out of it.

Small set of data can be easily presented through textual presentation. E.g there is 30 pencils in the bag 10 of which are red and 20 are black. There is no need for a table or graph to explain or comprehend this.

Demerit

The major demerit of textual presentation is that extensive data are produced in the form of words and paragraphs. This makes it difficult for researcher to draw conclusion/inference at a glance.

There is the need to read through the whole text in textual presentation before one can have a full grasp and understanding of the research work.

Textual presentation of data is not suitable for large sets of data with too many details.

If the data under consideration is large then the text matter increases substantially. As a result, the reading becomes more intensive, time-consuming and cumbersome.

Tabular: this is one of the most widely used forms of presentation of data since data tables are easy to construct and read. Table facilitates representation of large amounts of data in an attractive, easy to read and organized manner. It is a systematic and logical arrangement of data.

Component of Data Table

Table Number: it is expected that each table must have a specific number for easy access. This will enable readers to easily locate the table when mentioned in the body or text of the research. It can be written on the top or at the bottom of the table.

²⁷ J. In & S. Lee. "Statistical Data Presentation." *Korean Journal of Anesthesiology*. [2107] Vol 70(3)

Title: A table must contain a title that clearly tells the readers about the data.

Head-notes: this further aids in the purpose of a title and gives more information about the data contained in the table.

Stubs: these are the title of the rows in a table. Thus a stub display information about the data contained in a particular row.

Caption: a caption is the title of a column in the data table. It is a counterpart of a stub and indicates the information contained in a column.

Body or Field: the body of a table is the content of a table in its entirety. Each item in the body is known as a cell.

Footnotes: they are rarely used as they supplement the title of a table if required.

Source: when using data obtained from a secondary source, this source has to be mentioned below the footnote

Merits of Tabular Form

Ease of Representation: it is a simplest form of data presentation because a large amount of data can be easily confined in a data table.

Ease of Analysis: Data tables are frequently used for statistical analysis.

Helps in Comparison: in a data table, the rows and columns which are required to be compared can be placed side by side. This will facilitate comparison as it makes it easier for readers to compare each value.

Construction of a data table is fairly easy and presents the data in a manner which is really easy on the eyes of a reader. It is economical in the sense that it saves time and space.

It provides the foundation for statistical analysis. It further helps in the formation of graphs as well as diagrams for the purpose of advanced data analysis.

Demerits.

Lack of focus on individual items: individual items are not presented distinctly. A tabular presentation shows data in an aggregated manner.

No scope for description as it is only the figures that are indicated in a tabular

presentation. The attributes of those figures cannot be mentioned in tables. Also, the qualitative aspects of figure cannot be mentioned using this method.

It requires expert knowledge as a layman will not be able to decipher the intricacies that are mentioned in the figures within a tabular presentation. By implication, its interpretation and analysis can only be undertaken by a person with the requisite knowledge.

Diagrammatic: this refers to representation of statistical data in the form of diagrams. Diagrams used in representing statistical data are geometrical figures such as lines, bars, and circles.

Merits

It is easy to understand.

It is more attractive

It makes presentation simpler compare to tabular presentation

It is universally acceptable in field of studies such as science. Statistics, commerce, economics etc

It improves the overall representation of data to a large extent by classifying data into several groups and presented in a systematic manner vide diagram.

It saves a lot of data and resources involves in classification and organization of data.

The following methods can thus be used in presentation of data. Some are in tabular form, i.e table, some in diagram form, i.e (diagram, charts and graphs and Maps), some are in textual form, (i.e, written reports), and some are combination of two or three methods of presentation. For instance, info-graphics combine both textual and diagram method of presentation while presentation is a combination of the three methods. i.e textual, tabular and diagram.

Tables: Tables present data in a structured format with rows and columns. They are useful for organizing and comparing numerical data or categorical information.

Charts and Graphs: Charts and graphs visually represent data using different types of plots such as bar graphs, line graphs, pie charts, scatter plots, etc. They are effective in showing trends, comparisons, distributions, and relationship within the data.

Info-graphics: Info-graphics combine text, visuals, and graphics to present data in a visually appealing and concise manner. They often use icons, illustrations, and charts to convey information quickly.

Dashboards: Dashboards are interactive visual displays that provide an overview of key metrics and data points. They allow users to monitor real-time data, explore different variables, and gain insights at a glance.

Maps: Maps are used to present spatial data and geographic information. They can be static or interactive and are helpful for displaying regional or location based data.

Diagrams: Diagrams, such as flowcharts, network diagrams, and organizational charts, are used to represent processes, relationships, and hierarchies. They simplify complex concepts and make them easier to understand.

Written Reports: Written reports present data and analysis in a narrative format. They often include descriptive text, headings, subheadings, and bullet points to organize and explain the data.

Presentations: Presentations combine visual elements (such as slides with charts,

graphs, and images) with spoken delivery to convey data and insights to an audience. Tools like Microsoft PowerPoint or Google Slides are commonly used for this purpose.

CONCLUSION

This paper has been able to examine the concept of data analysis and data collections and their importance in a research work. Various methods and techniques used by researcher have been examined. The paper also examines the strength and limitations of techniques or methods of data presentation. The paper concludes that though this method varies from one another, the choice of a researcher is formed based on the topic of the research and the aims and objectives the research set out to achieve. Also, no method is in isolation of one another as they can be used interchangeably in a single research depending on what the research set out to achieve. The essence of this method is to ensure data are collected seamlessly and analyzed and presented to the general public in a way that readers will comprehend the essence of the research.

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