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THE SURVEY COMMUNICATION RESEARCH

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Abstract

Research is an indispensable means of discovering new ideas and finding solution to problems. Communication practice, like other professions, requires a great deal of research for effective results. This paper is a descriptive research, and makes a holistic overview of the survey as a very important communication research technique. The paper discusses the survey as a primary research design and elaborates on the constitutes of the methodology to include study area, universe, sample size and sampling procedure, method of data collection, scaling of measuring items, validity of measuring instrument, reliability of measuring instrument and method of data analysis. It is recommended that the survey should be adopted by communication researchers, especially in perception studies and other researches that hinge on respondents' views and opinions.

Introduction

The survey is one of the methods of quantitative research technique. It entails a painstaking process, which involves the gathering of information or data, analyzing the data and using the result as the basis for determining the trend or the issues that formed the thrust of the research. The issues that constitute a research problem could be attitude, opinion, behaviour, practice, etc, that arouse the concern of a researcher, thereby driving him to carry out a research. The bottom line here is that the survey research requires careful planning (including setting the objectives and outlining the research methodology) and executing the plans in order to arrive at reliable findings.

The survey is a research technique which investigates, examines, assesses or evaluates the issues that constitute a research problem. Research on the other hand, according to Osuala (2007, p. 1), is "the process of arriving at dependable solutions to problems through the planned and systematic collection, analysis and interpretation of data. This implies that there is something, which the research does not know, yet he is interested in knowing it, and then he sets out to find out. The process and activities of finding out the unknown is called research. It is one of the best known methods of seeking knowledge, gaining knowledge, or understanding a trend or phenomenon. The survey is the research technique used in finding out facts when human beings are the source or custodians of the facts under investigation or when the phenomenon or trend that is under

investigation is manifest and quantifiable. It is very useful when the research hinges on perception involving two or more issues. Wimmer and Dominick (2006, p. 179) thus observe that the survey "allows researchers to examine the inter relationships among variables and to develop explanatory inferences.

Some researchers and scholars are of the impression that the survey research is only used when the population is very large thus making the use of sample fundamental. This is a misconception. The survey can be used both for the very small population or very large population. When the survey is adopted in a small or very small population the complete census method is adopted. This means all the members of the population are studied without any exception as such the study population also becomes the sample. It is only when the population is too vast for a complete census that sampling becomes necessary, where the representative of the population is studied and findings are generalised to the entire population. Baran (2007) is of the view that the survey is designed to give a scientific description of phenomena and their relationship in an environment at a particular time. This lends some credence to the application of the survey.

The survey is applied in so many aspects of communication or mass media research, and it usually proves a useful technique. It is applicable to print media research (such as newspaper/magazine readership, typography and make-up, aesthetics etc), public relations and advertising research (such as impact of public relations on the attainment of organisational goal, effect of advertising on consumer patronage etc), broadcast contents research (such as programme preference, content consumption trend among youths, viewing habits of a particular audience etc), business and organisational communication research (such as effect of communication pattern on staff productivity, communication and corporate image etc), and so on.

Types of Survey Research

The classification of a survey research is usually determined by the nature of the research or the reason for which it is conducted. For instance, it may be determined by whether the survey seeks to describe a phenomenon, current condition, trend etc or whether it seeks explanations on why certain situations exist. Based on the fore-going, survey research can be categorized into two:

- Descriptive survey
- Analytical survey

(i) Descriptive Survey

As the name implies, a descriptive survey aims to describe a trend, condition or attitude. This means that what a descriptive survey sets out to study is mainly something contemporary that is, it seeks to explain something that exists at the moment. An example of a descriptive survey is where a publisher seeks to find out the readership of his newspaper. In such a research, the survey research would explain the conditions that exist at the moment, for example, who and who read the newspaper, what contents they read, which edition they prefer etc, depending on the thrust of the research. Similarly, a broadcast station would adopt a descriptive survey research to the trend of viewership of the station, to determine the actual viewers of the station, to find out content

preference among the audience etc. The underlying factor in a descriptive survey is that it is based on contemporary issues or occurrence.

(ii) Analytical Survey

While a descriptive survey mainly describes, an analytical survey describes a situation and explains the reasons behind the existence of the situation. In other words, it goes beyond merely explaining the situation, but it also examines the 'why' of what is observes. This enables the research to examine the interrelationships among variables and to draw inferences. Most survey researches on uses and gratifications are good examples of analytical survey. The reason is that such surveys would enable the research to describe the situation and examine the reasons behind the situation. For instance, a uses and gratifications study on the viewership of NTA's AM EXPRESS among the residents of Uyo, Nigeria,would not only reveal the strength of the programme's viewership, but would also explain why the residents watch the programme.

Potentials and the Limitations of Survey Research

The survey research technique has both strong points and weak points:

(a) The Potentials

The survey research presents the researcher with an opportunity to scientifically examine the phenomena in reasonable state of their realistic settings. As the survey mainly deals with human beings, it enables the researcher to keep in touch with them in one way or the other and understand the interrelationship existing among them.

The survey research does not only gather, analyse and present data, it goes further to interpret the data, synthesise and integrate them with other variable in order to unravel the relationship between the data and the variables. This makes it easy for the researcher to know and explain the implications of the data for the existence of certain phenomena and their antecedents.

Another important strength of the survey is that it enhances flexibility and versatility. Since the method is more realistic and experimental, it makes room for an investigation under a national setting. As such it is easy to handle unprecedented problems that may arise in the course of research. For instance, if the research encounters unprecedented challenges in the course of administering the research instrument, it is possible to take an alternative measure to solve the problem rather than start the whole process all over.

It is important to note that the survey is not constrained to geographical boundaries. A survey research can be conducted virtually anywhere (Wimmer and Dominick, 2006). The primary thing here is that the sources of data must be readily accessible to the researcher.

Considering how cost effective the survey research is, it can prove to be an effective method given the quantum of data gathered for study. This means any serious researcher can determine to be very painstaking in the study since a little amount can be enough for a large area of study.

(b) Limitations

The major limitations of the survey research are as follows:

(i)   The result of a survey research may be misleading if the wrong respondents were selected.

(ii)   In sample survey generalization may be only in principle. No matter how well the research is conducted, human nature remains dynamic and to a greater extent, unpredictable. By reason of individual differences, in some forms of research, the opinion and attitude expressed by the sample may sometimes be a sharp departure from the popular opinion of those not included in the sampled whereupon generalization would be made.

(iii)   Unlike in laboratory experiments, independent variables cannot be manipulated. Wimmer and Dominick (2006, p. 180) explain: "Without control over independent variables, the researcher cannot be certain whether the relationships between independent variables and dependent variables are causal or non causal."

Preparing for a Survey Research

The survey research is highly systematic. This gives an extra task to the researcher to put in more time in planning or preparing for the survey. Like any other kind of research, the survey requires a step-by-step procedure in order to conduct a good research with generalisable results. A faulty methodology or instrument often leads to a less undependable result.

The first stage in a survey research is ideation. This is the time that the researcher perceives a situation or condition that constitutes a problem, which may warrant a research.

It involves a reasonable brainstorming session so that the issue can be couched into a research problem. A research problem gives rise to statement of the problem. A statement of the problem is a brief expression of the uncertain issue that necessitates a research. It is usually expressed by way of question or suspense which can be ascertained or resolved through research. At the stage of ideation or conceptualisation, the researcher should clearly highlight the variables among which a relationship may exist. Such variables are usually independent and dependent variables. An independent is the variable that can exert some effect or influence on another variable called the dependent variable. An example is the topic, "Print media aesthetics and newspaper readership. Among these two variables, print media aesthetics is the independent variable because it is capable of influencing newspaper readership; newspaper readership is dependent because it is the probable outcome of the independent variable. When the research problem is articulated and the variables are underscored, it is then easy to frame the research topic, justify the need for a research and establish a nexus between the variables that are inherent in the research problem.

Another important stage of preparing for a survey research is the delimitation. This entails determining the scope or extent that the research intends to cover. The first step at the delimitation is the framing of the topic. After the research topic, the researcher still needs to go further to specify the scope of the research in order to give the study a focus.

For Osuala (2007), delimitation "builds a fence" around the topic under study; it is concerned with a part or parts of the topic or problem, which ordinarily would be part of the study, but the researcher cannot or does not include. When the topic or the problem is delimited, it gives the study a focus. It is important to clearly indicate what constitutes the issue of concern, which

informs the need for research. This is referred to as the statement of the problem. The statement of the problem usually presents what the right situation should be, what has been done wrongly or what has been omitted and what brings about the problem or concern that necessitates a research, normally in a question form or as suspense. In other words, the statement of the problem requires the research to state the concern or situation which pushed him into the research. It is the situation, thing, event or occurrence that motivated the researcher to undertake the study.

Setting a goal for the study is another important stage. At this point, the researcher has to outline the objectives of the study. The objectives themselves will be transformed into questions called research questions. It is at the end of the research that the research questions are answered based on the data gathered and analysed. When the research questions are properly answered, the study would have achieved its objectives. Sometimes, it is necessary to also develop hypotheses and make assumption in the study. This is usually dependent on the kind of study and the subject under investigation.

Howbeit, a hypothesis is a conjectural statement that gives an impression or makes an assumption that there is a certain relationship between two variables. To make the hypotheses to have relevance to the study, they have to be adapted from the objectives of the study via the research questions. Assumption, on the other hand, is an affirmative statement which suggests a relationship between the variables in a research problem.

Also, the researcher has to carefully outline the methodology to be adopted in the research. It must be stated that the survey is a research technique. The use of the research method must be justified. This helps in making the researcher to adopt the right research technique and procedures. Another important issue is that the population of the study must be stated clearly, possibly the approximate number of people or subjects making up the population should be clearly indicated. Population is the universe or entity within which all the subjects or elements under investigation are. For Osuala (2007, p. 119): "The selection of the problem is the first step in determining the population." As earlier explained in this paper, when the problem is properly articulated and the study is delimited, it is easy to determine the universe of the study. The population must be relevant to the study. It is also important to select the sample for the study. A sample is the actual unit of the study population earmarked for investigation.

The last steps in survey research include data gathering, analysis and discussion of findings. Discussion of findings enables the researcher to make a concise summary of the findings, draw conclusion based on the findings and make appropriate recommendations based on what the study has revealed.

Methodology in a Survey Research

Methodology can be defined and explained in various ways depending on the writer's background and the intent of the writer. Literally, methodology is a set of methods and principles adopted in carrying out a particular activity. This indicates that methodology involves many sets and stages before the task can be accomplished. For the purpose of this chapter, methodology is the outline of the steps and procedures used in conducting a survey research. It is instructive to note that the methodology in a survey research is not applicable to survey research only to the exclusion of

all other research techniques. Content analysis, for instance, shares some sets of methodology in common with the survey. However, the various units that make up the research methodology in a survey are examined as follows:

(a) Research Design

A research design is the technique of investigation adopted by the researcher to find out the facts that were hither to unknown or bleak. Every kind of research has it various designs which aid the researcher to achieve the purpose, goal or objectives of the study. A research design is also known as research method or research technique. Whatever the case, in quantitative research, two research designs are very outstanding; they are: survey and content analysis.

Both survey and content analysis share a lot of things in common; apparently, that is why the two are mentioned in this chapter, but the emphasis is on the survey. It is important for the researcher to point out clearly from the outset, the particular research design he/she is adopting so as to take the right steps in the study. The research design to be adopted in a quantitative study is usually determined by the nature of the study. For instance, if the study seeks to examine the quantum or the frequency of the occurrence of the research subject in a particular medium, the best research design to adopt is content analysis. But, if it seeks to find out people's opinion or perception, or it seeks to find out or examine the relationship between variables, then the most applicable research method is the survey. This assertion is in tandem with the observation of Wimmer and Dominic (2006, p. 179) that the survey research methods "… allows researchers to examine the interrelationships among variables and to develop explanatory inferences." Indicating the study design is one of the ways of laying the foundation for determining the delimitations of the study.

(b) Study Area

Every research is conducted within a particular locale, whether or not the research or its findings have a global application. Study area is the locality or the environment from which the population of the study is drawn. It could be country, a state, region, Local Government Area, community, university community, college or any other entity that is large or smaller than any of the afore-mentioned. A description of the study area makes the entity of the research and the subjects under investigation very clear. It gives the reader of the research report a mental picture of the place from which the study population was drawn. The most outstanding advantage in defining the study area is that it makes it easy for the delineation of the population and by extension, the sample.

(c) Population of the Study

A population is the universe of the study or the entire entity within which all the subjects of the study are found. There is no particular number that serves as the standard size or numerical strength of a population. It depends on the nature of the study and what the researcher aims to achieve. Therefore, it is better for the researcher to specify the population of the study from the beginning, even at the level of conceptualizing the study. The researcher also has to state whether

the population is definite; if so, the particular or approximate numerical strength of the population should be stated. When the population of the study is specified, it becomes easy to select the sample. It must be noted that if the size of the population is small, sampling becomes unnecessary. In such a situation the population itself also serves as the sample. Taking the entire population to be the sample is called census. This means all the subjects in the entire population are sampled in the course of the survey.

(d) Sample Size and Sampling Procedure

When the population of the study is too large for a complete census to be taken, it becomes indispensable to take a sample out of it for an effective research. According to Osuala (2007, p. 114), "Sampling is taking any portion of a population or universe as representative of that population or universe." To make a research to be effective and plausible, a reasonable portion of the population should be sampled. This would make for a reliable generalization of the findings. What constitutes a reasonable portion of the population is not absolute; it depends on specific facts and circumstances of the study such as the size of the population, time frame for the study, available funds and manpower for the study. Best and Kahn (1989, p. 16) assert that "there is no fixed number or percentage of subject that determines the size of an adequate sample." Sample size is a matter of convenience and applicability. This is mainly so when the population is not definite – where the numerical strength of the population is not certain or specified.

However, Meyer (1979, p. 123) suggests the following range of population and the corresponding sample size to derive there from:

Population Range	Approximate Sample Size
Infinity	384
500, 000	384
100, 000	383
50, 000	381
10, 000	370
5, 000	357
3, 000	341
2, 000	322
1, 000	278

It should be noted that the above range is a suggestion, which works best at the convenience of the researcher and the applicability of the method to the research. A researcher is therefore not compelled to follow the suggested range of sample size hook, line and sinker. Another good and useful suggestion for determining the sample size for a study is the Yaro Yamane Statistical Formula for Finding Sample Size of a finite Population. This method is only applicable when the numerical strength of the population is known. The formula is:

$$n = \frac{N}{1 + N (e)^2}$$

Where;   n   =   the sample size

N   =   the finite population

e   =   the level of significance or limit of tolerable error

1   =   unit or a constant

Thus, if a researcher decides to study a universe which constitutes a total of 1, 024 for instance, with a tolerable limit of error or the level of significance at 0.05, using the above formula, the sample size would be determined thus:

$$n = \frac{N}{1 + N\,(e)^2}$$

$$= \frac{1,024}{1 + 1,024\,(0.05)^2}$$

$$= \frac{1,024}{2.5625}$$

$$= 399.60$$

$$= 400$$

From the above example, the sample size for a study population of 1,024 is approximately 400, which also is approximately 39% of the population.

When the sample size for a study is determined, the next invaluable stage is the procedure for selecting the particularly subjects or respondents for the study. The whole process and procedure involved in selecting the particular subjects or respondents for investigation in a research is called sampling procedure or sampling technique. Because of the important role that sampling procedure plays in a research, it is here considered in detail. There are two types of sampling techniques:

- Probability sampling technique
- Non-probability sampling technique

A probability technique is a sampling procedure in which the sample is selected based on well-defined mathematical guidelines whereby every member of the universe has equal chances of being selected. Non-probability technique, on the other hand, is a sampling procedure that does not following any mathematical guideline, and as such the members of the population do not have equal chance of being selected. This method is more or less based on the principle of availability, not on prescribed formula or guidelines.

Types of Probability Sampling Techniques

This technique is otherwise referred to as systematic sampling technique because it follows mathematical guidelines. There are four types of probability sampling techniques. These are:

(i)   Simple Random Sampling

(ii)   Systematic Random Sampling

(iii)   Stratified Random Sampling
(iv)   Cluster Random Sampling

(i) Simple Random Sampling

One of the most outstanding features of this method is that each member of the population has an equal chance of being selected. The simple random sampling operates in two ways: replacement of the subject after being selected and non-replacement of the subject after selection. When it is sampling with replacement, any member of the population that is selected still has a further chance of being selected because after the first selection it is returned to the fold. On the other hand, when it is random sampling without replacement a member of the population that is selected is removed from the fold and cannot be selected again. Random sampling without replacement is the most widely used random sampling method.

The most popular approach to simple random sampling is the use of a table of random numbers. In this method the researcher arbitrarily picks the starting by going up, down, left and right on the table or random numbers, or even randomly throughout the table (Wimmer and Dominick, 2006).

Apart from the use of the table of random numbers, a crude method can also be used in the simple random sampling. In this case, every member of the population is represented by a serial number. The serial number is written on a tally and put in a bag and mixed. The researcher then closes his eyes and picks out one tally at a time till the required number of sample is picked. The serial number on the selected tally then determines the particular member of the population to be selected for study.

(ii) Systematic Random Sampling

In this probability sampling method, every member or unit of the population is sampled. The process continues until the required nth number of sample is selected. In this case the nth number is the very first number after the skip interval or sampling interval. For the systematic random sampling to work there must be a sampling interval and a sampling frame. Sampling interval is the range of successive numbers that are skipped while others are sampled. The skip (sampling) interval (S.I) is usually derived from the formula.

$$\text{S. I} \quad = \quad \frac{P}{S}$$

Where P   =   Population

      S   =   Sample

For instance if the researcher wants a sample of 250 from a population of 1000, the skip interval can be determined thus:

$$\text{S. I.} \quad = \quad \frac{P}{S}$$

$$= \quad \frac{1000}{250}$$

$$= \quad 4$$

On the other hand, a sampling frame is the comprehensive list of members of the population. The members must be arranged serially. The researcher can decide on the starting point arbitrarily, and then pick every nth number until the total number of the required sample is selected.

(iii) Stratified Random Sampling

The stratified random sampling is a type of probability sampling that gives room for effective representation of the various subjects in the population. Babbies (2005) argues that stratified sampling ensures the proper representation of the variables in a given population. To ensure effective representation, the whole population is divided into smaller segments or strata called subsamples. The stratification is based on certain homogenous demographic variables. The stratified random sampling adopts same strategies or approach with the sample random sampling. No wonder Nwodu (2006, p. 55) asserts that "stratified random sampling design is a modification of simple and systematic random sampling techniques".

There are two types of stratified random sampling:

        (v)   Proportionate Stratified Sampling

        (vi)   Disproportionate Stratified Sampling

The main difference between the above two types of stratification is that in the proportionate stratification samples are selected from the various strata based on their proportional numerical strength in the population. On the other hand, in the disproportionate stratification, the number of samples, selected from each stratum, is determined by the degree of the perceived importance or the effectiveness of the contributions of the stratum to the study. Such variables that determine the stratification in the population include age, religion, income level, marital status, academic qualification etc. Considering age, for instance, if it is reasonably believed that in a research, people of 18 to 30 years would be more useful than those of in range of 31 to 43 years, then the bracket of 18 to 30 years would produce more samples for the study. In this case, the disproportionate method

of stratification is used, but if the samples are selected from the two age brackets based on their numerical strength in the population, it is the proportionate stratified sampling. The availability of sampling frame is important to the working of the stratified random sampling, depending on the approach the researcher wants to take.

(iv) Cluster Random Sampling

This technique is close to the stratified random sampling, with the major difference being that in order to escape the error that may arise from the incomplete list of the population in the stratified sampling, the cluster sampling may be used. This means a sampling frame is not fundamental in the cluster random sampling. The working of the cluster sampling can further be explained through this example: if a research sets out to find out the effect of cartoons on newspaper readership in Akwa Ibom State, Nigeria, the research can divide the state into senatorial districts, Local government areas, wards etc, and then select certain groups of people from these clusters. However, if the clusters mainly comprise subjects who are not a true representation of the study population, the researcher can further break down the clusters into smaller ones and randomly sample the subjects or the households that would be appropriate and useful to the study. This type of cluster random sampling is called the multi-stage cluster sampling.

Snowball Sampling

This sampling method is close to the probability sampling techniques. It works through the systematic sampling method, but is not truly a systematic sampling method. However, because of its remote use of the systematic sampling techniques, some people sometimes consider it as systematic, but in real sense it is not.

Snowball sampling is also referred to as referrals. In this method, "a researcher randomly contacts a few qualified respondents and then asks those people for the names of friends, relatives or acquaintances they know who may also qualify for the research study" (Wimmer and Dominick, 2006, pp. 99, 100). In this case, strictly speaking, whatever kind of systematic sampling technique the researcher uses ends at the people who were sampled randomly. The referrals are prone to bias or prejudices. This is because those who were randomly sampled may have referred to others based on one form of subjective factor or the other.

Non-probability Sampling

The non-probability sampling does not follow any systematic or mathematical guideline. There are many types of non-probability sampling methods. These are:
- Available Sampling
- Volunteer Sampling
- Quota Sampling
- Purpose Sampling
- Haphazard Sampling

(i) Available sampling

In this method the researcher selects only the subjects that are readily accessible for the study. Available sampling is otherwise known as the convenience sampling. It is very easy and convenient for the researcher because it eliminates the idea of going about in search of subjects for the study.

(ii) Volunteer Sampling

Volunteer Sampling entails the researcher sampling the opinions of those who willingly offer to participate in the research work. Such people are called the volunteers. In this method of sample selection, participation is first and foremost determined by the volunteer. It is expected that in this method the volunteers are sure of themselves that they would be useful in the study. This forms the basis for the main advantage of the volunteer sampling. That is, the volunteers have some special advantages or edge over those who decline to participate in the study. This method is often very effective in academic environment since research is a familiar practice there; prospective respondents know the importance of giving data or information for research.

(iii) Quota Sampling

In quota sampling method, the samples are selected from the segments or units already created by the researcher. This method is a non-probability version of the probability sampling techniques called the stratified random sampling. A researcher adopting the quota sampling first of all pigeonholes all the elements in the population into appropriate strata or segments. This is done in a way that all the elements in one stratum have similar characteristics. The researcher then selects a subsample from each of the strata. The summation of all the subsamples so selected constitutes the total sample size needed for the study. It must be noted that the selection of elements from the various subsamples can be done proportionately or disproportionately. If it is proportionate, it means the member of samples selected from each of the strata is based on the numerical strength of the strata, but is it disproportionate if the number selected from each of the strata is determined by the perceived degree of importance of each of the strata to the study.

(iv) Purposive Sampling

The purposive sampling method is a non-probability means of sampling in which the researcher uses pre-determined criteria as the basis for selecting the actual sample for investigation or examination. This is the reason why this method is otherwise called the judgmental sampling. In this method, the subjects are selected from the population based on their ability to meet certain specified characteristics or quality. The implication is that all the elements or subjects that do not meet the predetermined criteria, qualities or characteristics would not be selected as part of the sample. It is immaterial whether or not the selection reflects the true representation of the study population. Thus, barring sampling error, the highest justification for purposive sampling is the use of predetermined criteria or qualities.

(v) Haphazard Sampling

This method is somehow close to, but not the same with, the purposive sampling. Wimmer and Dominick (2006, p. 92) explain that in this method; the subjects are selected "haphazardly based on appearance or convenience, because they seem to meet certain requirements."

By this assertion, beyond the qualities of the purposive sampling, haphazard sampling also has elements of most other non-probability sampling method. Haphazard sampling method is highly subjective, although it sometimes poses the illusion of probability sampling by giving a plausible impression that any subject can be sampled at any time. It is probably the easiest sampling procedure and practically the one with the highest rate of sampling error.

Method of Data Collection

The method used in gathering data for a survey research depends on lot of factors, such as the nature of the research problem, the nature of the population and the sample. There are therefore many methods of data collection in survey research; they include:

(i) The Questionnaire

The questionnaire is a set of questions framed by the researcher, based on the research problem and objectives of the study, and administered on the sample or respondent. The opinions and responses supplied by the respondents constitute the information or data, which help the researcher to resolve the research problem, answer the research questions and test the hypotheses as the case may be.

Researchers should ask mainly close-ended questions so as to make for easy coding and data analysis. Where questions seeking the respondent's opinions are asked, the researcher should suggest as many options as possible for the respondents to select from. Where open-ended questions are necessary the researcher should be ready to take qualitative and quantitative approaches where applicable, in order to represent the respondents' views well. At all times each question in the questionnaire should revolve around one variable and the question should dwell on only one issue.

(ii) Personal Interview

This is when the interviewees are considered as experts in one way or the other, and their views are pertinent in the study. It is a one-on-one question and answer situation where the researcher or research assistant raises questions that hinge on the thrust of the research. This method of data gathering is applicable in both qualitative and quantitative researches.

(iii) Panel Interview

This is similar to what obtains in personal interview. The major difference is that, while personal interview involves one interviewee at a time, panel interview involves many interviewees assembled and interview at the same time.

(iv) Telephone Interview

This is still a variant of personal internal interview. The difference here is that in a telephone interview, the telephone serves as the medium mediating between the interviewer and the interviewee.

(v) Conference

Conference is one of the recent methods of data gathering in the survey research. In this method the researcher organises a conference, sets the theme and probably the topics for discussion by the participants. This method is mainly applicable in academic research. It is an elitist method of data gathering since participants are drawn from the literate class in the society. The participants are basically people who are well versed with the thrust of the research and theme of the conference. They are usually given opportunities to present paper and answer questions as much as possible.

Scale for measuring Items

When the items on the questionnaire are structured based on the five-point Likert-scaling the corresponding weighting is as follows:

Strongly agree – 5

Agree – 4

Undecided – 3

Disagree – 2

Strongly disagree – 1

This is usually meant to given the respondent an opportunity to express the degree of their views appropriately.

Sampling Error

Naturally all the respondents cannot have the same view or opinion on the subject matter of the research. The differences in the individual respondents sampled within the population constitute the sampling error. Sampling error is the difference between the result obtained from a sample and the result, which would have been obtained from the population. Osuala (2007, p. 122) states that, "a sampling error usually occurs when the complete survey is not carried out, but a sample is taken characteristic of the population." Wimmer and Dominic (2006), who also describe sampling error as standard error, are of the view that the computation of sampling error is essential in research. It makes generalization relatively meaningful and reliable.

Sampling error (S.E.) can be computed based on the formula:

$$S\,E \;=\; \sqrt{\frac{P\,(100 - P)}{n}}$$

Where   P   =   percentage of the sample

             N   =   Sample Size

Therefore in a research in which the population was 1,024, the sample size was 400 that is, about 39% of the population, the S. E. can be computed this:

$$S\,E \;=\; \sqrt{\dfrac{39\,(100-39)}{400}}$$

$$=\; \dfrac{39\,(61)}{40}$$

$$=\; \sqrt{5.9475}$$

$$=\; 2.4387$$

This gives a searched value of 95, therefore in the research; a confidence level would be 95% accuracy of result.

Validity of Measuring Instrument

To ensure the face validity of a measuring instrument, the question (whether on the questionnaire or the interview questions themselves) has to be vetted by experts before they are administered on the respondents. This usually ensures that the questions are constructed in a way that would enhance effective measurement of opinions of the respondents or gathering of appropriate data for the study.

Again, the instruments should be pre-tested on the population of the study, even through non-probability sampling method. This usually enhances the exact and appropriate modifications to be effected on the research instruments for them to achieve their purpose.
Another significant means of ensuring validity is by a painstaking sampling procedure. When the sampling procedure is efficient, it brings about effective representation of the population and as such appropriate respondents would be faced with appropriate research instrument. The end result then would be validity of the measuring instrument.

Reliability of Measuring Instrument

When the measuring instrument is reliable, the findings of the research can be generalised. Adedoku (2003, p. 44, 55) is of the view that:

> Reliability is the degree of similarity between two or more results or
> information obtained with an evaluation instrument after a repeated
> administration of the same instrument. It refers to the extent to which
> a particular measurement is consistent and reproducible.

The reliability of the measuring instrument for a research can be determined by the technique of correlation coefficient, based on the degree of agreement of two sets of measure obtained from the same basic instrument. The formula for the reliability coefficient is.

$$r_{xx} \;=\; \dfrac{2\,(r_{oe})}{}$$

$$=\; 1 + (r_{oe})$$

Where rxx   =   reliability of the instrument

Roe   =   correlation between the odd and the even items.

Method of Data Analysis

The opinions expressed by the respondents form the basis for data analysis. The responses are often first expressed in tables and computed using the simple percentages (%), with the formula:

$$\% \quad = \quad \frac{R}{N} \quad x \quad \frac{100}{1}$$

Where R   =   Number of responses (distribution)

N   =   Total Number of respondents

The research questions are usually answered based on the data calculated and expressed in simple percentages. That is, when an issue is raised, the position taken to resolve the issue is based on the percentage of the response to the related questions.

For the testing of hypothesis, there are many statistical formulae available for use. They include:

(i) The Pearson – Product Moment Correlation ($r$xy)

$$\frac{N\sum X - (\sum x \sum Y)}{\sqrt{\{N\sum X^2 - (\sum X)^2\}\{N\sum Y^2 - (\sum Y^2)\}}}$$

Where X and Y stand for original scores

N   =   the number of pair of scores

$\sum$ =   the summation

(ii) Spearman Rank order Correlation Coefficient ($r$rank):

$$r\text{rank} \quad = \quad 1 \quad - \quad \frac{6\sum D^2}{N(N^2 - 1)}$$

Where $r$rank   =   Correlation Coefficient

N   =   Number of cases

D   =   Differences between the ranks

(iii)   The Chi-Square (X^2)

$$X2 \quad = \quad \frac{\sum(f_i - e_i)^2}{e_i}$$

Among the above statistical methods, the one that is most frequently used in testing hypotheses in communication research is the chi-square. It should be noted that no method is, on its own, better than the other, but the use of a particular method is determined by the nature of the data set generated for the study. It follows that; a researcher should adopt a statistical method that suits the data set generated. Unfortunately, so many people feel that the use of chi-square in communication research is becoming trite and tedious. This is not a very complementing perception. The main reason behind the use of the chi-square in many communication researches is that most of such researches revolve around human beings and as such, gather and generate discrete data sets not continuous data sets. Discrete data set centres on human being; does not involve fractions since there are no 1.5 human beings for example. Thus discrete data set involves whole numbers only. On the other hand continuous data set involves non-human beings or figures gathered or generated from non-human being. Examples of continuous data set include 2. 7389; 1. 8; 0. 539 etc; that is, figures with fractions.

Conclusion

The survey is a very popular research technique in quantitative research in particular and communication research in general. Like any other research techniques, the survey entails a painstaking planning and executing of the plan religiously. The survey is somehow a common place technique in communication and other social science researches. In communication research, audience survey, programme survey and other forms of survey are rampant. This establishes the importance of the survey in this field of endeavour.

This paper has established the importance of the analytical and descriptive survey and the various processes of a survey research. It is thereby concluded that despite the limitations of the survey, it still remains a crucial technique of quantitative research in communication and other related fields.

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