Overview of research methods

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Why research method?

- Research is crucial to those in the business of knowledge production.
- It is the nucleus of any academic endeavor and advancement in knowledge is tied directly to its endless pursuit.
- Career advancement as academics depends largely on the amount, frequency and quality of research carried out.
- In the Humanities and social sciences, human beings form the laboratory
- There then arises the need for scholars in these areas to be adequately informed on the nuances and intricacies of research method.
- This talk focuses on the various methods of qualitative and quantitative data collection and analysis in the Humanities and Social Sciences.

Two major approaches

- The two dominant approaches in the Humanities and Social Sciences Qualitative and Quantitative techniques.

- Either of the two can be used separately

- They can also be combined.

- Both methods are designed to capture social life as people experience it. While qualitative approach reports it in a non-numerical form, quantitative employs numerical techniques to capture such.

- Thus, the major difference between the two is the manner of data analysis.

Data types and sources

- Primary data

This is derived mostly from fieldworks or available collections by credible organizations and bodies. The presence of primary data makes research empirical. Primary data must be derived from credible and verifiable sources

- Secondary data

This is the literature that gives flesh to research works. It is usually derived from published materials such as texts, newspapers, magazines, documentaries, gazettes, declassified documents, etc.

Data Collection

- **Interview:**

This is usually used for qualitative research. It is a conversation between parties to a research (researcher and the researched). A way for researchers to understand the thought process that exists inside, an inner look at why people behave in the way they do (Stuckey, 2013). It is employed to elicit data on (1) peoples experience, feelings, perceptions, idiosyncrasies, etc and (2) to also assist in constructing researcher's narratives based on the understanding of the responses of the respondents.

Interviews could be structured, semi-structured or unstructured.

The major difference between them is the amount of control the interviewer has over the encounter and the aim of the interview.

Data Collection

- **Observation**

A qualitative research strategy. It is a researcher's eyewitness accounts of what people do rather than what they say.

Could be episodic, periodic, repeated, or prolonged.

Depends on the researcher's interpretation of what s/he sees or observed.

It is useful in (1) studying sensitive situation where people are not willing to talk and (2) when there is abundant time for fieldwork.

Observation could be participant or non-participant

Data Collection

- **Focus Group Discussion**

This is a group of carefully selected people by a researcher to discuss specific research topic that are supposedly of mutual interest to researcher and the discussants (Morgan, 2013). FGD requires specialized skills. It is usually led by a moderator, and assisted by note takers and time keeper. An FGD takes about 1-2 hours. A standard FGD should be composed of between 8-12 people.

Data Collection

- **Ethnographic method**

A qualitative approach. It is useful in studying socio-cultural phenomenon, employed mostly by anthropologists and sociologists. It involves studying a phenomenon from the point of view of the subjects being studied. Here, the researcher will have to immerse him/herself in the culture of the social field of the studied group for a long time. The method allows researcher to sufficiently observe, learn and document the group's socio-cultural patterns, relationships and the meanings attached to them.

Data Collection

- **Oral history:**

It is a qualitative approach that draws from history and sociology. It is a system of collecting people's spoken accounts and personal reflections of particular events, places and times through recorded interview.

Data Collection

- **Sampling**

It is employed for quantitative research. It involves selecting units (e.g., people, organizations) from a population of interest, for studying in such a way that the results can be fairly generalized back to the entire population from which they were chosen.

Methods of non-probability sampling:

1. Quota Sampling

2. Convenience Sampling

3. Accidental Sampling

4. Purposive or judgmental Sampling

5. Opportunity Sampling

6. Consecutive Sampling

7. Snowball Sampling

8. Cluster Sampling

Data Collection

- **Methods of probabilty sampling**
1. Random sampling
2. Cluster Sampling
3. Stratified Random Sampling

Data Collection

- **Questionnaire**

A set of questions for obtaining statistically useful or personal information from individuals

Types

1. Dichotomous Survey Questions
2. Multiple Choice Survey Questions
3. Rank Order Scaling Questions
4. Rating Scale Questions
5. Semantic Differentials Scale Questions

Data Collection

- **Pre-existing statistical data manipulation**

This involves the use of existing data collected by other parties through research activities, information system and other surveys such as CBN, Bureau of Statistics, AFROBAROMETER etc. The existing data can be analyzed to generate new hypothesis or answer critical research questions. The advantage of this is that it saves time and money. It also offers wider opportunity for generalization. However, this method should be used with caution as regards ethical issues. Also, the credibility of the data sources must be taken into consideration.

Data Collection

- **Content Analysis**

This is a method of collecting data from the manifest of communication materials, documents and other broadcast and printed materials in an objective, systematic and qualitative manner.

Types of Analysis

1. Analysis of substance:- subject matter analysis, direction analysis, analysis of authority, analysis of target

2. Analysis of form: (1) the form the content appears – books, fiction, film, etc., (2) statement through which it is crafted, eg, grammar, syntax, structural components, logic etc., (3) measurement of the strength, emphasis, or exitement or value of expression.

Data analysis strategies

- **1. Excerpts**

- A piece of quote extracted from a larger body of information. Excerpts can be taken from a broad range of data in research.

> The farmers used to hunt grass cutters; but now there are no grass cutters anymore. Now, if you hunt grass cutters that only sell for twenty Ghana Cedi and there are cattle in the bush that you can kill and sell for two thousand Ghana Cedi, which one do you think they will prefer? This is what is happening. What they do is that when they want to kill the cattle and you resist, they will attack you and turn around to say it is the Fulani that attack (Personal Interview, 2014)

- Excerpts must be indented, if it is more than four lines.

- It must be followed by analysis in form of explanation.

- It must be properly referenced.

Data analysis strategies

- **2. Paraphrasing**

When a researcher puts a piece of information or passage from an author in his/her own words.

- Paraphrases have to be acknowledged and referenced.
- There is a fine line between paraphrasing and plagiarism

Paraphrasing

- Example of paraphrasing

Original text

"The political independence Europe 'granted' to her overseas territories in sub-Saharan Africa during the 1960's changed nothing ... On the contrary, Europe economic domination over sub-Saharan Africa deepened" (Walter Rodney, 1972:149). –

Paraphrasing

Sub-Saharan Africa's political independence from Europe during the 1960s changed nothing in Africa but, on the contrary, it deepened Europe's domination of the region (Walter Rodney, 1972:149). - Ideal Paraphrasing

- Paraphrasing should be kept short and if longer than 4 lines should be indented as a lifted direct quote.

Data analysis strategies

- (3) Typology

Typology is the grouping and classification of different phenomena based on their cluster characteristics.

- Categories are constructed based on the nature & levels of similarities and differences amongst constituent elements.

- Typology construction tries to exhaust all possible combinations of theoretically conceivable differences.

- **A researcher can construct typology out of qualitative data or apply existing relevant typologies to analysis of data**

Data analysis strategies

- (4). Triangulation

Triangulation in the social sciences is an attempt to explore social phenomena and also validate research data from multiple standpoints, usually three or more standpoints.

- There are four methods of triangulation:

- *(a) Data triangulation (involving data that traverses time, place & persons);*

- *(b) Methodological triangulation (multiple data collection methods);*

- *(c) Investigator triangulation (involving multiple investigators); and*

- *(d) Theory triangulation (application of multiple theories).*

- Triangulation has the advantage of enriching research and minimizing bias.

Data analysis strategies

- **(5). Statistical and computer programs and packages**

- A number of softwares have been developed to assist in analyzing data for quantitative research. All we need is to acquaint ourselves with these developments.

- **(6). Tables, Charts and graphs**

- Tables and charts could be derived from both qualitative and quantitative data.

- Data collected through personal interviews, observations, FGD, etc., can be analyzed descriptively.

Data analysis strategies

- **(7). Grounded Theory (GT)**

- GT is a research method that seeks to develop theory that is grounded in systematically gathered and analyzed qualitative data, usually [ethnographic] interview, observation or FGD data.

- It aims to develop an understanding of social reality "grounded" in a systematic analysis of data.

- Seeks to understand research and develop theory from the perspective of the researched.

- • It is appropriate for studies that aim to explain a process, not to test or verify an existing theory.

- GT is problem-solving oriented and is mostly used in qualitative research requiring data coding using appropriate conceptual constructs or themes

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