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]RESEARCH METHODS IN THE SOCIAL SCIENCES

(SOCIAL RESEARCH METHODS)

SOCIAL SCIENCE FOUNDATION OF RESEARCH: OVERVIEW

- Social research is a purposive and rigorous investigation that aims to generate/at generating specific new knowledge.

- It is the intellectual tool of social scientists which allows them to enter contexts of personal or public interests that are unknown to them and to search for answers to their questions.

- Social research is about discovery, and expanding the horizons of the known, confidence of something, ideas and new conclusions about all aspects of life.

- As the quest for knowledge, social research has been the ultimate goal of social scientists who basically seek, not only to gather useful, valid knowledge, but also to educate the community about the status and validity of certain sources of knowledge.

TRENDS IN SOCIAL RESEARCH OVERTIME

- Research has been diverse and pluralistic.

- The two major forms of research within the research domain have been positivists (qualitative and non-positivists (quantitative).

- Quantitative research became popular, and overshadowed other types of research. However, the rise of qualitative research (during the second half of the 20^{th} century) reduced the popularity of positivism significantly.

- There have been an ideological division over the quality and suitability of social research.

- Research has been associated with personal interests, social problems, ideologies and political influence.

- Research has also served as a toll of social policy and social construction.

PHILOSOPHY OF SCIENCE

Science is a method (way) of knowing things (a way of generating knowledge).

- Thus, science is a systematic/logical method of knowing or generating knowledge.
- It is an objective way of knowing things.
- There is objectivity in the way knowledge is generated. That is, science is less biased.
- It is also empirical/practical/experimental, science is experienced as it is concerned with generating knowledge about things that can be observed/seen/experienced.

In social work, we are concerned about knowledge that is scientifically generated. It is about evidence based social work practice through the use of methods and techniques that have been scientifically proven to be effective (through research).

Philosophy studies things in a more speculative way as opposed to observation.

- It is based on facts (there is no proof by observation)
- It is also a method of knowing or generating knowledge.
- One characteristic is that it is subjective. That is, it is biased and based on personal judgment or experience.

TWO BRANCHES OF SCIENCE

There are two systematic methods of acquiring knowledge (or methods of investigation):

(i) Social science

(ii) Natural science

Social workers use applied science to generate knowledge about nature of human benefits. Applied science is the science that uses knowledge acquired to solve human problems/social problems (problems affecting human beings/people).

Social science thus is the study of human society. The emphasis is on research methods.
Social: Relationships, that is, how people relate to each other, at individual, family, community and organizational levels. It is also based on the type/nature of relationships and outcomes of those relationships. For example, economical, political, social and cultural etc. In case of economical relationships, those working and not working relate to each other.

*Natural scienc*e is the study of natural phenomenon that is the physical environment. Primarily/traditional branches include: physicals, chemistry, biology etc.

DIFFERENCES BETWEEN SOCIAL SCIENCES AND NATURAL SCIENCES

- Social sciences (social work, sociology, psychology etc) are concerned with the study of society – social structure and interrelationships.

- Physical/natural sciences deal with observable phenomenon. They mostly deal with non-living things. For example, physics – light, chemistry – chemical compounds.

- In terms of subject matter, natural sciences deal with matters different from social sciences. The difference has led to social scientists to believe that social sciences, for example sociology, sociologists such as Emile Durkheim and Max Weber to have different views.

  E Durkheim introduced the issue of social facts as social reality as having an independent existence. He used positivism which is the study of social reality objectively through the use of scientific methods.

Max Weber argued that the subject matter of social sciences and physical sciences were distinctive, and as such the local inquiry should be different and that you cannot use positivism to study social reality, that is you cannot be objective. He thus argued that social reality has got a subjectivity part to it. Thus, the methodology should employ verstehim. You cannot avoid emotional engagements but 1be more empathetic in understanding social reality. (Employ phenomenology as a school of thought).

SIMILARITIES BETWEEN SOCIAL SCIENCES AND NATURAL SCIENCES

What is common between social sciences and natural sciences?

Science is about methods of investigation. It is the systematic method (way) of generating knowledge. They are both called sciences because they use systematic methods (ways) of investigations in describing explaining and predicting social phenomena and events.

AIMS AND GOALS OF THE SOCIAL SCIENCES

(i) Description
(ii) Explanation — Major ones
(iii) Prediction
(iv) Understanding

(i) Description

Refers to the accurate and precise measurement and reporting of events and social phenomena, including characteristics of social phenomena and events so that for any given event a social scientists is able to describe it. For example, a strike, risk of demonstration, such as who participated, where did it take place, who took part in students' demonstrations? What were their characteristics? When, who, where, what are the questions.

(ii) Explanation

Involves investigation of causes underlying the existence of particular phenomenon.

Why?

Students' demonstration; Poverty; Child abuse/defilement; HIV/AIDS; Street kids

That will lead to causes, explanation related to analysis, so that ultimately you can build the body of knowledge.

There are two aspects:

(a) Deductive explanation

(b) Probabilistic (inductive) explanation.

(a) **Deductive Explanation:** are explanations based on universally established laws. Spatio – temporal validity.

For certain explanations, truth will remain the same.

These are common in natural sciences, for example, laud of gravity, as it universally varies. It is true across time and space.

Universal – unchanging

Spatio – space, temporal – time.

It is used to explain social phenomena. Social science have spatio-temporal validity. For example, economics has law of supply and demand.

(b) Probabilistic (Inductive) Explanations

Explanations are not based on universally established laws but are based on generalizations expressing tendencies observed in many instances.

X → Y

If X takes place, what happens to Y?

In this case, explaining social phenomena is based on what has been observed. For example, law of supply and demand.

- Availability of goods, prices go down
- Scarcity of goods, prices go up.

This should be based on empirical observations, and make a generation. This generation is not applicable in all situations since it lacks universality. Thus, it may not apply in all instances. Explanations are always expressed with some probability. For example, unemployment will lead to high crime rates.

Unemployment = Crime

You cannot have universality in terms of explanation in social sciences.

(iii) Prediction

Prediction - forecasting, projection, prophesying.

The more complete an explanation is, the more accurate is the prediction likely to be.

A prediction based on deductive explanation is more likely to be accurate than probabilistic explanation. For example, a law of gravity – a stone is likely to fall down, but you cannot predict that unemployment with fall drastically. For example, all the people will die, has universal validity.

(iv) Understanding

Means to grasp the meaning of on to comprehend something. In social sciences, we conceive understanding by verstehen – Empathetic understanding of social phenomena as the social sciences deal with a distinct body of knowledge with some subjective component to it. Thus, one should try to put himself in the area of the subject of inquiry (matter/subject under investigation).

THE MEANING AND IMPORTANCE OF RESEARCH

- Re-search
- Re-again (search again). That is, look at problems or situations afresh/a new.

Why?

This is the first looking at phenomenon may be misleading or it may have been error prone, false, or inaccurate information, hence the need to look into problems again.

Research tends to go beyond common sense view of reality. In research nothing is taken for granted (and always take a second look). There are a number of things that are taken for granted. For example, all the street kids may be considered to be children orphaned by HIV/AIDS, when infact not all of them. In research we go beyond what we see and try to see what lies beneath it. By doing that, research helps us correct misconceptions about reality, and

we get closer to new knowledge through systematic investigations. Therefore, in research never take things for granted.

Research is thus undertaken because people want to find out more information about a problem, or others may even question that information.

MEANING OF RESEARCH

Research is a systematic collection, analysis (or collation) and interpretation of data/information in order to answer a question or solve a problem. Research is a systematic way of collecting, analyzing/collating and presenting information on a certain problem or situation or event. It involves finding out more about a certain problem so as to come up with a certain conclusion/solution to solve a problem.

CHARACTERISTICS OF RESEARCH

- A research demands a clear statement of a problem. That is, identify the problem (state the problem). What is problematic about a situation? For example, what is problematic about alcoholic abuse?

- Research requires a plan.

- Research builds upon existing data and information and makes use of both the negative and positive aspect that data or information.

- In every kind of research, the information that exists has to be built upon (relating to literature review).

- New data should be collected in every research as per problem identified or defined.

- It must be organized in such a way that it answers your questions or solves a problem.

TYPES OF RESEARCH (TWO MAIN TYPES)

(i) Pure (basic) Research
(ii) Applied Research

(i) Pure (Basic) Research

- This type of research is concerned with the production of new knowledge and with the increase of scientific understanding of the world and not with the application of its outcome.

- It aims purely at the discovery of knowledge. Thus, it is referred to as pure research. In other words, pure research is the kind of research intended to acquire knowledge for its own sake.

- It is one done for personal interest. It aims at fulfilling some academic interest. That is, to satisfy one's intellectual curiosity/answer questions. For example, research done for academic fulfillment.

- Thesis/dissertation students who are doing master program submit their research papers to fulfill academic interest/requirement as part of the conditions set by university.

(ii) Applied Research

- This is the type of research which places strong emphasis on application of knowledge acquired and problem solving as opposed to the basic research.

- It also entails the personal engagement of the researcher and elements of change (people affected by the problem) and enlightenment.

- It is usually referred to as emancipator research.

- Social impact studies, action research, evaluation research and cost-benefit analysis are a few examples of applied research.

- In other words, applied research is the one that is intended to find solutions to problems. It is about finding practical solutions to real world problems.

- You can also evaluate certain policies, projects and program. Thereafter, come up with interventions and solutions. For example, the problem of HIV/AIDS, street kids.

- In most cases, you want to come up with solutions that will help in improving buy that particular problem.

Examples of Research

- Zambia Demographic and Health Survey (ZDHS)
- Living Conditions and Monitoring Survey (LCMS)
- Census which is done by Control Statistical Office (CSO)
- These are done by governments, donor agencies, NGOs to improve the quality of life of people.

Note Book

- There is some continuity between pure research and applied research. That is, what begins as basic research can be applied research (from academic to applied research). For example;

POSITIVE FUCNTIONS (USES) OF RESEARCH

- It assists in the acquisition of knowledge (as a major use).

- Solving of problems – finding solutions to problems (particular solves in applied research). For example, commissioned research, that is, looking for data/information and come up with

recommendations, with the view to implementing the policy. For example, street vendors in Lusaka identified as a problem.

- Research of this nature will always give the quality of life indicators. For example;
    - CENSUS - Life Expectancy
    - ZDHS - Per Capita Income
    - LCMS - HIV prevalence rates, enrolment rates, maternal mortality rates, percentage of women in decision making positions.
- These indicators are a result of applied research conducted. For example, Millennium Development Goals (MDGs).

NEGATIVE USE (ABUSE) OF RESEARCH

- The use of research findings to maintain the status queue or the situation of a particular group.

- Carry out research to prove a point.

- It is pre-conception about reality.

- Research carried out in a disordered way. For example, a particular group has low ZQ, especially blocks. Also that HIV/AIDS originated from blocks who are related Chimpanzees.

- Carry our research in uncondusive environment and the group on which research is conducted comes from the disadvantaged background.

- Doctoring of data; involves a process of playing around with data so that it yields the results that you want. For example, constitution review commission and the recommendations say 90% of Zambians want the constitution to be adopted through constituent Assembly. However, Information Minister presides over the adequate and change the data to suit themselves – ruling party.

- Over advocacy trap is a situation where a researcher officers advise or recommendations based on advocacy or personal opinions and avoids empirical investigations or evidence.

- One may give personal opinion or advocacy to represent the opinion of the people to justify their positions or situations.

- The social sciences 'priesthood' (after research, the information is for the benefit of the general society to make decisions and policies).

- However, social scientists use language that makes it difficult for people/society to understand the outcomes of the research.

- Invasion of privacy during research, ensure that you do not violate the privacy of the people from whom you are collecting data/information so that you do not harm them. For example, collecting information on daga, do no mention names of respondents. However, the privacy of people is violated.

- Unscientific sampling; researches have a tendency to sue methods of sampling/samples that are not representative of the population and using them to make generalizations. This becomes the abuse when generalizing the population.

SOLUTIONS TO ABUSES

- Use the language that can be understood by people, especially people who will benefit from the research.

- Use of scientific sampling so that the results will be representative of the general population.

- Use of informed consent in order to safeguard confidentiality, ask the participants to willingly and voluntarily give you the information and not through conversion.
  Note: Only in a CNEUS, all people are required by law to give data.

- In order to preserve the privacy of individuals, information/results generated must be reported in form of grouped frequencies – collectively so as not to reveal the identity of people who gave the information. For example, data on daga smoking. Do you smoke daga/marijuana?

	Male	**Female**
Yes	%	%
No	%	%

Express the information in form of percentages (%) or numbers.

COMMON SOURCES OF KNOWLEDGE

- Research is primarily motivated by acquisition of knowledge.

- How do we know the things and how valid is the method or how valid is our basis of knowledge.

VARIOUS WAYS OF KNOWING THINGS

(i) Intuition

Is the subjective way of knowing things through insights which are not based on rational thought. It is based on lunch, premonition, "gut-feeling." That is, it is subjective and based on personal feelings, it is like a lunch – a idea based and feeling rather than on facts or proof/without reasoning or proof.

(ii) Habit

- It involves believing what we do because it is tradition to do so.
- It is knowledge acquired through socialization.
- Tradition, in the sense that it is practiced through generations (opinions, beliefs, practices and customs passed on from generation to generation).

(iii) Common Sense

- It is about opinions that are widely held because they seem to be obvious or correct.

- Everyone believes in something even though there is no proof. For example, prostitutes do what they do because of poverty. Street kids are orphaned or vulnerable because of HIV/AIDS.

(iv) Authoritarian

- This is where it is assumed that knowledge is derived from those individuals who are politically and socially producers of knowledge.

- It is based on authority. It is the way of experts. For example, individual social scientists.

(v) Mystical

- This is where knowledge is assumed to be solicited from prophets. It is based on divine and supernatural powers. An example, should be in the bible that Jesus Christ healed the blind or lame people.

- It is based on the divine, goods, mediums and other supernaturally endowed individuals or supernaturally knowledgeable authorities. For example, witchdoctors/finders.

- In most cases, it is accompanied by rituals and ceremonies in order to arrive at some knowledge.

- Problem associated with thus, source is that it stands as it were on tenacious grounds because confidence in knowledge generated diminishes as the number of disconfirmation increases. This happens as society advances. For example, most of the educated people would question witchcraft or the Bible.

(vi) Rationalistic mode

- Knowledge acquired through an opinion or judgment based on careful thought or reasoning.

- Knowledge in its totality can be derived from a strict adherence to the rules and forms of logic.

- Related to this, is the view that the human mind can understand or comprehend events or phenomena independently of observed phenomena so that it is possible to understand the world.

- It is possible to know things in their true essence without involving one's emotions or feelings.

- Completely, absolutely and objectively so that you can conceal your own knowledge.

- Knowledge can be obtained strictly through the process of reasoning.
  Abstract Logic – pure mathematics characterised by values that are universal and very compelling and absolutely certain.

(vii) The Scientific Mode

- It is based on assumption that knowledge must rely on perceptions, experiences and observations.

- It is based on empiricism. It is knowledge derived from our senses indirectly or directly (what you see, feel).

- To a considerable degree, a scientific mode also tends to marry certain aspects of the rationalistic mode – relationship between scientific mode and rationalistic mode. For example, a lot of mathematics in social sciences such as demography and economics.

THE SCIENTIFIC METHOD

Characteristics

- In conducting of research, there must be systematic rules and procedures. Researchers should operate on the rules or road map in the manner in which they make inferences, observations and conclusion.

- Logical in the sense that it uses deductive reasoning and inductive reasoning. Deductive reasoning/logical involves a process of reasoning from the general to the specific. For example, all men are mortal (general); John is a man and therefore, he is mortal (specific). Inductive logic/reasoning involves general. That is, you start with specific instances to general. For example, John is mortal; All men are mortal.

- Scientific method is empirical. It means that data or knowledge is derived from reality. That is, from observations of what actually exists (observations, experiences, perceptions).

- Replicable: It means that another researcher conducting research should come up with more or less the same research results of the other researchers using a research in similar circumstances.

- Transmittable: having taken research, the findings of research can be in a way that findings go beyond the research.

- The research findings should be transmitted from the sample to the whole population (generalized to the whole population – should be representative of the larger population).

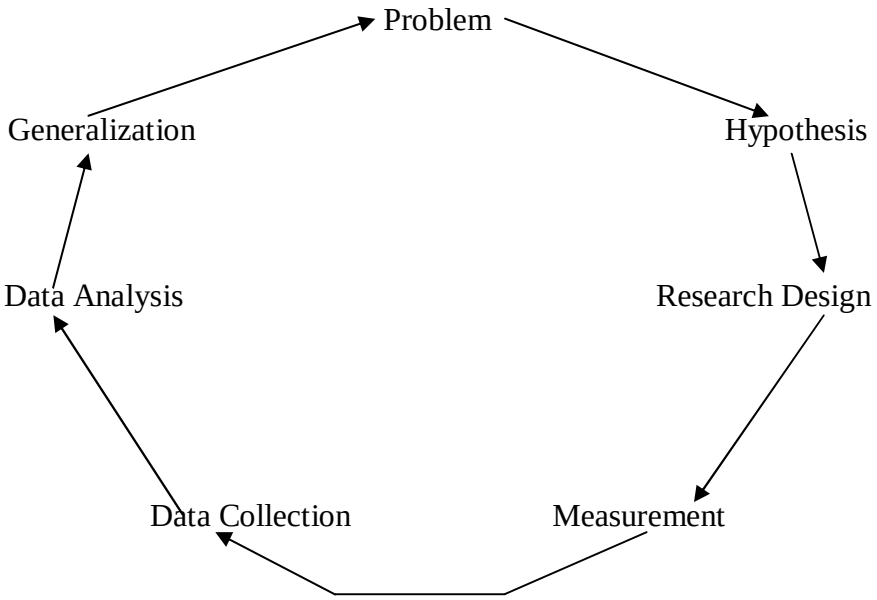
- It should be transmitted to other contexts. For example, research conducted at UNZA can be transmitted to other universities.

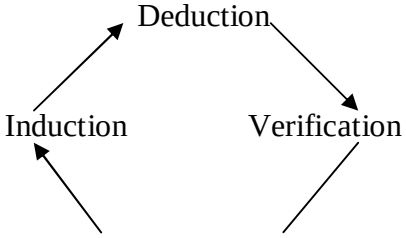
- Reductive: When you think about research you must realize, that you are dealing with complex situation(s). That is reality which is complex/infinite. You have to focus on realities – things that concern us so that you make your research so physical. Focus on something that you can manage.

- Objective: Means removal of personal values and biases, away from unduly influences by prejudices and values. It calls for suspension of beliefs. When conducting a research, make your own reflection on the truth.

THE RESEARCH PROCESS

This is a cyclical process as it moves in stages from the conception of problem to the final result.





Theory – Research (deductive)

Research – Theory (inductive)

You can start with a theory (general), then do research (specification). Or start with research (specification), then up with theory (general).

Research does not end, it is an ongoing process (it is dynamic).

FACTORS THAT INFLUENCE CHOICE OF RESEACH PROBLEMS (TOPICS)

(i) **Value and relevance in life:** Investigate things that have value, relevance and meaning in life.

(ii) Intellectual and academic interest, especially those on pure research. For Purposes of fulfilling course requirements.

(iii) **Practical Interest:** This is the kind of research undertaken to find solutions to a problem. For example, problems of street kids, street vendors. Embark on research to find solutions.

(iv) **Personal Interest:** A desire to undertake research from a personal perspective. For example, documenting strikes, boycotts or demonstrations by students. (Sometimes, may overlap with others).

(v) **Accident (Serendipity):** This is covering by chance. That is, research which starts by chance/accident. Chance research, especially through expectations. You might find yourself deviating from your goal, for example, Rontgen discovered x-rays by accident (German Physist). This is done more especially in natural sciences.

(vi) **Social and Financial Incentives:** People undertake research as it gives them the opportunity to get money, for example, commissioned research through bids. Tenders

and advertised, and a number of people will bid for tenders to conduct research because it involves money.

(vii) **Human Resource Capacity:** Ability to conduct research. Knowledge and skills in terms of research methodologies. Normally bid for consultancy.

IDENTIFICATION OF THE PROBLEM

- Is the topic so problematic to warranty further investigation? For example, street vending.
- In fact, this is the first stage in the research process.
- Ask yourself questions:
    - What is the problem?
    - Why should it be studied?
- There should be three (3) conditions for a problem to exist on any given topic.

Three (3) conditions necessary for the existence of a problem

Whether a problem or situation exists depends on three conditions:

(i) There should be a discrepancy or perceived difference between what exists (actual situation) and the ideal (desired situation).

(ii) The reasons for the discrepancy or difference must be so unclear that it warrants research questions and further investigations.

(iii) There must be more than one reason and possible answer(s) to the research question paused.

DISCREPANCY

Identifying a problem (what is the problem).

- Ideal or desired situation
  Numbers should decrease, go away from streets.

- Real or actual situation
  Numbers of vendors increasing and vendors are becoming more militant.

If the actual situation equals to ideal situation, then there cannot be a problem, hence no discrepancy.

Reasons for discrepancy (why does the problem persist)

- The reasons should lead you to investigation of the discrepancy.
- The reason or even answers must be unclear.
- There must be many reasons or more than one possible reason or answer.

Discrepancy

- Ideal or desired situation
  After all efforts, the number of vendors should decrease.

- Actual or existing situation
  The number of vendors is increasing.

- This scenario is the basis for the discrepancy.

- The reasons for the discrepancy are unclear, leading to the research question.
  - What explains the discrepancy?
  - What are the reasons for the discrepancy?

- There are many possible answers/reasons for the discrepancy:
  - More customers on the streets leading to more profits
  - Avoidance of market levies
  - Unfair allocation of tradition space
  - Ignorance/level of knowledge
  - Lack of capital
  - Too much competition in the markets
  - Limitation of time
  - Easy to trade in illegal goods
  - Lack of employment
  - Poverty
  - Asian traders encourage these
  - Influx of traders from outside Lusaka
- When doing research, openness of the mind or sense of accommodation is vital.

PROBLEM DEFINITION

- Involves identifying and quantifying the core problem. For example, the core problem is the increase in unregulated street trading in the streets.

- This is a situation whereby you use figures and numbers to quantity the problem in terms of the nature of the problem itself.

- That is, ideal and actual but this time you use numbers and figures and this should lead to distribution of the problem. For example, what is the number of street vendors?
    - What are the vendors?
    - Who is affected?

  Then you have to use picture.

    - Where are the vendors?
    - When is the problem more serious?

- You have to indicate the size and intensity of the problem
    - How widespread is the problem?
    - How severe is it?
    - What are the consequences?

- When you ask questions like these, you are concerned with occurrence, intensity and distribution of the problem. It means defining the problem in terms of its occurrence, intensity and distribution.

- By asking questions, you are establishing the parameter which will indicate the incidence and prevalence of the problem. How big/prevalent the problem is?

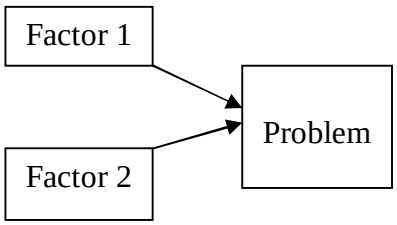
- It will also determine the geographical areas or distribution of the problem. Is the problem only confined to certain areas?

- You also have to know the characteristics of the population.
    - Who are these vendors?
    - Who is affected by this particular problem?
    - Are they young, old, residents or migrants?

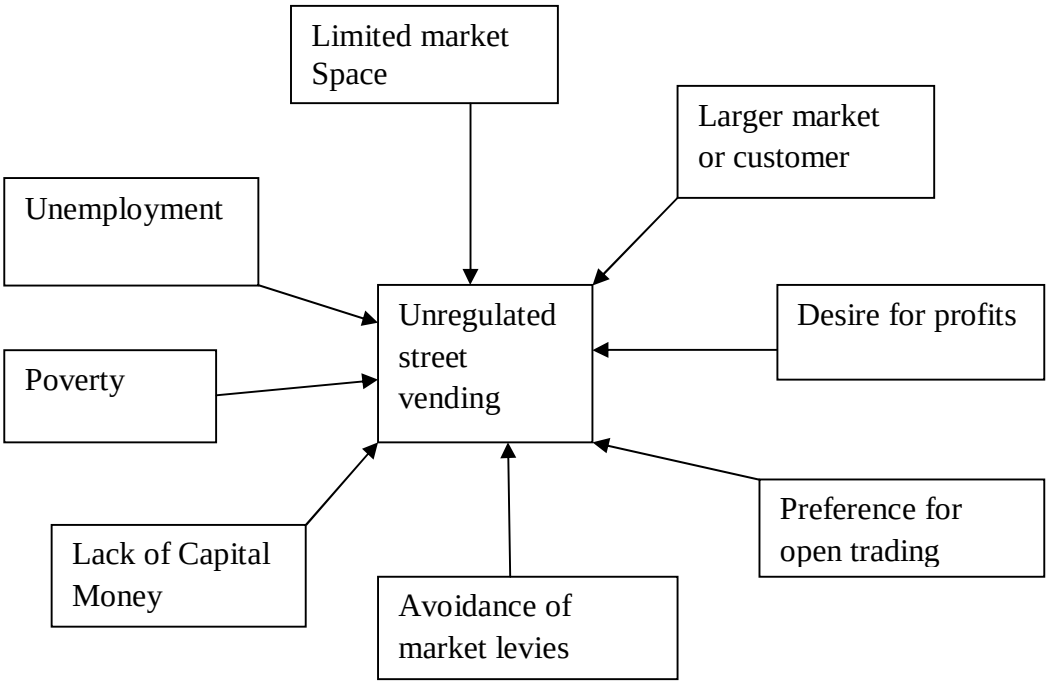
- Having done this, you want to know the information available about the problem. This requires reviewing the information available, about the problem. You need some information already available from sources.

- After defining the problem, analysis of the problem follows. Identify factors that have contributed to the existence and persistence of the problem. For example, street vending. This is done by clarifying the relationships between factors and the problem itself.

ANALYSIS OF THE PROBLEM



For example:



To make further clarification, organize factors into larger categories as it makes it easier to narrow the base for data collection in a more systematic way:

- Social, demographic characteristics: For example, age, sex, marital status, occupation, education etc.

- Economic factors/characteristics: Unemployment, profit, mature, poverty, customer base, avoidance of market levies.

- Environmental Factors: Limited market, preference for open space.

- Political Factors: Political bias in the allocation of space or stands. Absence of by-laws to regulate trade.

- Cultural Factors: Breakdown of extended family.

- Behavioral Factors: People may want to do things of their own.

CRITERIA IN PRIORITISATION OF THE PROBLEM

Before research, we need to know whether or not it is worth proceeding with. You have to know the criteria of prioritizing the problem:

(i) Relevance

- Is this particular area of investigation a priority?
- Who is affected by the problem?
- How widespread is the problem? How large?
- How server is the problem? Consequences

If in terms of relevance, there is discrepancy you can proceed.
It governs the choice of investigation.

(ii) Avoidance of duplication

- Questions concerning topic – whether or not this topic has been investigated within the same area of another area in similar circumstances, for example, street vending.

- Major questions concerning street vending, have they been answered by other researchers and addressed the main issues adequately?

- Are the answers to the topic readily available?

- If all the questions have been answered, and answers are readily available in other documents, and if you continue, it means you are duplicating.

- Duplication does not include replication as long as certain questions are still hanging or no solutions are found to the questions. For example, have the questions to street vending been answered and documented?

- You can avoid duplication by involving literature review.

(iii) Urgency of the data needed (timeliness)

- This is a situation where you ask questions, for example, vending.

  Are the results obtained needed to come up with decisions to develop some interventions urgently? If so, proceed.

  Whether or not there are other competing projects. For example, City Council, are there other research projects, one on street vending and the other on street kids.

- Thereafter, you have to prioritize. These are decision making issues.

(iv) Political/Social Acceptability or Academic Acceptability

Does the topic chosen have the interest and support of the relevant stakeholders? For example, street vending – financial support from Ministry of Local Government and Housing and City Council.

(v) Feasibility

- The concern is about complexity. Is the problem too complex or big to be undertaken?

- Always reduce a topic to the extent where it is manageable. The larger the topic, the more complex it becomes to manage.

  <u>Questions</u>

- How complex is this particular problem? Is it too complex?
- Are the resources available? If so, are they adequate?
  Resources: Money – financial resources, human resources, manpower, and time.

- You also consider the cooperation of respondents.
- Too complex:
  - There is need to narrow the topic.
  - There is also need to take into consideration the sample size (n=100)

- For large scale projects, there is need for training of human resource.

(vi) Applicability of possible results/recommendations

- Using competing interest during research.

- How likely is it that the results and recommendations of the research will be applied? If so, you can proceed.

  This does not apply in all situations. For instance, in pure research but this is considered in commissioned research or funded research.

- It is optional. For example, street vending. Is the government or Ministry of Local Government and Housing going to accept these recommendations.

(vii) Ethical Acceptability

- The research must not violate the research subjects' rights. So ethical considerations are key.

- Whether or not research results are accepted to the research subjects? To what extent are the people going to accept the research?

- Can the informed consent be obtained from the research subjects?

- Informed consent – elicit cooperation or voluntary participation of the subjects.

- Whether or not the conditions of the research being taken have been taken into consideration.

- Whether or not the results will be shared with participants?

- Will the results improve their conditions? If so, then proceed.

LITERATURE REVIEW

- For any given research topic, it is important to read and gather information about the topic so that you are better informed. There may be other research.

- Literature review is very important because:
  - It may act as a pre-route to problem formulation
  - It may inspire you to formulate a problem. That is, by refining ideas.

- It is a very dynamic process.
- Literature review consists of two aspects:

- Review of theory (theoretical framework)
- Review of empirical research.

REVIEW OF THEORY

- This involves reading books or articles about certain theory (ies) that may have a bearing on the topic (insights about subject).

- Theories are generalizations that purport to give explanations about phenomena. For example, law of supply and demand.

- Thus, review of theory involves reading books/articles about certain theories that may have a bearing on the topic or that may give insights about the subjected you are investigating. For example, functionalist theory, conflict theory, role they and systems theory.

- Sometimes, you can use theory and subject to do empirical tests. Theories can give an insight to understand phenomena adequately. It is used to enhance your understanding.

- You can drive some propositions from theory to help you understand subjects under investigations and be subjected to tests.

- You can use theory to come up with conceptual organization of the subject. For example, crime and poverty (theory of anomie) OVCs and HIV/AIDS (systems theory or structural functionality theory).

REVIEW OF EMPIRICAL RESEARCH

- Reflection of research that has already been undertaken. Make observation on certain topic and produce reports.

  Research findings in books/articles have to be revised.

- When you are doing research, it is important to review the research that has already been undertaken.

- Important things to consider:
  - Challenge previous research, that is, be very article. For example, street vending – look at it critically. Was this research done properly?
  - Is it methodologically sound?

- Was the sampling scientifically or correctly done? (May be it did not use representative samples).
- Are there any other factors omitted?

- Challenge prior/previous research.
  - There may be some weaknesses in methodology. For example, omission of variables. Sampling may not be sued in order.

- Purpose of determining whether or not research findings have stood the test of time (is it valid up today).

IMPORTANCE OF LITERATURE REVIEW

- It prevents duplication of what has already been done – prevents unnecessary duplication.

- It helps in finding out what others have done and reported on the topic (biographic indexing). It helps you to refine the statement of the problem (anything to be modified).

- It increases your awareness and familiarity with different methodologies that might be useful for your research (those might be better methods for tackling problems than what you have).

- Literature review provides you with convincing arguments on why the research should be undertaken (to justify your undertaking) research, and also to clarify your weaknesses).

Sources

- Individuals, groups and organizations.
  - Knowledgeable individuals or people who have written about such topics. For example, City Council on street vending, ZINGO on parenting and parenthood.

  - Groups and organizations that may have something to do with the topic/subject. For example, organizations dealing with HIV/IDS. They may even have materials.

- Published information – books, articles, reports, abstracts and indices.

- Unpublished information – Thesis/dissertations, research reports/proposals, databases, statistical bulletins.

Where to Find Sources

- Libraries – articles, books

- Archives
- Government departments. For example, Central Statistical office (CSO). Also Ministries.
- Museums
- The Internet
- CD-Roms
- Raw data from the CSO on CBS
- From bilateral and multilateral agencies.

Other Sources
- Seminar/conference/workshop presentations.

Strategies (How to go about this)
- Identify a key person who is knowledgeable about a particular topic.
- Look up presenters/resource persons at seminars/conferences/workshops.
- Contacting librarians
- Newspapers/magazines
- Look up indexes/abstracts
- Use the internet.

Method of Reading
- Skim them
- Look at the title, paragraphs, abstracts to have a picture of what the article is all about.
- Important information to be included:
    - Record the key words, for example, street vending - Economic aspect of street tradition.
    - Put down some information on the author, title of journal/book, even date of publication.
    - Purpose/objectives of the article/hypotheses.
    - Methodology – Indicate study/research design. For example, descriptive study/explanatory study.
    - Sampling method – Target population, method, measurement of variables (for example, how did they measure poverty).
- At the end of the above section, say something about, for example, appropriateness of the methodology. In your own understanding, say if it was properly used.

- Conclusions/major findings
    - What were the major findings/conclusion
    - Focus attention on the most salient findings – that is, things that are more important/standout.
- Indicate also the relevance of information to your own research.

- After summarizing the information. Classify if for easier retrieval in whatever way convenient. For example, historical aspects of street trading to be put together.
    - Social aspect
    - Economic aspect
    - Political aspect etc

Review
- After that, then review all of them by reading through them and understand the information.
    - Decide the order to presentation. For example, begin with historical aspect.
    - Write a coherent discussion in your own words using all the relevant information because you have to make citations/references in order to avoid plagiarism.

ORGANISATION OF REFERENCES

Articles
Authors (surname followed by initials). Title of article. Name of journal, year, volume number: page numbers. For example, Banda M. Drug Abuse at UNZA African Social Research, 2009, 35:200-220.

Books
Author(s) (surname followed by initials). Title of book. Edition – place: Year of publication: Number pages.

STATEMENT OF OBJECTIVES AND HYPOTHESIS

- For any research, you have to indicate your objectives. Summaries what is to be achieved by the study.

- Objectives should be closely related to the statement of the problem so that eh research, for instance, about street vending should state the objective and show why street vending is on the increase.

General objective(s) and specific objectives

- General objective states what the researcher(s) expect to achieve in general terms.
    - It is possible to break the general objective into specific objectives.
    - These specific objectives are normally smaller but logically interconnected parts of the general objectives.
    - Specific objectives tend to be more concrete than general objectives.
    - Specific objectives should systematically address various aspects of the problem as well as key factors that assume to influence or cause the problems, f or example, street vending.

General objective

- To explore the causes and the extent of illegal street vending in Lusaka.
- To identify policies and interventions to deal with the problem.

Specific Objective(s)

- To establish eh magnitude and severity of street vending.
- To identify social, economic and political factors contributing to the problem.
    - To determine…….
    - To establish to which education contributes to the problem
    - To establish the role of gender in the increase of street vending
    - To determine the extent to which unemployment contributes to street trading.

- When talking about specific objectives, ensure that specific objectives attempt to quantify the objective of the problem.

WHY SHOULD RESEARCH OBJECTIVES BE DEVELOPED

- Research objectives make it possible for you to focus on the study (narrow the study to essentials). For example, research on sports preferences – reasons why women prefer certain sports discipline as opposed to others.

- To avoid collecting unnecessary data for understanding or solving the problem.

- To help you organize your study in clearly defined phases/parts, especially at the stretch of report writing. For example, Sports infrastructure; Role of gender; role of age.

- A well formulated research objective facilitates appropriate research methodology.

- It also helps in orienting you in collecting data, analyze, interpretation and sue of data.

HOW TO STATE OBJECTIVES

- When stating objectives, ensure that objectives cover the different aspects of the problem as well as the factors contributing to the existence and persistence of the problem in coherent and logical sequence.

- Ensure that the objectives are phrased clearly in operational terms in the sense of specifying who, what, where.
    - Operationalize specific objectives in the manner that makes objectives more or less observable, for example, to find out which gender is prone to drug abuse.
    - To find out which age group is prone to drug abuse.

- Ensure that statements of objectives are stated realistically, take into account local conditions, for example, to investigate the extent to which students use marijuana.

- Use action verbs – action verbs should be specific to be evaluated. For example, to investigate, to determine, to explore, to describe, to verify…
    - Findings should be compared to the objectives
    - To find out if the objectives have been achieved
    - To evaluate whether or not what you are investigating has been achieved. For example, to what extent the findings reflect the problem.

- On the basis of the problem identified, nature of the problem as well as discrepancy, you can ask research questions relevant to the problem and objectives.
    - Why are students abusing drugs?
    - Who among male and female students abuse drugs?

PARADIGMS

- When carrying out research in one way or another, you do so by the influence of the paradigm.

- A paradigm is like a research perspective. It guides one in terms of what research goals, and what research methods are appropriate and should be sued in the conduct of research.

- Paradigm in that sense is the model for further research and problem-solving.

MODELS

- Likeness of something
- Model is an initiation of something
- An abstraction of something (abstraction from reality)
- The purpose is to simplify and order that which is abstracted from reality in such a way that it represents the essential characteristics of that particular reality.
- A model may be taken to be a representation of a system. For example, explanation of society using an organic model, structuring functional model.

THEORIES

- A theory is a proposition or set of propositions that purport(s) to explain some phenomena or event.

- Theorizing is a process of purporting the explain and predict event phenomena or events.
    - You have to relate a subject of interest to some other phenomenon or event. For example, poverty and criminal behaviour.
    - Theory – poverty leads to criminal behavior.
    - When you theorize, operate on the basis of abstract and general.
    - The theory has to be subjected to empirical tests.

- Theories attempt to answer why questions in most cases. For example, why are there high rates of corruption in Zambia?

HYPOTHESES

- Based on your experience and knowledge of the problem:
    - You can develop a tentative/possible explanation as to why that problem exists and persists.
    - It makes it possible to test theories.

DEFINITION

- Hypothesis is a tentative statement derives from the theory.

- It is also an explanation derived from direct observations (experience) of events and phenomena.

- Hypothesis is a tentative or provisional response to a research question. For example;
    - Theory: relationship between poverty and criminal behavior or illegal activities. Unemployment – street vending and prostitution.
    - Experience: Most of the people involved in street vending come from poor families.
    - Question: Why is the problem persisting? Who is more lively to abuse marijuana?

- Hypothesis (tentative explanation from tentative response). The greater the academic pressure, the greater the tendency to use drugs (why). Males are more likely to abuse marijuana (who).
    - Variables: Hypotheses are characterized by relationships between variables.

- The greater the academic pressure, the greater the tendency to use drugs.

CHARACTERISTICS OF A GOOD HYPOTHESIS

- Hypothesis must be clearly formulated. This means the concepts in hypotheses should be those that can be defined operationally (operational concepts). For example, academic pressure, drug abuse.

- Hypotheses must be specific. That is, the direction or the relationships between the concepts (variables) must be specified.

- ↑ Academic pressure → drug abuse

  Or

  ↓ Academic pressure → drug abuse

  - Indicate the level of analysis
  - Indicate the conditions under which relationships operate should be specified. For example, does academic pressure in all situations lead to drug abuse?
  - Under which situation is academic pressure not able to lead to drug abuse?

- Hypotheses must be value free. This means that in formulating hypotheses, the researcher must ensure that one's values, biases, and subjective preferences do not affect the way the hypotheses are formulated. That is, divorce yourself from the values, biases and personal feelings.

- The hypotheses must be testable. Any hypotheses formulated must be amenable to empirical testing.

- Hypothesis should have concepts which can be subjected to available methods in social sciences in order to test that particular hypothesis (concepts should be empirical).
  - The greater the intensity of drug abuse, the lower the probability of situation (it is not measurable, and it is also bias).

IDENTIFICATION OF VARIABLES

- After hypotheses and objectives have been formulated, we have to know about variables or concepts.
    - Questions: What information is needed or do you need?

Concepts

A concept is an abstraction which may represent an object – a poverty of an object, certain phenomenon or event, an idea of something that exists.

Variable

- A variable is also a concept, which takes on different values. It is synonymous to a concept. It only varies/changes/differs. There are different classifications of variables. For example, the greater the consumption of daga, the greater the chances of going or becoming mad/psychiatric or the greater the chances of committing crime.

- Two types of variables are: Independent and dependent variables.

Dependent Valuable

Is that variable that the researcher wants to explain.

Independent Variable

Is that variable that is expected to explain the change in the dependent variable. It is the explanatory variable. That is, the variable that causes changes or variations. For example;
Population of mosquitoes (Independent)
Prevalence of malaria (Dependent).

Interviewing Variable(s)

- Is that variable that is a consequence of the independent variable and determinant of the dependent variables. That is, it is the result of the independent variable and determine the dependent variable and determines the dependent variable. It stands in between the independent and dependent variables. It interviews so that there is a causal chain or influence. For example,

  X ⟶ Z ⟶ Y
  IND/V I/V D/V

- The effects of education on voting.

  Hypothesis: The higher the level of education, the greater the disposition to vote.

  - Independent variable – Education
  - Dependent variable – voting
  - Interviewing variable – Interest
  - Education ⟶ Interest ⟶ Voting

- To establish that the variable is interviewing, you must be in the position to demonstrate some kind of asy-metrical relationships among the three variables. Statistically, you should hold the interviewing variable constant. That is, the original relationship between X and Y must disappear or be reduced. (A test to sue when checking intervention variable).

  X ⟶ Y X ⟶ Y
  High Low

Antecedent Variable(s)

- You want trace the chain of events or establish causality. The difference in case of antecedent variable is that it comes before the independent variable.

  X ⟶ Y Z ⟶ X ⟶ Y
  Education Voting Antecedent Education Voting
  Variable

- For example, socio-economic status of the family might influence one's level of education, which in turn might influence voting.

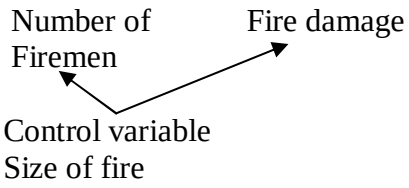
  Z ⟶ X V ⟶ Y
  Socio-Economic Education Antecedent Voting

Status

- Antecedent variable when held constant, the original relationships between variables remain the same.

Control Variables

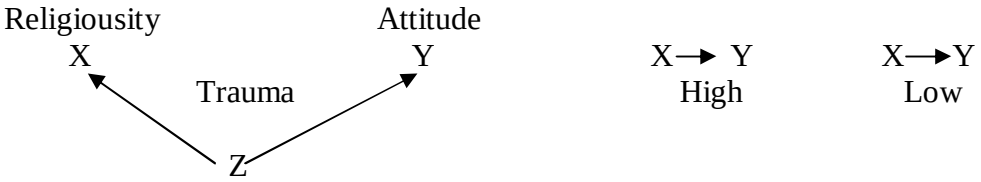
The function is to reduce the risk of attributing explanatory power to independent variables that are not infact responsible for variations in the dependent variables. Control variables are used to test the possibility that the relationship between X and Y is a true or false relationship. For example; X ⟶ Y The control variable stands outside X and Y



Confounding Variable(s)

- Is that variable which like control variable is related to both independent and dependent variables, but stands outside the variables. It represents the genuine relationship but spurious or false relationship. It stands outside the variables.

- The confounding may strengthen or weaken the relationship between X and Y. For example, religiousity ⟶ attitude towards HIV/AIDS patients.



- The more religious a person is, the more than person is likely to help HIV/AIDS patients.

Background Variables

- Are those variables that normally relate to the characteristics of respondent(s). For example, age, sex/gender, marital status, occupational status or employment, educational attainment, etc.

- They provide information about characteristics of subject(s) of investigation. They are often related to independent variable and may influence the dependent variable indirectly.

  Stand behind the independent variable X $\longrightarrow$ Y
  Ind/V Dep/V

  They may also influence the dependent variable (the problem). Sometimes may act as confounding variables.

- You can decide as the researcher as to whether to use the background variable(s) depending on the circumstances.

MEASUREMENT

- How to measure variables or concepts in hypotheses in order to test hypotheses (to ensur that hypotheses are tested).

- Measurement is the process of assigning numbers or numerals to properties of variables or concepts according to rules.

- Why? This is because we carry out mathematical manipulations of between or among variables, ensure that concepts are measurable.

- Invariably, when doing measurements, the final results are indicators.

How to measure variables or concepts

- Start with conceptual definitions and operational definitions.
  Conceptual definition deals with defining of concepts by another concept. For example
  Poverty ⟶ Starving
  Street vending ⟶ Unregulated trading.

  Operational definition is simply a set of rules and procedures that describe the activities to be performed in order to establish empirical that abstracts/concepts exist. This is to ensure that concepts/ideas become observable.

- To establish the existence of a concept, you do this by asking relevant questions. The responses to these questions serve as indicators for those concepts or variables. One simple rule is to ask questions.

INDICATORS

An indicator is a way of measuring a concept or variable with more or less exactness. For instance, how many, to what extent, what size, how much?

TYPES OF INDICATORS

Basically, there are two types: numeric and non-numeric indicators.

Numeric Indicators

Are expressed in the form of counts, percentages, ratios, proportions, rates or averages, frequencies etc

Non-numeric Indicators

Are those that are expressed in words. They are also referred to as qualitative or categorical data. For example, marital status, gender/sex, age, or some indicator with responses of Yes or No, female, male etc. For example

Conceptual Level		Conceptual Definition
Poverty	⟶	Starvation/Suffering
Street vending	⟶	Unregulated trading.

Operational Definitions

- Where do you live?
- What is your house made of?
- Do you have a regular source of income?
- Do you have a bank account?
- How much money do you have in your account?
- How many meals do you have per day?

Observational Level

Responses in the form of indicators:

- Residence: low density, medium density, high density
- Housing standard
- Income source
- Savings

Operational Level

- Do you have permission from the City Council to sell on the streets of Lusaka?
- Do you have a hawker's license?

Observational Level

Responses in the form of indicators:

- Permission
- Licensed/licence.

SCALES (LEVELS) OF MEASUREMENT

- Scales of measurement are associated with all the variables

- Scales of measures are important because they determine the type of analysis (statistical) that is possible or permissible.

- The choice for analyzing data, testing hypotheses. For example, relationship between unemployment and crime rate. You have to know the scales of measurement for you to analyse data and test the hypotheses.

TYPES OF SCALES

There are essentially four (4) types: (i) Nominal (ii) Ordinal (iii) Interval (iv) Ratio

PROPERTIES OF SCALES

(i) Magnitude

(ii) Equal Intervals

(iii) Absolute (or natural) Zero

Magnitude

Makes it possible to make comparisons or observations in terms of whether one is greater than the other, less than higher than, shorter than the other or equal to.

Equal Intervals

Suggests a situation where constant units of measurement which by defining are equal and in some cases have universality (unchanging over time and space). For example, 1000g $\rightarrow$ 1kg is universal, that is, it is equal and constant over time and space.

Absolute (or Natural) Zero

Value that indicates that nothing all of the attributes being measured do exist. For example, stationery vehicle in terms of speed, it is zero speed.

- You cannot get a negative value or minus. For example, height, weight, etc.
- The variables have starting point zero.

TYPES OF SCALES

Nominal Scales

- The nominal scale involves classifications of items into discrete groups/categories. Normally, these groups are mutually exclusive groups. They are also exhaustive so that all the elements are in one group. For example, sex – male and female, marital status – married, single, divorced and widow. They are categorical since they do not belong to other groups.

- Numbers are just for purposes of identification (there is no magnitude). Numbers are arbitrary nothing.

- Nominal scales do not have magnitudes, equal intervals and no absolute zero (no attributes at all).

Ordinal Scale

- Involves the ranking/ordering of categories or groups of particular variables in either an ascending or descending order. They have to be classified first, then ranked.

- The groups must also be exclusive and exhaustive. For example, attitude towards vending
    - Very favorable
    - Favorable
    - Not favorable
    - Highly unfavorable

- The numbers assigned have quantitative value.

- Ordinal scales have magnitude but do not have equal intervals and absolute zero – no starting point.

Interval Ratio (continuous Scales)

- These scales consist of continuous measurements with no minimal size unit (they are divided into fractional units/decimal places).

- Interval scale has two properties: Magnitude and equal intervals but no absolute zero because it is possible to get negative value. For example, income/money in the account can be overdrawn. For magnitude, more money than the other person.

Ratio Scale

- Has got all three properties:
    - Magnitude
    - Equal interval
    - Absolute zero

- It is possible to do division/analysis, it can accommodate all sorts of age, weight, speed, etc

PROPERTY

Scale	**Magnitude**	**Equal**	**Absolute Zero**
Nominal	No	No	No
Ordinal	Yes	No	No
Interval	Yes	Yes	No
Ratio	Yes	Yes	Yes

Conceptual	**Conceptual Definition (indicator)**	**Scale of Measurement**
Poverty	- Regular source of income - Savings	- Nominal - Interval/Ratio
Unregulated trading	Whether one has a license	Nominal
	The degree of satisfaction	Ordinal

RESEACH DESIGN

- Is some kind of structure, plan, blue print, which guides researchers in finding solutions to problems or answers to questions.

- The research design answers questions such as:
    - What information do you need in order to meet research objectives?
    - How do you collect this information?
    - How do you analyze this information?
    - How do you test the hypotheses?

COMPONENTS OF RESEARCH DESIGNS

At analytic level, three are three (3) components:

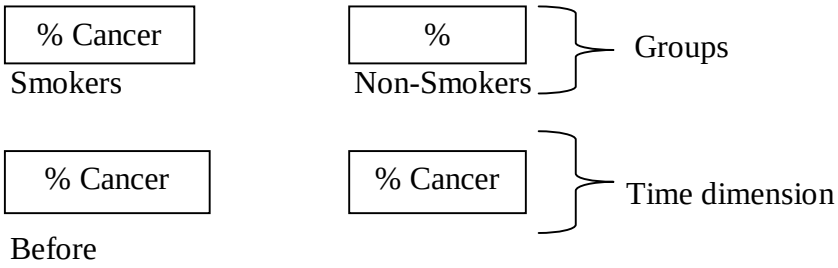
(i) Comparison

(ii) Manipulation

(iii)Control

Comparison

Research design, comparison is an operation to demonstrate that two variables are correlated. For example, lung cancer rate and smoking, comparison may be in two forms; in terms of groups and time dimension:



- Compare over the period of time.

Manipulation

It is an operation to demonstrate causality between X and Y – whether or not X often precedes Y. For example, academic performance and teaching methods.

			Old Method	New Method	
Q_1	X	Q_2,	Y	Y	
			Academic Performance	Improved Academic Performance	

Conclusion is that new method is better than old one because academic performance has improved.

Control

It is criterion for determining causality. Rule out other rival explanations that may otherwise explain relationships between X and Y. For example,

Teaching Method ⟶ Academic Performance: X ⟶ Y

Other Factors

Study habits, access to information, intelligence, attendance, motivation, etc.

DIFFERENT TYPES OF RESEARCH DESIGNS AND STUDIES

Broadly, there are two types:

Non-intervention Studies and Intervention Studies

The researcher just describes and analyses the research subjects and the situation in which they are found without intervention. The researcher takes the research in the situation just as it is found.

Intervention Studies

The researcher manipulates the situation and even measures the effects.

NON-INTERVENTION STUDIES

Broadly, you have the following:

- Exploratory Studies
- Descriptive Studies
- Analytical Studies
- Longitudinal studies
- Case Studies

Exploratory Studies

An exploratory study is normally a small scale study often of short duration and is often undertaken in situations where little is known about particular situation. The researcher tries to explore this situation in order to familiarize with problem. This happens quite often especially when the topic is new.

Exploratory studies are typically done for three purposes:

- To satisfy the researcher's curiosity – to get better understanding of the problem.
- To test the feasibility of undertaking a much larger and more elaborate study.
- To develop methods to be use in a more elaborate scale study. For example, participant observation.

Descriptive Studies

Involve the systematic collection and presentation of data in order to have a very clear picture of a given situation/problem. Descriptive studies require a greater degree of accuracy and precision in the manner in which you report events. Even the order of generalization and description becomes relevant (who, what and extent).

Analytical Studies

Attempt to establish causes or risk factors for certain problems. They seem to unravel factors underlying that particular problem. For example, why is street vending increasing? Why are there so many street kids?

Cross-Sectional Studies

These are the studies which take place at one point in time. For example, Zambia Demographic Health Survey 1996-2006 so that observations are taken at one point in time and conclusions are made based on observations.

Longitudinal Studies

Are studies designed to meet observational made over an extended period of time. Three major studies include:

(i) Trend Studies

(ii) Cohort Studies

(iii) Panel Studies

Trend Studies

Are studies in which the research studies changes within some general population overtime, for example, someone studying opinion polls to determine political candidate preferences over the course of the campaigns. For instance, three samples of political candidate.

Cohort Studies

Cohort is a group of people with shared characteristics, for example, a cohort of social work students. They tend to focus on specific sample of population as they change overtime. Such studies may differ overtime.

Panel Studies

Share some characteristic with cohort studies because they also focus on the same set of people. The difference is that cohort studies focus on characteristics of people but different sets of people while panel studies focus on some sets of people with same characteristics.

The disadvantage is that they are costly (they are expensive). They also suffer from experimental mortality. That is, some respondents might not be accessed resulting not obtaining the information required.

CASE STUDIES

- These are studies that involve in-depth analysis of one unit of analysis. This unit of analysis could be an individual, group, community or society. That unit of analysis could be taken either as an independent or dependent variable depending on the nature of the problem. For example, street vendors' impact on society (independent).

- The problem is in terms of context of justification as far as case studies are concerned. Problem of verification of findings based on case studies since findings cannot be generalized. This is because case studies tent not to be representative. You only have proof by examples and not by evidence.

- The advantage is in terms of context of discovery. Discoveries lead to the richness and the meaningfulness of insights – good information.

- It also leads to though understanding of the studies or the phenomena/events. For example, the studies done by anthropologists.

INTERVENTION STUDIES

(i) Experimental
(ii) Quasi-experimental

Experimental Designs/Studies

- Are designs/studies in which you can prove causation/causality.

- In an experimental study, individuals are randomly assigned to the experimental. And control groups, and make observations to the particular problem. For example, street vending. Willingness to move out of streets.

- X - manipulation by sensitization program confined o the experimental group. After that measure willingness to move out of streets

Ex	R	Q_1	X	Q_2	Difference = Q_2 - Q_1
CT	R	Q_3		Q_4	Difference = Q_4 - Q_3

Main characteristics:

- Manipulation: the researcher does something to the experimental group.
- Control: the researcher introducers one or more control groups, then compared.
- Randomization/matching: subjects are randomly assigned to experimental and control groups.
- Matching is a process equivalent to randomization. It aims at removing the influence of other factors.

<u>Disadvantages</u>

- Experimental designs are a typical because they take place in unnatural (laboratory like environment). Implication is that subjects may not behave naturally.

- Reactivity – Hawthorne effect; as subjects will react to the experiment. So results may not be as the result of stimulus. It may impair causality called Hawthorne because subjects were aware of the experiment.

- It is not always that you can randomly assign subjects. This is because it is not physical.

- It is difficult to maintain the same experimental conditions as there are always extraneous and intraneous factors.

<u>Advantage</u>

It gives the highest level of causality assuming the conditions are ideal.

QUASI-EXPERIMENTAL DESIGN

One characteristic may be missing. It is either the use of control or randomization or both missing but manipulations I always there. In terms of structure, it resembles the experimental design, that is, it uses one or more control groups, and same procedure are followed.

Ex Q_1 X Q_2 Difference = Q_2 - Q_1

CTR Q_3 Q_4 Difference = Q_4 - Q_3

Advantage

You conduct the research in the natural environment.

Before and After Design

- Easy to set up anywhere
- Only one group
- The group chosen is when the intervention is placed to see if there would be any differences.

  Q_1 X Q_2 Difference = Q_2 - Q_1

  Before After

- The % ↑ complaints concerning quality of service go up.
- Based on the complaints, the management decides to implement all the suggestions.
- X – implementation o recommendations
- % ↑ complaints on quality of service go down.
- This is attributed to manipulate as there is free participation s opposed to randomisaion and control group

SAMPLING

Involves selection of a part, subset, fraction of a population.

Importance of Sampling

Why sampling is necessary?

- It is necessary because it is cheaper in terms of costs than doing the whole population (complete emuneration).

- Speed: dealing with smaller numbers is faster to collect and analyze data.

- In a number of instances, it has a larger coverage in terms of amount of information you can obtain, for instance in sample survey, is greater than the entire population.

- Quality of information. In most cases, it gives you better quality of data. The amount of training involves is intensive.

Problems with sampling

- Non-response from a situation where people are never/not at home.
- People who are difficult to intervene do not give detailed answers (hostile).
- High non-response rate has a biasing effect) those who do not cooperate are likely to be left out of sample).
- Sampling error results from biases, defective sampling design – no structure, plan and blue print.

Note

You must have in your mind, establish your survey objectives.

Stages of Sampling

- Broadly begin by defining your population.
    - Decide on sample size
    - Decide on sample design
    - Then estimation
- Defining the population is the most important step after defining survey objectives.
    - Populations in an aggregate of all elements conforming to a designated specification.
    - Your topic should lead you to specific population. For example, drug abuse among students – students population, free education in Zambia – Zambia population.

- Define the population in terms of certain criteria namely: content, extent and time.

  Content – people who will be included in the population. For example, drug abuse among students – all students.

  Extent – Geographical extent of population, for example, Great East Road Campus.

  Time - 2007 academic year.

Choice of Sampling Frame

- Sampling frame is a complete listing of all elements in the population. For example, drug abuse, all students at Great East Road Campus. Student year book has all the students – complete listing or all students.

- After sampling frame, there have a table of Random Numbers (it is optional in a way). There is need to have randomly generated numbers.

- After that, you have to define the survey units.

Definition of Survey Units

Are normally units targeted or units of analysis. For example, sampling unit will be students. Sometimes, you might sample a house/room. For example, Zambia Demographic Health Survey (ZDHS) might sample a household.

Determination of Sample Size

There are a number of things to consider:

- Required precision of estimates – larger sample, more precision.
- Resource availability – larger sample, more costly (how big a sample is).
- Time:
  - Statistical procedures – in terms of prevision of estimates.
  - Optimize so that you do it cheaply and obtain precision of estimates.

Sample Design

In selecting sampling method, the choice to be made between probability and non-probability sampling.

PROBABILITY SAMPLING

Is sampling where you ensure that each element in a population has equal and non-zero chance of being included.

Types of probability Sampling

- Simple random sampling
- Stratified Random Sampling
- Systematic Sampling
- Cluster Sampling
- Cluster/Multistage Sampling).

Simple Random Sampling

- Is the basic probability because it is the simplest.
- It is normally incorporated in more complex samples.
- It is ideal to sue in situations with population concentrated in one geographical area. For example, UNZA Great East Road Campus.
- This is the sampling where each element has an equal and non-zero chance of being included.

Stratified Random Sampling

- It is used in situations where the population is skewed in one direction (where there are imbalances in the population).

- It is also used when estimates are required for sub-groups as well as total population. For example, UNZA male sub-groups and female sub-groups.

- It is also important to avoid under representation of some groups of the population. For example, disabled, race-Asians/Africans.

Proportionate Stratified Random Sampling

- You divide the population into groups/strata which are homogenous and mutually exclusive groups/strata so that you create, for example, male or female, race, disability groups.

- In case of proportionate stratified random sampling, you apply a uniform sampling fraction to the strata. For example, you are required to select a sample of 10 students out of the population of 100 students. N = 100, n = 100

  $\ell = \frac{10}{100} = {}^{1}/_{10} = 0.10$

- Stratification – use sex as the criteria

M	F
75	2

$M = {}^{75}/_{100} = 7.5$

$= 7$

$F = {}^{25}/_{100} = 2.5$

$= 3$

- Then, select 7 male students out of 75 or select 7 numbers randomly.

  M = 01 - 75

  F = 01 - 25

- The numbers will represent the strata in terms of males and females.
- When doing the stratification, avoid using too many strata for easy analysis of data.

Disproportionate Stratified Sampling

- Used in situations where you equalize the numbers by giving higher probability of inclusion in a sample. For example,

  $\ell m = {}^{5}/_{75} = {}^{1}/_{15}$; $\ell F = {}^{5}/_{25} = {}^{1}/_{5}$

- Over sampling the females

Systematic Sampling

- Is used in situations where the elements to select from or when the populations is serially numbered – 01, 02.

- It involves the selection foe very K^{th} (5^{th}) element after the first one has been selected randomly from the first K elements.

- Select individual elements at regular intervals after you select the first one at random.

Cluster Sampling

- Is a formal sampling sued in situations when you have no sampling frame.

- It is also sued when sampling units are cluster – collection of several units. That is, required to select clusters rather than individuals.

Cluster/Multistage Sampling

- Is used when you do not have a sampling frame.
- It proceeds in stages.
- It involves more than are sampling method

First Stage

For example, list the halls of residence (10) and select 5 randomly.

Second Stage

In each Hall of Residence, there are 5 blocks, select only one block.

Third Stage

List the rooms, and select one room.

Fourth Stage

In the room of two individuals, select one individual. In each, you can use simple random sampling or systematic sampling in complex situations.

Non-probability Sampling

In this case, the probability of selecting an element from the population is not equal and can even be zero chance of being included.

Convenience Sampling

In which elements are selected because they are easily accessible and available. For example, research on drug abuse among students on campus. Instead of selecting randomly, you get those near you. You cannot generalize the findings to the population.

Purposive Sampling

Sampling where the subjects are selected subjectively to represent as accurately as possible the characteristics of the population of interest. Judgmental sampling because it depends on the researcher as to who should be included in the sample. For example, IT research, you select those with experience in IT.

Quota Sampling

- Involves selection of elements that closely resemble the characteristics of the total population.

- It is referred to non-probability sampling equivalent to stratified sampling because you have to create quota or groups – strata. For example, UNZA population – males and females with different religious, programs of study, year of study.

Male	Female	
25	25	Catholic
25	25	Protestant

- Some elements will have a higher chance than others.

Snow Ball Sampling

- Used to capture "hard-to-find+ populations (populations not found on sampling frames). These are rare populations (scattered all over the place).

- You start with few of hard-to-find populations that are easily available. Ask from the same people where you can find the other people. Then continue to ask from the other interviewed where others are. For example, street kids, prostitutes with similar characteristics.

VALIDITY

There are two major aspects of validity:

(i) Internal validity

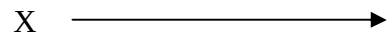
(ii) External validity

Question: Are we accurately measuring particular phenomena?

Internal Validity

- Refers to the extent to which the independent variable and only the independent variable is the cause of dependent variable.

- This means ruling out other factors that may otherwise provide alternative explanations to the cause of dependent variable.



Teaching Method Academic Performance

- Other factors: Intelligence (IQ), study habits, motivation, class attendance, nutrition.

- Makes sure that you control some other factors in order for you to come up with good conclusion.

- Take into account the factors if you prove that there was a relationship between the two (independent and dependent variables), then you can conclude that there is internal validity.

External Validity

- Refers to the extent to which the findings of the research can be generalized from the sample to the population from which the sample was selected, as well as other relevant contexts.

- The sample must be representative of the population. If not representative, if weakens the case of the external validity.

- If you use non-probability sampling, do not generalize the findings because it does not contain external validity.

- Non-probability designs are not representative of the population, hence no external validity.

- Thus, non-probability sampling cannot be generalized.

Threats to Validity

These threats can be extrinsic and intrinsic factors.

Extrinsic Factors

Refer to selection factors such as biases in the selection of elements from the population to the sample (effective sampling). They normally threaten external validity.

Intrinsic Factors

- Changes that take place in the individual elements in respect to your sample may prove to be a threat to internal validity.
- Normally threaten internal validity.

History

Refers to events that may take place during the research and may provide explanations to the results of your research. For example, Campaign Strategy → Electoral outcome.

Maturation

Refers to biological as well as psychological changes taking place in the units of analysis. For example, carrying out research – panel study on group of people who are growing up (there may be changes in both mindset and age).

Testing

Is usually as a result of prior exposure of elements to phenomena which may have influence/affect the outcome of the research. For example, the person is exposed to research questions.

Instrumentation

This has two (2) aspects:

Instrument Reactivity

The manner in which you construct your questions in questionnaires affects the research outcome (normally negative affects). For example, research on drug abuse – to find the extent of drug abuse. Questions no questions should give a provision for confidentiality. Questions such as do you smoke daga, do you engage in illicit sex, should e avoided.

Unreliability of Instruments

Results from inconsistencies in the way questions are asked. Standardise questions in order to avoid misleading answers. For example, do you smoke daga?

Experimental Mortality

Results from the selective dropping of subjects from your research or differential subject loss. Same is not representative (weakens both internal and external validity). Non-response is a form of experimental mortality.

Reactivity (Hawthorne Effect)

Especially if the research subjects react to the experiment in the way the outcome appears.

How to reduce threats to validity extrinsic

- Ensure that you use randomization that is random sampling.
- Matching/pairwise/frequency to control external validity.
- Instrumentation: In case of instrumentation, carefully design your questionnaire – remove the defects in the questionnaires. Use control variables in the experiment.
- This ensures that your research has got both external and internal validity.

DATA COLLECTION

Allows to systematically collect information concerning research objectives and even to test hypotheses as per problem identified.

Types of Data

(i) Qualitative Data

(ii) Quantitative Data

Qualitative Data

- Data which is non-numeric.
- It may consist in-depth answers and discussions that result from open-ended questions.
- This information is often recorded in narrative or prose form/words or phrases.

<u>Sources</u>

- Loose structured interviews (open-ended questions). For example, what is the purpose of the NCC?
- Participant observation
- Focus group discussion

Quantitative Data

- Data that is numeric and this data originates from questions which are structured. For example, do you believe in witchcraft?

- Can be measured in different scales and assign answers (you can do mathematical or statistical manipulation). For example, how old are you?

- The results may be summarized in numbers, percentages, averages, etc.

Sources

- Structured interviews – close-ended questions. For example, how old are you?
- Population/sample survey
- Service statistics – sources from government departments/ministries.

TWO MAJOR METHODS OF COLLECTING DATA

(i) Primary
(ii) Secondary

Primary Data

Is data collected personally through fieldwork and data collected for the first time.

Secondary Data

Another person's data or it is like borrowed data.

PRIMARY METHOD

Observation

- Used in collection of qualitative data
- It is commonly known as participant observation
- It involves a situation where the researcher joins a group or creates a closer attachment to group the research wants to study.

- Quite often, when the researcher joins group, he/she has to learn the language, habits, understand the life style, and views of the group, so that you can understand the group well. For example, studying callboys.
- Norms of objectivity and validity do not apply.
- This is used by anthropologists
- There are two aspects:
    - Researcher operates as a complete participant. For example, studying all boys. The research conceals his/her identity and does not reveal his research objective. This approach has a risk if it is discovered that you are researching on them.

    - Participant is observer:

      The researcher and the role he/she plays are known.

      Here the researcher explains the research objectives to the group (there is no pretending as the group understudy knows that you are studying them.

<u>Advantages</u>

Observation provides first hand information (richness and meaningfulness – get insights of the context).

<u>Disadvantages</u>

- Time consumption and labour intensity.
- Interpretation of data/information gathered may be subjective, especially between relevant and irrelevant data.
- Violation of privacy, especially in participant observation.
- Observation biases – Researcher only records issues of interest and eliminates things seen not to be of interest to the researcher.
- Information cannot even be generalised.

Interviewing

- An interview is a data collection technique that involves oral questioning of respondents, individually or group so that you approach individuals with a set of questions (in questionnaires/interview guide).

- An interview is an interpersonal relationship between the interviewer and interviewee (between person collecting data and person from whom data is collected).

Advantages

Provides detailed or insightful information, especially if interviewing knowledgeable individuals

Disadvantages

- Some of the interviewees though knowledgeable may be bias depending on their experience.
- Some interviewees may not be well informed.
- The presence of the interviewer may influence responses.

Administering Questionnaires

- Questionnaire is a written document in which questions to be presented to respondents are written.
- Self-administered – respondents complete without the presence of the interviewer

SECONDARY DATA

- Refers to data collected for some purpose other than your data – other people's data.
- Published information.
- Second-hand information (books, articles, statistics).
- Use of available information.

Advantages

- Readily available (articles, newspapers, books, etc)
- Affordable – less costly

- Allows for analysis of trends. For example, census report published some years ago, ZDHS – already there for you to use as references.

Disadvantages

- It is often data collected for some other purpose (other than your data, it may not be complete or satisfy).

- Sometimes, access to information can be difficult due to issues of confidentiality and certain laws concerning access to information, especially information relating to security of the nation.

INSTRUMENT DEVELOPMENT

- Questionnaire is a document that contains questions and other types of items designed to solicit information appropriate for analysis.

- Invariably, a questionnaire is limited to written responses (to pre-arranged questions).

- Importantly – the questionnaire must translate research objectives and hypotheses into specific questions through operational definitions.

- A questionnaire is a repository of all questions resulting from all questions asked and answered.

TYPES OF QUESTIONS

Common used ones are called open-ended and close-ended (closed) questions.

Open-ended Questions

- Question which permit free responses that should be reported in the respondent's own words. For example, what is your opinion on marijuana smoking on campus?

- Question on attitudes, opinions, sensitive matters are recorded so that respondent is not given possible answers to choose from.

Advantages

Give more insightful information because people express themselves freely.

Disadvantages

- Sometimes, information becomes difficult to record, especially when the speaker is very fast.
- It is also difficult to analyse because it comes in form of prose, words. It is thus labour intensive.

Close-ended (closed) Questions

- Questions that allow a list of possible options from which a respondent must choose.
- Ideally the options must be mutually exclusive and exhaustive. For example, do you smoke daga? Yes, No.

Advantages

- Easy to ask, for example, do you think?
- Easy to analyze, for example, counting the number of smokers

Disadvantages

You do not get in-depth information/responses as respondents to not express themselves freely.

OTHER TYPES OF QUESTIONS

Filter Questions

- Apply only to a segment of a population.
- Filter certain group of the population. For example, do you smoke cigarettes? Yes, No.
- They lead to contingency questions – that which is contingent upon the response from the filter question. For example;
    - If yes (filter them, then say) what kind of cigarettes do you smoke?

- How often do you smoke?
- If no, why don't you smoke?

Rating Questions

Questions in which respondents are allowed to make judgments in terms of sets of ordered categories such as smoking is bad for your health.

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- No opinion.

Matrix Questions

Involve organizing a large set of questions with similar response categories. For example;

- Smoking is bad for your health
- Drinking is good for your health
- Sports do more good than harm.

	Strongly Agree	**Agree**	**Disagree**	**Strongly Disagree**	**No Opinion**
Smoking					
Drinking	√		√		
Sports		√			

STEPS/STAGES IN QUESTIONNAIRE CONSTRUCTION

Step One

- Decide on the content (take into consideration your objectives, hypotheses and variables).
- What questions will be needed to measure the variables.
- Length of questionnaire depends on the number of objectives and hypotheses. For example, to determine the influence of socio-economic status on substance abuse. The higher the socio-economic status (SES), the greater the substance abuse.

Step Two

- Formulating the questions: One or more questions that will provide information for each variable or concept.

- Ensure that questions asked are specific and clear so that different respondents do not interpret the information differently.

POSSIBLE PITFALLS IN QUESTIONNAIRE CONSTRUCTION

Problems that arise in the way you construct questionnaires:

- Ambiguous questions
- Leading questions
- Technical and jargon questions
- Emotional and value – laden related questions
- Double barreled questions
- Yahoo and threatening questions.

Ambiguous Questions

Question success table to different interpretations and hence different responses. For example, do you smoke marijuana because you are always thirsty? Thus, standardize questions to deal with this problem.

Leading Questions

- Questions whose content, structure and wording have a tendency to lead a respondent in certain direction. For example, you do not like smoking, do you?
- They have a tendency to compel or influence the respondent.

Technical and Jargon Questions

- Questions that whose language cannot be understood easily by the respondent. For example, how often do you use tetracycline? Have you ever taken LSD?

- Questions should be simplified.

Emotional and Value –laden Questions

- Questions that are subjective and by nature biased. For example, don' t you think smokers are rather weird? Are you in support of the undemocratic ways of Movement for Multi-party Democracy (MMD) administration?
- There is need for neutrality.

Double Barreled Questions

- Questions that include too or more questions in one. For example, do you smoke cigarettes, drink beer and go to church?
- Always split questions up.

Threatening and Taboo Questions

- Questions are sensitive and may be embarrassing and thus difficult for the respondent to answer, and may generate hostility on part of the respondent. For example, it your father a smoker?
- Care and prudence have to be exercised.

Step Three

SEQUENCING OF THE QUESTIONS

- Construct or design your questionnaire in such a way that it is user friendly both for the person gathering information and the respondent. Do this by logical sequencing the questions:
    - To allow a natural discussion, ask safe questions first and thus avoid sensitive questions at the beginning.
    - Start with background of an individual. For example, educational status.

- The danger is that you may put off the respondent. Make questionnaires reasonably short (make them in terms of objectives and hypotheses).

Step Four

FORMATING THE QUESTIONNAIRE

- Ensure that a questionnaire ahs a heading, for example, baseline study on drug abuse.
- Have a space for questionnaire ID – ideally to number all questionnaires.
- Space for date
- Space for location (place of interview)
- Name of interviewer (to detect cheating).
- Name of data entry clerk.
- Name of respondent is optional for reasons of confidentiality.

Note: The above should be on cover page.

- Age and sex of the respondent to be included. Age to be left blank. For example, Age_____
- Layout: ensure that questions belonging together thematically are grouped together.

  For example;
  - Questions on mother's and father's income, and religious matters.
  - Do they go to church? How often do they go to church?
- Also ensure that you have sub-headings. For example;
  - SOCIO-ECONOMIC STATUS
  - RELIGIOUS BACKGROUND

Dealing with Open-Ended Questions

Always leave sufficient space for your questions (open space). For example, how old were you on your last birthday? _____

Dealing with Close-Ended (Closed) Questions

- Ensure that you have pre-categorized boxes on right where respondents will have to make a tick or circle. For example, do you some daga? Yes ☐ No ☐

- Use of computer codes: If you are going to use computer, reserve right margins for each question for computer codes. For example;

Questionnaire Number	Questions	Respondent	Computer Codes
1	How old were you on last birthday?	25	25
2	What is your sex?	1. Male ☐ 2. Female ☐	1
3	Father's occupation?	1. Farmer ☐ 2. Teacher ☐ 3. Manager ☐	2
4	Residence?	1. Kalingalinga ☐ 2. Kabulonga ☐ 3. Kabwata ☐	3

Dealing with no Responses

For questions that may not apply to individuals (not applicable) – N/A, the code has to be constant.

Step Five

TRANSLATION

- Questionnaires have to be translated into local languages (from English into local languages), then from local language into English using different translators.
- Standardize the understanding of the question.

Step Six

PRE-TESTING

Test questionnaires so that you can detect mistakes from the questionnaire. For example, ambiguous questions. It is thus important to rephrase you on questions (make necessary changes).

Step Seven

PRE-FIELDWORK EDITING

Ensure that everything is on order:

- Fonts, grammatical issues – language, geographical area, etc
- Specifying instructions on how to complete questionnaires. For example, circle or tick answer
- Edit questionnaires.

INTERVIEW

- Introduce yourself nicely, in a diplomatic way
- Tell the respondents about the research
- Collect questionnaires
- Edit questionnaires

POST-FIELD WORK EDITING OF THE QUESTIONNAIRES

- Edit after collecting questionnaires to ensure that questions asked are answered and recorded correctly.
- Data processing and editing which has three aspects. So check for:
    - Completeness
    - Accuracy
    - Uniformity

COMPLETENESS

- Involves examining questionnaires to ensure that every question has an answer.
- Gaps: sometimes, it can be that respondent refuses to cooperate, or may forget to tick or interviews forgets. Sometimes, information may not be applicable.

CHECKING FOR INCOMPLETENESS

- Use your memory if you can recall/remember to fill, for instance, age
- For age, non-response use code 99.
- If someone has not indicated sex, residence, you can do so by implication or inference.
- If too many questions are not answered, for example, why 10% of the questions have been answered, discard it (questionnaire).

ACCURACY

- Checking the questionnaire against inconsistencies in terms of responses and logic does not make sense.
- Problem/inaccuracy: careless way of completing the questionnaire.
- Sometimes an attempt to cheat deliberate attempt by response to mislead the interviewer by giving wrong answers/information/sometimes not honest.
- Also inexperienced construction of questionnaires.
- Also people writing in answers instead of ticking.

UNIFROMITY

- Involves the situation where the interviewers interpret questions and instructions in the same way.
- Anticipate what you are going to find in the field.
- Accommodate some additional information to cater for all the respondents.

BUILDING BLOCKS OF SCIENTIFIC KNOWLEDGE

Concept

Idea about phenomena or idea about what is happening. For example, poverty and crime.

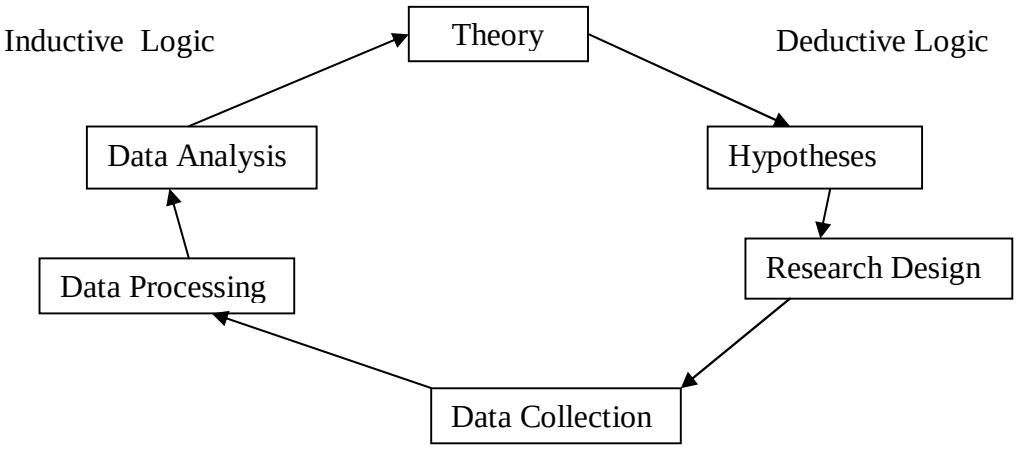
Theory

Generalized relationships between concepts. For example, poverty and crime.

Grounded Theory

It is based on data:

- Deductive logic – from general (which is a theory) or generalized relationship between concepts-embodied. That is, moving from generalized knowledge to specific.
- Inductive logic – moving from specific to general
- Logic – thought process
- Science – reality, testing, test for bias, values, beliefs/verification of facts.



Law

Theories tested over and over. They are valid and reliable. For example, law of supply and demand.

Paradigm

Frame of reference or model of doing things based on existing law. For example, functionalism. This is the highest level of scientific knowledge.

SOURCES OF KNOWLEDGE

- Where do you get research questions?
    - Theory: from the existing body of knowledge. For example, relationship between crime and poverty, especially for basic research.

  This should be evidence based research.

- Scientific knowledge is always tentative or relative (always changing).
    - Experience/observation.

- Also philosophical knowledge; that is personal experience(s) or people's experiences. For instance, why so many orphanages, or why high HIV/AIDS rates?
    - Hypotheses: Testable statement about relationship between two or more variables/concepts (based on some theory(ies).

TYPES OF HYPOTHESES

(i) Null Hypothesis

There is no relationship between the concepts. Non-directed hypothesis (two-tailed test). Always test for null hypothesis.

Null hypothesis = A_0: $M_1 = M_2$.

(ii) Alternative Hypothesis

H_1: $M_1 \neq M_2$ (2-tailed test). It is the non-directional hypothesis.

H1: $M_1 > M_2$ (one-tailed test). It is a directional hypothesis.

Note:

Null hypothesis
Alternative Hypothesis
} Statistical Hypothesis

LEVELS OF SCIENTIFIC RESEARCH

- Exploratory
- Descriptive
- Explanatory

Exploratory Research (Level)

- To find out the nature of the problem/phenomenon.
- It is the primary or preliminary investigation because:
    - The subject matter is new;
    - There is very little, knowledge/information about the topic;
    - No research has been done about the topic/problem.
- This is done to arrive at specific question so as to arrive at research topic.
- In social work practice/problem solving, you need to know what is the problem.

Descriptive Research (Level)

- To find more detailed kinds of characteristics about some topic/phenomenon or subject matter. For example, census, and survey – population is the subject matter. For instance, information on gender, employment levels, morbidity etc (survey research).

- You look at problem from various angles/perspective/scenario. For example, poverty-incidence of poverty (nature of poverty).
    - Formication of poverty – mere women vulnerable to poverty than men.
    - Regional poverty.

Explanatory Research (Level)

- It is about cause and effect relationships, for example, cause – poverty, effect – crime. It helps in explaining the occurrence of events/things.
- It is the highest level of scientific research.
- It helps in terms of defining the problem.

DIFFERENT TYPES OF RESEARCH (GENERAL TYPES OF RESEARCH)

(i) Longitudinal Research: Is concerned with studies of social issues on more than one occasion using the same or different samples.

(ii) Descriptive Research: Aims to describe social systems, relations or social events.

(iii) Classification Research: Aims to categorise related units into groups, to demonstrate differences, explain relationships and clarify social events or relationships.

(iv) Comparative Research: Aims to identify similarities or differences between related units.

(v) Exploratory Research: Aims to establish the most basic criteria of the research topic often before the actual study has started.

(vi) Exploratory Research: Aims to explain social relationship between variables.

(vii) Causal Research: Aims to establish a causal relationship between variables.

(viii) Theory Testing Research: Aims to test the validity of the theory.

(ix) Theory Building Research: Employed to establish and formulate theory.

(x) Action Research: Application of fact finding to practical problem-solving in a social situation with the view to improving the quality of action within it involving the collaboration and cooperation of researchers, practitioner and laymen.

(xi) Participatory Action Research: Characterized by strong involvement and degree of participation of members of public in the research process.

(xii) Evaluation Research: It is employed to assess the suitability, relevance and effectiveness of certain programs, projects, policies or activities.

(xiii) Feminist Research: it focuses on the life of women. It is usually conducted by women and is based on issues concerning women and is for women, and employs a variety of research paradigms.

RESEARCH DESIGN

- Is a method/plan/strategy to be used to test the hypothesis.
- Plans/types of research, research techniques and method.

Research Techniques

- Experimental design
- Quasi-experimental design

Types of Research

- Evaluative research
- Qualitative Research
- Quantitative research

Research design must be able to control for alternative explanations. Things that can control for other possible explanatory – explanation of the cause of something other than the other factors. For example, crime and poverty – is poverty the cause of crime and not anything. (Relationship between poverty and crime).

EXPERIMENTAL DESIGN

- Experiment is a collection of comparative data under controlled condition(s)
- Controlled study is where clients/subjects are randomly assigned to a group where they will receive treatment compared to the group that will not receive treatment.

PRE TEST – POST-TEST CONTROL GROUP DESIGN

You measure before and after the experiment.

- It is pure/classic/basic/true experiment.
- R – randomization (randomly selected)
- X – Intervention (Independent variable)

  For example, X – quality education, and no quality education for the other group.

	Pretest		Posttest	
R	Q_1	x	Q_2	- Experimental group
R	Q_3		Q_4	- Control group

H_0: $M_1 = M_2$

H_1: $M_1 > M_2$

- Pretest: To know if two groups are the same. For example, G12 and income is the same. That is, Q_1 and Q_3 to be compared, thereafter compare Q_2 and Q_4 in terms of income levels.
- H_0: $M_1 = M_2$ – there is no income difference between educated and non-educated.
- H_1: $M_1 = M_2$ – there is income difference between educated and non-educated.

POST TEST ONLY CONTROL GROUP

- You measure after the experiment.
- Compare and measure the groups after the experiment.

R	x	Q_1	Q_2	Q_1	Q_2
R		Q_2	Q_4		

SOLOMON FOR DROUP DESIGN

- It is the combination of the pure/basic experiment and post test only control group.

R	Q_1	x	Q_2	= 1
R	Q_2		Q_4	= 2
R			Q_5	= 3
R			Q_6	= 4

QUASI-EXPERIMENTAL DESIGN

Quasi (semi) – it is not real (not as real as the pure experiment).

NON-EQUIVALENT CONTROL GROUP DESIGN

- It is not equivalent and not randomly assigned.

  Q_1 x Q_2 - Experimental group

  Q_3 Q_4 - Control group
- Groups can be drawn from different settings.
- Groups may not be the same. For example, income/age may be more than others.
- Groups are not purely matched.
- This is commonly used in social sciences such as social work, sociology, etc.
- Subjects are not of the exact/same characteristics.
- You get the control group from any source. For example, how to control drug abuse. To find out the impact of drugs on subjects, for example, choose Munali School and Kabulonga School.
- Experimental group – Munali
- Control group – Kabulonga
- This design is common for social sciences because of ethical issues and practicality. You do not deprive clients of services.

TIME-SERIES/SIMPLE INTERRUPTED DESIGN

- Q_1 Q_2 Q_3 x Q_4 Q_5 Q_6
- X is the intervention/program.
- You measure three times, and introduce the program, then measure three (3) times after implementing the program.
  - There is no randomization
  - There is no control group
  - There is time interval between measurements and they are also equal. Thus, it must be standardized. For example, measure after every 2 weeks.
- Find out if the trend has changed because of the intervention/program.

MULTI-TIME SERIES DESIGN

- Q_1 Q_2 Q_3 x Q_4 Q_5 Q_6
- Q_1 Q_2 Q_3 x Q_4 Q_5 Q_6
- No randomization
- There is control group
- It is suitable in education sector. For example, to find out the impact of the teaching method.

SINGLE SYSTEM DESIGN

- One of the oldest methods of doing research. For example, case study.
- It was introduced by a psychologist. The first group to you this method were clinical social workers. It is used to find out the suitability of intervention design. It is mostly used in social work.
- Single-one client/one family/one community.
- System – level/type of client deal with by social workers, for example individual.

AB DESIGN

- A - Baseline data
- B - Intervention/treatment plan
- A - Baseline data becomes control
- B - Intervention becomes an effect.
- You measure during the course of implementing the programs.
- It is used by clinical social works.
- Do your assessment, for example, child abuse in the community.
- Intervention, you employ parental education program.
    - What are the incidences of child abuse?
    - Are they going down?
- You can tell that your method is effective by the difference.

Weakness

You cannot generalize the findings because it is an individual. (DIAGRAM)

WHICH TYPE OF RESEARCH IS BEST?

Choose the type of research is determined by different factors:

- The **Level of Research** you are to undertake. That is, descriptive, explanatory and exploratory.

- **Availability of Resources** – time, finances, more money/finances as research is expensive, and it also needs more time.

- **Ethical Issues:** values are very crucial.
    - There should be no harm to clients.
    - There is need for client self-determination.
    - The pure experiment is not physical in social work as we deal with real human beings. Thus, there is a limit in the extent to which we can go in manipulating the experiment.
    - There are philosophical issues. Thus, in social sciences we use quasi-experiment.

- When doing pure scientific research, there are requirements, and these are:
    - Internal Validity; and
    - External validity.

- You must find a way of controlling any other major possible/alternative explanations other than the intervention/treatment plan.

- A way to show proof that it is the independent variable that caused the changes in the dependent variable (make sure that changes are to do with independent variables).

- If any other changes or interventions, they should be minimal, for example, high income due to education and not socio-economic status, gender, etc.

INTERNAL VALIDITY

The degree/extent to which the intervention/independent has truly/honestly/factually responsible for the observed differences/changes in the dependent variable. For example, the higher the education, the higher the income. This should actually account for changes.

THREATS TO INTERNAL VALIDITY

There are certain things associated with research design that can affect/warrantee changes in the dependent variable. It is not the real cause of the changes in the dependent variable.

Maturation: Growing up and changes in behavior. For example, kids observed for one year, but because of time factor (tenure-frame), there may be changes in behaviour and not necessarily as the result of the intervention (for example, teaching method).

History: Many things taking place within the environment during your research (events taking at the same time the research is being conducted), for example, changing people's attitude towards sex so as to prevent HIV/AIDS. For example; kinds of program concerning HIV/AIDS on television can make people change and not necessarily treatment method. You can control your history by using control group.

Selection of Subjects (selection virus/bias): To what degree or extent you may be bias by not using an objective way of allocating subjects to groups. For example, no randomization and no control group.

Mortality: Some subjects or people drop out of the experiment or they may leave depending on the length of time. Some may leave voluntarily (people may die or dropout/withdraw voluntarily from the control group).

To reduce mortality, you give an appreciation or incentive to the subjects.

- Is it due x/intervention or not.
- Both the experimental and control groups are affected.

Interaction Effects: Selection bias combines with mortality or selection bias combines with maturation-maturity. For example, no randomization, and also subjects in control groups are old people and are likely to mature early and affect their level of perception.

No randomization, there is a high likelihood of some subjects with common characteristics to be found in one group and may affect the generalization of findings, for example, quasi-exceptional design, and people may drop out or die (mortality).

Unreliability of Instruments: This result from inconsistencies in the way questions are asked. Standardize the questions in order to avoid misleading answers. For example, do you smoke daga? Do you engage in sex?

Instrument Reactivity: The manner in which you construct your questions affects the research outcome, normally results in negative effects. Questions in the questionnaire should give a provision for confidentiality. For example, do you smoke daga? Do you engage in illicit sex? Should be avoid.

Reactivity: When people become aware that they are participating in research, their mindset changes and this can have an impact on the way they will respond to questions and can have an effect on the research. People become aware that they are participating in research (they have knowledge of the research). It ahs Hawthorne effect and can distort research findings.

TYPES OF RESEARCH

UNOBSTRUCTIVE RESEARCH

- Obstructive means obstruction/interference.
- Unobstructive means not interfering in collection of data or selection of subjects.
- It means not dealing with subjects directly. (Not directly involving people in the research).
- This is the kind of research where you are not directly involving people. For instance, no interviews with people. It is mostly used by archaeologists who study the past. Historians, for instance, rely on written information as they do not involve people. Anthropologists use

artifacts, sometimes use people but do not manipulate them (through participatory and non-participatory).

- It is used in social sciences, for example, social work especially when it comes to ethical issues.

Advantages

It uses minimum resources as no people are involved. Researchers make use of existing literature, hence costs saving and time saving as well.

Disadvantages

- Does not use people, thus does not rely on primary data but using secondary data (for example, diaries, reports, journals, etc), thus data may not be complete.
- Definitions may have different meanings and the context in which these (definitions) are used may not be understood.
- Accuracy may not be established as facts may be distorted since people who wrote the information may have biases, values and may not be the true reflection of reality or what is on the ground.

TYPES OF UNOBSTRUCTIVE RESEARCH

Analysis of Survey Data

- Examining and using data already collected by organizations, institutions, researchers, etc.
- This is descriptive type of data that is always updated from longitudinal studies, for example, census data.
- All researchers are free t access the data they are interested in, for example, census data on employment, death and birthrates, health, income, HIV/AIDS, morbidity rate, etc. For example, data found at CSO.

Advantages

It serves time and resources. It is thus cheap.

Archival Research

- Collection of data from an archive – where old information concerning the history of institutions is kept/stored.

- It could be: (a) public documents (b) Private documents.

- Public – government documents/reports of various government departments, for example, health, education, department of social welfare, etc.

- It is also in form of actuarial data, for example, health level – death and birth rates, marriage and divorce rates – courts. It is kept by various levels of departments, for example, UTH – courts, dockets of crime/cases – Police.

- All this information, for instance, in Zambia is kept by National Archive in Lusaka.

- Private documents – letters of prominent people, diaries of prominent people/figures for example, freedom fighters. History of Zambia's struggle for freedom/independence. Presidential speeches/kinds of stories are kept in archives.

- You can it (data) to test the hypotheses but much of it is used to understand trends of events, that is, to see trends in certain patterns. For example, in health sector – disease patterns (historical aspect of that disease) for example, policy on drugs and impact of the policy on disease prevention.

- It is also used when doing comparative studies using social indicators (that is, basic information about particular countries). For example, incidence of poverty according to socio-economic indicators compare Zambia and other SADC countries in terms of how have the trends changed (that is, social indicators such as mortality rate, literacy levels, life expectancy, etc). Look at the trends.

Content Analysis

- Content: Something written about and what is contained in it.

- It is about examining patterns of phrases of interest in particular book. They are to be quantified in terms of frequency. That is, how many times has a particular word/phrase been used? For example, in book, report, speeches, journals, newspapers, movies, etc. So as to make sense of it in the patterns of communication.

- Also obtained from graphics as to what kind of messages are contained in the writings or words.

- This type of research use quantitative pattern of data analysis. It is about examining content of communication.

- Examining contents of communication by quantification – counting contents of communication/language – words/phrases (how many times is the world/phrase used). It should be in terms of frequency.

<u>Advantages</u>

- Non-reacting type of research
- It is cheaper/cost saving thus widely used.

WHAT KIND OF SOURCES ARE USED?

Newspapers: Editorial comments. What kind of words/speeches are used? (For example, Post Newspaper.

Journals: Where researchers put their finds/discuss some topics/debate.

Movies/Cinemas: Prejudices – biases, for example, racial groups are portrayed, for example, blacks take no leadership role, they are savages – rough/barbaric.

Magazines: Specialized in different issues, for example, gender issues, politics, etc.

Minutes of Meetings (board meetings) for example human service organizations. There are words used to describe clients, for example, medically social, hopeless fellow or failure), for example strength based practice or asset based practice. Somebody who has got ability/potential and something to be used to solve problems.
What does this have and what resources can be sued to solve the problem.

Parliament Speeches: for example, voting patterns of politicians – opposition parties and ruling party. What kind of policies come out of parliament sittings depending o ideological orientations, and this has an impact on social work practice in terms of social policy.

Historical Records: for example, manifests of political parties.

Letters and Diaries of prominent people.

OTHER FACTORS TO CONSIDER

Research question/hypothesis: what type of interesting sources.
Source of Information: What type of material, for example, movies, newspapers, etc
Identity unit of analysis: What type/kind of words/phrases?
Sample size: Take a sample if there are so many words/phrases (do random sampling).
Reliability Check: What should be used to count words/phrases of interest.
Interactor Reliability Test: Use many people to count the words/phrases – how many have these (words/phrases) been portrayed?

SURVEY RESEARCH

Survey is snap shot method of gathering information and one particular point in time (not always and what type of information – descriptive type). For example, census of population.

PURPOSE OF SURVEY RESEARCH

Exploratory Survey Research: Used to test questions – how people are going to respond to questions. For example using a questionnaire such as testing the instrument – the way questions are. You test for validity and reliability of the instrument (such as, to what extent can it be used for testing or extent to which the findings can be reliable.

Descriptive Survey Research: For example census population.

Explanatory survey Research: The relationship between concepts. For testing the hypothesis using statistically controlled design.

DESIGN OF SURVEY RESEARCH

Cross-Sectional Survey Research

- (You can do explanatory, descriptive and exploratory).

- It means data collected at one point in time from a sample selected to be described. For example, census survey – completed enumeration – everybody is involved but survey sample of population which is a representative sample which can be generalized (based on random sampling).

- You can use a questionnaire after identifying a sample (self-administered).

- You can also use personal interviews such as using a questionnaire and record answers.

- Self-administered questionnaires, responses are very low as they may not be received as people are not obliged.

- Personal interviews may be effective, however, people may not be comfortable and may give general response so as to please the interviewer, and some may want to protect their integrity.

- Self-administered questionnaires may have genuine or complete answers.

Advantages

- Data collected once with quick results, thus cheap.
- Results can be generalized as sample is representative (scientific purpose – take a sample due to resources).

Disadvantages

Variables change over time, for example, attitudes/behavior of people can change overtime.

Control for alternative explanations - status local techniques, for example partial correlation – age, gender, tenure, etc.

Longitudinal Survey Research Design

- Collect and analyze data overtime.
- It is data collected at different times to analyze changes in the relationship between variables or descriptive information.

Advantage

It can be generalized (compare overtime, such as it should stand the test of time/over length of time).

Disadvantage

It is very expensive.

VARIANTS OF LONGITUDINAL SURVEY RESEARCH DESIGN

Trend Studies

What is happening overtime (Changes in events). For example presidential opinion pool during campaigns time changes in the relationship between variables – to see the changes/development overtime based on general population. Do random sampling/techniques of sampling.

Cohort Studies

- Cohort means characteristics, for example, age. Groups can be observed overtime – changes overtime.

- Select people/group of people of certain characteristics so as to check on various characteristics, for example, behavior.

- There can be different groups of people belonging to the same age, or same gender.

Panel Studies

Collecting data overtime from the sample, for example, sample group of the same people (this year the after two years).

METHODS OF DATA COLLECTION

- Questionnaire – self administered.
- Personal interviews, such as, data collected using a sample.

PARTICIPATORY RESEARCH/RAPID APPRAISAL

Participatory Research

- Involving people, that is, more than one person is doing) something – the researcher and other people (other stakeholders).

- This is opposed to basic scientific research where only the expert/researcher has technological know-how (knowledge).

- Research undertaken in collaboration with relevant stakeholders or relevant interest groups or potential beneficial of research findings. Who should do the research and who should benefit – it is common people (experts or non-researchers).

- It is the philosophical kind of research.

- People will claim ownership of the research findings (people will claim responsibility and partnership as there is no manipulation by experts/researchers for personal gains.

- This research is widely usually done with applied type of research. Applied research is used to identify and solve a problem as opposed to basic research which generates knowledge to understand a problem/phenomenon. For example, evaluation type of research (problem evaluation) involves program planning or program esign:

    - Problem identification/needs assessment: Cause – effect relationship.
    - Goal/Objectives: Program hypothesis – anticipated outcomes (goals) after implementation.
    - Program/Services to be provided: Activities to be undertaken – health, education, housing, water, etc.
    - Implementation of the programs.
    - Evaluate (evaluation): The impact of the program on the lives of people – any difference in the livelihoods of the people.

- Evaluative research – to find out the impact of the program on certain beneficiaries/certain values.

- People must be actually involved in all the stages/activities.

HISTORICAL BACKGROUND

- Participatory research came into effect in the early 1980s and late 1990s as a result of failures of development programs or projects sponsored by international development partners. That is, the impact of programs or projects sponsored by international development partners. That is, the impact of programs was less effective, and promoted research it he 1980s involving people.

- The programs were short lived in programs/activities, hence there was no sense of ownership.

- Moreover, the impact of programs was less effective as output of programs was not sustained – not long term. That is, programs did not have greater impact on beneficiaries as they did not involve the people who were beneficiaries. Programs were only undertaken by experts.

- This was one of the pitfalls of the method, such as people were not involved and thus no sense of ownership.

RATIONALE/JUSTIFICATION

- Lack of sustainability as people were not involved.
- People were not empowered as they did not learn skills/technical issues. They were not empowered socially and economically.
- Participation is also a matter of human rights.

Ethical principles

Client self-determination, respect the clients by not imposing things on them. Thus, show respect for human dignity as people should feel respected.

METHODS OF DATA COLLECTION

- Community meetings/focus group discussions.
- Questionnaires – use survey techniques.

LIBRARY RESEARCH

- Use a library which is a depository of knowledge.
- For literature review – get information from library
- It is used to avoid duplication but for replication of research and to avoid wasting resources.
- To see gaps in previous studies

- To check for limitations/inadequacies in previous studies (this also applies to archival study and content analysis).

HISTORICAL RESEARCH

- What is the purpose of history – what took in the past so as to understand the present events/situations (methodology).

- Is history part of social sciences or humanities? Philosophical issues/human society.

- Argument is that history is not part of social sciences as the method used in research is not systematic method.

- But some historians have adopted scientific research process or principles.

- Interest for social workers is social welfare departments, institutions such as prisons. Social work professional find out how social work methods have emerged/also how provision of social welfare has changed overtime.

- Use archival studies to understand various institutions.

- What can we learn from the past to avoid the pitfalls. (How effective have the methods been or has the practice been, for example, participatory research).

DESIGN OF PARTICIPATORY RESEARCH

(PARTICIPATORY) RAPID APPRAISAL

- Passive and active participation
- Active participation: People have power to make decisions.
- Passive participation: People are not involved in decision making, but can be consulted after a decision is already made.
- Appraise: Is to evaluate or analyse.

- Rapid: fast way of doing things. Fast because when beneficiaries are involved in research, it is a fast way of collecting data and being used. When people who are affected participate in research can tell what they are experiencing. Get first-hand information because you are dealing with people who are experiencing the problem.

Advantage(s)

As opposed to survey (self-administered questionnaires and personal interviews), it is fats as people/beneficiaries and this great benefits.

Disadvantage(s)

- It demands for more resources and time.
- It has potential for conflicts
- Requires training of people – leaders (need for special skills).

TYPES OF TECHNIQUES USED TO COLLECT DATA

Because you deal with people of different background, for example, gender – men and women, educated and non-educated, socio-economic status, etc, culture of people, children at community level (for example, as a community workers, divide the group in various groups).

DIAGRAMMING

- Seasonal calendars – able people to identify their major season, for example, rain season – what happens in the rain season, when does it start?

- Trend lines – Understand the history of the problem – when did the problem start? What happened.

- Framework of the problem regarding how the problem started.

- Transect – scouting to know the place, such as boundaries of the place – familiarise with the place (local knowledge).

RANKING

- What are some of the priority areas such as major problem areas.
- Preference ranking: List of problems in terms of major issues based on people's priorities.
- Well-being: To knew what people think about their own community, for example, is it a good community (for example, high crime rates, or community isolated from major activities – lack of proximate to major areas.
- It is part of problem identification.

MAPPING

Map of the community, to find out their understanding of community resources.

Resource Mapping: What resources do you have to solve problems? For example, rivers, land, cattle. What can we get out of resources, for example, jobs, nutrition, depending on the resources available and the nature of the problem? What do people have that can be used to solve problems?

Social Mapping: Clinics, schools, Police, stations, recreational facilities – including pubs.

- Indentify the problem and analyze it.
- Data is being collected and analyzed at the same time.

  Asset based practice (resource-based practice).

OWN OBSERVATION

You have to make your own observations through physical appearance of the area and its people.

DATA COLLECTION

- After choosing the research design.
- It is the process of collecting or obtaining the required data/information for you study to test the hypotheses.

THREE MAJOR STAGES

(i) Designing the instrument to be used to collect data.

(ii) Select the respondents

(iii) Administer the instrument.

DESIGNING THE INSTRUMENT: TWO TYPES OF INSTRUMENTS

(i) Questionnaire

(ii) Composite Scale

QUESTIONNAIRE

(Depending on the level of research, for example, explanatory –relationship between variables, for example, age, gender, income etc).

- Questionnaire consists of sets of questions (which should reflect on particular variables – dependent and independent).
- The questions will depend on level of research and variables.

HOW TO ASK QUESTIONS

Questions must be clear and concise.

- Clear – easily understood
- Concise – straight forward. Questions to the point.
- There are does and don'ts of making questions.

DOUBLE-BARRELED QUESTIONS

Asking questions which consist of two things.

Leading Questions: For example, do you agree that KS is not a good guy?

You should make clients/respondents think and understand the questions.

Unavailable Answers: How many hours did you watch the television last year?

There is no appropriate answer.

Insensitive Language: Use of language must be civil, for example, questions about gender, do not down grade certain categories of gender. Do not offend your respondents.

OPEN AND CLOSED-ENDED QUESTIONS

- Open -instructed questions, for example, what is your age or what is your gender?
- Closed-structured (you give alternative answers, for example, gender/sex – male and female, age – 5-6, 7-10, etc.
- It is mostly associated with descriptive type of research.
- Open-ended questions: you ask the respondents to amplify the answers given) explain why they have to give additional information about particular question asked). They have to write in words or responses have to be in words.
- This also applies in explanatory type of research.

QUESTIONS BASED ON VARIABLES OR LEVEL OF RESEARCH

Composite Scale

- Measuring one variable using several questions (series of questions) and each of these questions are measuring the dimension of that variable. For example, aggression, job satisfaction, organizational commitment, stress, etc. For example, psychological treatment in interpersonal relationships.

- Series of questions to measure one variable. When added together can measure the variable (sub-variable).

PRE-TESTING THE INSTRUMENT

- To make sure that the questions are clear and concise – give people the questionnaires so s for them to answer the questions in it. Thereafter, check if the questions were clear and concise. If no clear and concise, fine tune the questions.

- Check for psychometric properties of the composite scale-series of questions to measure one variable. Are the questions related to the variable or dimensions you are measuring?

- The statistical way of doing that is: Questions must correlate to each other or must be related to each other.

- Use statistical correlation, such as the degree to which the two questions must relate to each other or measure the concepts.

- Make corrections.

- If there is high correlation, you can have confidence that they are measuring the variable.

SAMPLING PROCEDURES

- Not getting information from all the people but from limited number of people (sample).
- It is not necessary and easy that everybody has to be interviewed.
- We can generalize the findings
- Sampling procedures refer to methods or techniques used when selecting respondents.

PROBABILITY SAMPLING

People have equal and non-zero chance of being selected.

NON-PROBABILITY SAMPLING

Not everybody would have an equal chance of being selected because of using non-scientific methods.

TYPES (VARIANTS) OF PROBABILITY SAMPLING

Simple Random Sampling

Selection of subjects by chance and each subject has an equal chance of being selected. The researcher is not conscious of what is being selected.

Stratified Random Sampling

- Stratifying into groups, such as doing the population into groups and each member has an equal chance of being selected (equal representation). The researcher is conscious because we may have men and women, for example, more women than men.

- Get larger number from smaller group and small number from larger group.

Cluster Sampling

Select the individuals from natural groups. For example, schools, churches, clubs, organisations or institutions or institutions which people belong to.

VARIATIONS

One Stage Cluster Sampling

- For example, city of Lusaka – people belong to.
- Divide people into households (select them randomly) in that city, for example, select churches.

Two Stage Cluster Sampling

For example, Lusaka, identify households, select those households randomly and interview one person in that household. Select from natural grouping.

Multi-Cluster Sampling

Several Stages, for example, Provinces. Select the provinces, thereafter towns (select them randomly), then households and select randomly one individual in households.

NON-PROBABILITY SAMPLING

Not concerned about equal chance, and also not concerned about external validity as well as internal validity.

VARIATIONS

Convenient sampling

Select the people who are available and easily reached or accessed – select the people known.

Purposive Sampling

Select the people known but who you think have information. For example, child abuse, select professionals dealing with such issues, for example, Police, social workers, medical doctors as you are interested in the quality of information (get informed opinion).

Snow Ball Sampling

- Do convenient sampling
- Ask the people/people interviewed about who has particular kind of information.
- Using other people to lead you to other people, such as, to identify other people who have information.

DETERMINING THE SAMPLE SIZE

- The larger the sample size, the close to reality (the closer the sample to the population).
- The larger the sample since, the closer the sample to the findings.

Mathematical Formulas

For example, explanatory research, such as relationship between variables.

(i) Number of independent variables

(ii) Power of the statistical test

(iii) Significance levels

(iv) Effect size

Power of Statistical Test

It is the extent to which the statistical test can give significant results.

Significance Level

Margin error, for example, 0.5, 95%.

Effect Size

Degree of impact of the independent variable on the dependent variable, for example,

N = 0.2 x 0.2.

ADMINISTERING THE INSTRUMENT

- Email it
- Send it by mail (through post)
- By personal interview through door-to-door interviews.

Mailed Questionnaires

- Return rate may be very slow.
- Questions in it may be ambiguous – not amplified.
- Smaller sample size may affect statistical test, internal validity and thus credibility of findings.

Advantage(s)

Number of questionnaires may be small, but it is cheap.

Personal Interviews

Advantage(s)

- High return rate
- Get accurate responses as questions can be amplified.

Disadvantage(s)

- It is very expensive in terms of transport, allowances and training of research assistants.
- Some respondents may feel shy to give information, especially if the information is personalized (such as they may give distorted information).

PARTICIPANT AND NON-PARTICIPANT OBSERVATION

It is widely used in anthropological and qualitative research. For example, anthropology research, the researcher stays with the subjects and get the data. For example, qualitative research, you collect data from focus groups.

Participant Observation

- The researcher is participating in the activities of the subjects, for example anthropologists researching on ceremonies (initiation ceremonies).

- They collect data and take part in the activities. Thus, they will have good understanding of the activities.

- Sometimes, the subjects may not know that the researcher is collecting data.

Non-Participant Observation

- The researcher is not part of the activities but observing and collecting data.
- It is more of qualitative oriented data collection.

DATA ANALYSIS

Data Cleaning and Editing

- School through the instruments, such as look at questions and how they have been responded to (are there questions that have not been answered?).
- If not answered, either delete them or not.
- Some responses were not accurate, either cancel them or consider them like the answered ones.
- You edit for missing variables.
- Compare the questionnaires for section/questions about low income people.

Data Entry

For closed-ended questions

- Enter the data into personal computer, for example, SPSS for quantitative data – enter the responses.

- Develop the code book for each variable in the questions, for example, gender – 1 male, 2 female.

- Give the numeric number, such as level of measurement – nominal, ratio, etc, for example, gender is nominal (mutually exclusive as there is no addition or subtraction) for example rata-income, K25,000=00 is ratio as it can change.

For open-ended questions

Take a sample and look at the pattern of responses and create levels of measurements, such as numerical codes.

Uninvariant Analysis

- Find out the distribution for each variable, for example for control tendency – mean, mode, median and standard deviation.
- …… many times was the particular response given, for example, income-average income.
- Do that for each variable and only for ratio and interval scale.
- It is also the continuation of data cleaning, for example, if standard deviation is very, income is far away from the mean.
- It also gives the pattern.

HYPOTHESIS TESTING

- Relationship between variables.
- Use statistical test, for example, + - test, Chi-square (X^2), ANOVA, Correlation = r, regression and multi-regression.
- What level of measure are your very variables? For example, t-test on ratio scale and nominal scale, for example gender.

- Chi-square (X^2) for nominal scale, for example, difference between scale and income.
- Correlation/ANOVA – nominal or independent variable and ratio for dependent variable.
- Regression – nominal
- Logistic – independent variable nominal but dependent under ratio scale.
- Multi-regression – so many possible independent variables affecting the dependent variable. The outcome of each independent variable on the dependent variable.

PRESENTING RESEARCH FINDINGS

- What are your findings? Reporting your findings. Tell the stakeholders about the research findings.
- Verification of already existing body of knowledge, such as retesting.

Title Page: Title, name of author, date.

Abstract: Concise summary of research (less than a page).

It consists of objective(s), study methodology, study findings and conclusion.

Introduction/Background: Research rationale.

Literature Review: Methodology and limitations and rationale of your study, weaknesses and fill-up the gaps.

Methodology: Research design, data collection, sample size and instrument.

Findings: Results of statistical test – hypotheses rejected or accepted.

Discussion: Discuss major findings, limitation of the study, influences on results, constraints, for example, impact on results.

References: Only those mentioned in the paper.

Appendices: Research instrument to ensure replicability of your study – to be used by other researchers so as to come up with same research findings. Correspondence and other documents.

SOCIAL SURVEY

Why do we use or do a survey?

- Survey gives you a chance to know more about a certain phenomenon.

- A social survey gives you detailed information on the social phenomenon that is under investigation.

- It makes sense to question whether time, effort and money should go into a survey when the information were seeking might not help to solve problems or might be obtained more economically in other ways. That is, perhaps by asking questions from other people or simply consulting records.

- In general, the purpose of a survey is to provide concrete information just like planning of any sort is based on information.

- The hopes of a community may then be achieved more fully so that people can enjoy the kind of life they.

- The responsibility of researchers is to see that they get accurate and appropriate information in the most effective and efficient way. Thus conducting a social survey is important because; planning of any kind ultimately affects people and their lives may be better or worse depending on the results.

- In social planning, it is essential to know about these people and to understand some of their problems.

- Before providing new services or better services to the community, the needs of these people in that community should be founded. For example, such services might include; schools, clinics/hospitals, recreational and social facilities.

- Decision like constructing a hospital can only be done if you know the population by conducting a survey. Or divisions of where a road should be constructed needs a survey to determine it, otherwise if can be a waste of resources. You need objective data found by research of a survey.

- By talking with some of the real people or communities behind some social statistics, we gain better understanding of them.

- All these provide social planners with all special kind of information in order to plan effectively for the community.

PURPOSES OF SOCIAL SURVEY

Social survey aim to supply information, for example

Descriptive Social Survey

- It describes what exists in a particular locality, such as, it describes what is the recent fact existing on the ground (what is available in the area).

- It also tends to state the facts quantitatively. That is, it tends to identify aspects of community life and the environment where changes seem advisable (needed in the planning process).

- It also tends to talk about where there are social problems, to measure the extent and characteristics of those problems.

Explanatory Survey

- It tends to analyze relationships between the descriptive facts and to understand what is going on, for example, population movement in a particular community such as rural-urban migration and changes taking place in the social system. For example more old and children than young people (is descriptive) but the explanatory gives (why) for more children need schools, but very few mean to help build schools.

- It thus helps identify the causes for change and these are needed in the social planning process.

Predictive Survey

- In the predictive survey, you do a survey because of all the changes, for example, predicting social problems – more children to be provided for, for example education, food, clothes, shelter, etc.

- To examine the merits of alternative policy proposals and active plans, and predict/projects or forest the possible outcomes of suggested remedies for social policy.

Evaluative Survey

- To evaluate the results of past decisions (sometimes, through follow up steps).
- To assist in modifications or adjustments suggested by the evaluation.

DIFFERENCES BETWEEN SOCIAL SURVEYS AND CENSUS

- The official census is a form of survey that can give us general information about specific geographical areas, for example, the census has figures in such things as density of population, the average number of people where they live, average number of children per family.

- From census, we can also learn something about an area in terms of age distribution and the number of people in each occupational group.

- Census information often provides the essential general picture but it might still be necessary to check by means of a sample whether there are any changes since the last census was undertaken.

<u>Disadvantages</u>

It tells very little about what people to and nothing about what they think it the census lacks information about people's lives and ideas – it does not tell you about specific things/issues/problems that affect people as it is general.

THE MOTIVES OF SOCIAL SURVEYS OR SOCIAL RESEARCH

There are four motives for conducting a social survey:

Basic for Planning

Surveys provide essential information for drawing up policies and action planning.

Educational

Conducting and reporting surveys:

- It is one way of educating the public regarding policies, social questions or need for a new legislation. That is, information has to be brought to the people (survey can be sued to educate people based on a report).

- In other cases, surveys have properly been used to prove the need in order that a plan of action can be sold to the public about changes that are to be made at particular time (planners) researchers sell information to people so as to make them aware about a particular plan).

- In order to improve social services, a social survey should be carried out before a plan is finalized so that people can understand what that plan is.

Magical

- Surveys may be a kind of fetish or magical, such as, to blindfold people, as they are not intended to do anything.

- Those doing a survey may pretend as they may have a hidden agenda or intentions are not in line with the survey. For example, building a shopping mall in a compound, use the survey as an intentional to hide behind with the intention of demolishing the illegal settlement around it.

Tactical

- This is procrastination (delaying tactics). It is putting off the plan as to do a survey in order to find out if it is necessary.

- The intention is to make sure that it does not take place, for example, expanding University of Zambia up to Kalingalinga but planners will claim proof for the inadequate of the plan.

- Procrastination was actually a basis for the survey.

TYPES OF SOCIAL SURVEYS

- Surveys can be classified according to their general purposes.
- Social surveys are descriptive, explanatory, predictive and evaluative.
- Social surveys can be classified according to:

Demographic characteristics of people in a defined area

This type of survey seeks the kind of information usually covered in a census, for example, the composition of a family, or household, age, number of children in a family, marital status, number of schools in a particular locality, etc.

Social and Economic conditions of an area

- This includes information that could indicate whether people are well-off, barely comfortable or below the poverty line.

- These surveys often attempt to produce scales or social indicators based on questions about the level of education, occupation, income, housing conditions, etc.

- This type would also include surveys concerned with aspects of the social environment such as health and hospital facilities, schools and recreational facilities.

Disadvantage

Cross-checking that kind of information becomes difficult (but some direct observation may be necessary, for example, the state or condition of housing, roads and availability of amenities.

Activities people do

- This type of survey wants to know what people do, other than for a living. What people do for a living is different from what they do for a hobby.
- In this survey questions may be about travelling to place, visiting relatives and friends, etc.
- This type of survey is difficult as it is dependent on the human memory.
- There is need to cross-check the results in order to avoid being biased.

Opinions and attitudes

- By attitudes, we usually mean something rather more stable than fluctuating opinions.
- A related set of opinions usually consistent in the meaning and intentions as well as reasonably consistent over a period of time.
- An attitude thus does not just come on its own, for example, racial discrimination or prejudice.

FACT FINDING

- Research in the sense of fact finding is a primary method in community organization practice and it constitutes the necessary foundation for planning and action.

- In social work or community organization, fact finding is a basic tool in defining problems, evaluating services, determining needs, establishing priorities, setting standards and determining policies.

- There are various kinds of fact finding. Among the more common types are:
    - The collection and statistical interpretation of data.
    - Social surveys, financial status, opinion of welfare programs and overall community studies.

ACTION RESEARCH

- Characteristics of fact finding or research in community organization.
- It has eight (8) principles:
    - The problem of the research should start from a recognized community need rather than from a hypothesis generated by the personal interests. As a research expert/specialist, help the people to solve their problems.

    - For maximum effectiveness: Those who are expected to implement the recommendations or research process (the community should participate in the study process as they are the ones to implement the recommendations).

    - Before launching a study, the planning group should examine the readiness of the community for the study, for example, people should be aware of the study.

    - Action research requires external/technical assistance and direction to ensure objectivity and accuracy of the data collected.

    - Social problems must be reformulated into a researchable problem (put it in a format so that you can collect and analyze data).

    - Action research in community planning implies team work among researchers, other professional, technicians and laymen/citizens. For example, apart from social workers, other professionals such as teachers, doctors) nurses to assist.

    - The motivation for action research affects the nature of the research as well as its utilization. It is important that the researcher and those sponsoring the study to critically consider the events leading to the study questions. The reason why a group wants a study will have a direct effect on study procedures and results:

        - **Persuasive Research**

          Community, groups or individuals who request to research on a given problem may be seeking objective data to substantiate the decision already made regarding a course of action – action to be taken. For example, board of

directors may be ready to fire their Managing Director, but they tend to hesitate before a decision is made. They will ask for a study to find out on which basis to fire the director.

- **Escape Research**

  The individuals requesting research are usually motivated by a need to delay or avoid action. In such a case, action research is not intended to lead into action but to avoid or preclude it. For example, salary increment, but research to find out if it is justifiable.

- **Action Research** - usually leading into intended social action. In this case, community groups or individuals who see the need for action may find that they do not have adequate information necessary for their action. They should therefore ask/seek for data based on a research for them to come up with an effective plan.

- **Action Research or Action Research Project** – should result in recommendations for action or social change. A research or should base his recommendations for social action on the results of study, especially when he has around him competent social work professionals, as well community leaders who are aware of local feelings. Researchers should maintain technical responsibility for the study through representation o findings and formulation of conclusions.

SOCIAL SURVEYS

- There are as many definitions of a social survey as there are writers. According to the Harper and Dunham, "a social survey is the study designed to examine the need for social services in a community, so as to determine the degree to which these needs are being met, the effectiveness of the existing programs and agencies in meeting those needs and to develop a plan for coordinated social action."

ELEMENTS NECESSARY TO A SOCIAL SURVEY

(a) A clear definition o scope and purpose of discussion.

(b) Gathering of actual data.

(c) Limitation to fill social services and needs.

(d) Exercise of judgment in evaluating statistical and case.

(e) The participation o community representatives as well as professional personnel.

(f) The framing of conclusions and recommendations pointing towards action o improve services (planning).

DIFFERENCES BETWEEN SOCIAL SURVEYS AND OTHER TYPES OF RESEARCH/STUDY

- The social survey differs from other forms of social investigations. For example, the social survey is distinguished from basic social research/studies are concerned with the analysis of problems and collection of data without reference to immediate activity or utility.

- Similarly, surveys are distinguished from regular reporting and fact gathering utilized by regular agencies and national organizations as part of their normal administration and budgeting process like the Central Statistical Office (CSO).

- Basically, the survey should build as one means of community organization.

DIFFERENT TYPES OF SURVEY (MAJOR) TYPES OF SURVEYS BY SCOPE

Programe Analysis

This is a survey concerned with operations of a given agency or a group of agencies. It may include all or part of the following:

- Program of services provided,
- Staff activities,
- Quality of service,
- Volume of service
- Internal administration

- Financing and staff administrative relationships
- Reporting and institutional management

This is usually an evaluate type of survey. A substantial among of professional judgement is involved in applying and interpreting studies as they relate to local situations.

Needs and Resources

- This is a study of community needs in a given field. For example, childcare. Whether resources are available or meeting the needs of the community.

- This type of survey may call for examination of the quality of service to meet the existing or more often it is concerned with the volume of available need.

- This method calls of case finding and analysis among governmental agencies, and close examination of resources which are serving these needs. For example, money to use and personnel in deliver the services.

- Also helps in finding out the extent to which unmet need exist.

General Community Survey

- Is the study of needs and resources touching several fields and the central planning body.

- This usually covers social services such as education, health, housing and other services with special reference to planning for community needs as agencies individual agencies or specific programs or needs.

- It emphasizes relationships between agencies and central organizations, and cooperation with various national organizations.

- Consultancy services from these fields and carefully planned team approach are usually involved.

- Frequently, studies of population characteristics must be undertaken as a first step.

Study of Interagency Relationships

- Is a study of the way in which various operating agencies are working together in meeting community need (interagency cooperation or the relationship between functional agencies). Such as, is there cooperation or coordination o duplication of services – similar services offered by different agencies.

TYPES OF SOCIAL SURVEYS BY METHOD

Inventory or History Method

- This involves the compilation of facts from already collected /existing sources. Evaluation of a local problem is based upon such data.

- Regulatory collected information is available from their institutions in the country, for example, social agencies such as city councils, courts, Police, schools, hospitals, etc.

Disadvantage

- Such statistical data are seldom comparable as it is usually incomplete and are thus not capable of giving a clear/adequate picture of local services.

- They are therefore, seldom used except for highly specialized and selected projects. They are not updated, and they are biased because the sampling design is not correct.

Survey by Experts

- This type of survey involves the employment of a qualified survey or by a local community to collect data, evaluate it and to record the facts. Usually the surveyor makes recommendations for action to be taken.

- The scope of the survey is usually established by the community through its appropriate survey committee. In some cases, this may be left to the consultant in cooperation with the local committee.

- This method calls for the least local participation. Once the survey starts, there is no local sharing until a report is made. This method may include any or all of the following steps:
    - Collection of source data
    - Evaluation of published data, case studies, interviews, and conference with agencies, professional and board members, leadership and physical inspection of agencies.

The Process Survey

- This type of survey is characterized by the widest participation of local lay and professional leaders with the consultant of all stages of the survey setting objectives and scope, evaluating collected data, framing of conclusions/recommendations and follow up action.

- The consultants or survey staff may frame preliminary recommendations which are subsequently modified for discussion with community survey committees. Or factual findings may be represented prior to joint framing of recommendations between survey committee and staff.

- This method is most effective when a community policy and understanding are at stake.

Self Survey

- Is an extension and modification of the process survey.

- The amount of responsibility in the actual study including fact gathering as well as evaluation is predominantly in the hands of the local community and local professional personnel or consultants.

- The functions of the consultants are undertaken by the local professional staff.

- The consultation may only be about the organizations of the survey or help in evaluating findings and results.

- This method usually avoids responsibility for evaluating technical competence in performance unless qualified and professional personnel are available to undertake the type of a survey.

- More frequently, the self survey is concerned with matters of community organization, agency administration, volume of service and need for various kinds of service and their support.

- The self study makes exceptional demands for time and vision as well as competence in fact finding and analysis.

Continuous Self Study

It calls for a study flow of information on social services, to be regularly analyzed and discussed by lay and professional committees and connected with community's programs for raising money and supporting agencies.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