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ASSIGNMENT PROJECT MODULE

STUDY GUIDE 2020

1. WORD OF WELCOME

I want to extend a warm welcome to all of you into the Module of Assignment Project. I hope you all had a rewarding and successful midyear recess, after horrible and tough semester. Remember the words of Mahatma Gandhi, *'we don't make things easy for ourselves. After all, truth and science only flourish and prosper when they are inspired by the co-operation of active commitment, playful creativity, an ancient value system and a professional framework. This does not just happen, nor do we just make it happen. To work is to work together; not working together is a waste of time.* That is why we are organically united to a number of partners.

2. CONTACT PERSONS

Position	Title & Names	E-mail	Office # & Building
Facilitator (s)	Dr JN Lekunze Prof Christoff Botha	Joseph.Lekunze@nwu.ac.za	
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3. RATIONALE

The module aims to give a student a good grounding in research methods and how they have been used to carry out research in management and organisational settings. It introduces students to the field of research management and business research and some of the main research paradigms and theoretical traditions. It examines the strengths and weaknesses of competing approaches to research and some of the main ethical and practical problems that you are likely to confront as a researcher. Assignment Project Module is for academically capable and strongly motivated individuals who want to develop new and creative approaches that extend

existing knowledge and practice and advance their careers in business research in, industry, private and the public sector.

4. MODULE OUTCOMES

Upon completion of the module, students should be able to:

- develop a research proposal,
- perform a literature search and do a literature review,
- design survey questionnaires,
- evaluate different research designs and methodologies,
- design qualitative and quantitative research projects and use different methods to collect data,
- analyse collected data,
- present written work within tight time constraints, and □ solve problem and develop analytical skills.

5. Prerequisites and requirements

Prior understanding of basic statistics, undergraduate degree/diploma within management discipline, and working experience is needed.

6. STUDY MATERIAL

Prescribed textbooks

- ✓ Cooper, D. and Schindler, P.S. 2014: "Business Research Methods" New York, McGraw-Hill/Irvin, 12th Edition
- ✓ Blaxter, L. Hughes, C. and Tight, M. 2010. *How to Research*: Buckingham, Open University Press.
- ✓ Burns, R. 2000. *Introduction to Research Methods*, (4th Addition): London, Sage.
- ✓ Creswell, J. 2012. *Research design: qualitative and quantitative approaches*. (2nd Edition). Thousand Oaks: Sage.
- ✓ Neuman, W. 2009. *Social Research Methods: Qualitative and Quantitative Approaches*, (2nd Edition). Boston, Allyn and Bacon.

- ✓ Punch, K .2004 *Introduction to Social Research: Quantitative and Qualitative Approaches*, (3rd Edition). London, Sage.
- ✓ Mouton, J., and Marais, H. C .2007. *Basic concepts in the methodology of the social sciences*. Pretoria: Human Sciences Research Council

Recommended Material

- ✓ Jean, L. 2009. “Quantitative versus qualitative research methods: two approaches to organisation studies”, *Asia Pacific Journal of Management*, Vol. 9 (1).
- ✓ Long, R.G., White, M.C., Friedman, W.H., and Brazeal, D.V. 2000. “The ‘qualitative’ versus ‘quantitative’ research debate: a question of metaphorical assumptions”, *International Journal of Value-Based Management*, Vol. 13 (2).
- ✓ Thomas, R. M and Brubaker, D. L. 2010. *Theses and dissertations: a guide to planning, research, and writing*. Wesport, Conn: Bergin & Garvey.
- ✓ Wilson, J.B., and Natale, S.M. (2001), “Quantitative’ and ‘qualitative’ research: an analysis”, *International Journal of Value-Based Management*, Vol. 14 (1).

7. Assessment

7.1 Formative – formative assessments are about checking for understanding in an effective way in order to guide instruction. Formative assessment is a proven strategy for engaging students, eliciting evidence of student learning, and moving students forward to meet their learning targets and personal goals.

- ✓ class exercises and participation,
- ✓ practical work,
- ✓ group work

Refer to the formative (continuous) assessment plan at the back of this guide, which will lead to semester mark.

7.2 Summative – Summative assessment plays a critical role in information gathering process. By conducting a variety of forms of summative assessment (also known as assessment of learning), the facilitator will have a good grasp of where their students

are in the learning process. In this case, the students will be expected to produce a full-blown research report to be assessed for final mark.

8. Feedback

Guidance and proper research supervision will be conducted on a continuous basis through e-fundi as student's portal and through one-on-one contact with students. The turn-around time for responding to students query, questions, clarity whatsoever, is with two working days.

9. Work programme (time schedule)

The time schedule for this module is allocated by the PGDip Coordinator further discussed in class.

10. WARNING AGAINST PLAGIARISM

Copying of text from other students or from other sources (for instance the study guide, prescribed material or directly from the internet) is **not allowed** – only brief quotations are allowed and then only if indicated as such. You should **reformulate** existing text and use your **own words** to explain what you have read.

It is not acceptable to retype existing text and just acknowledge the source in a footnote – you should be able to relate the idea or concept, without repeating the original author to the letter. The aim of the assignments is not the reproduction of existing material, but to ascertain whether you have the ability to integrate existing texts, add your own interpretation and/or critique of the texts and offer a creative solution to existing problems.

Be warned: students who submit plagiarized academic work will be handled in terms of nwu policy on plagiarism and other forms of academic dishonesty or misconduct. It is also unacceptable to do somebody else's work, to lend your work to them or to make your work available to them to copy – be careful and

do not make your work available to anyone. ALSO REFER TO MANUAL FOR POSTGRADUATE STUDIES PROVIDED TO YOU.

11. UNIT 1: INTRODUCTION TO RESEARCH

11.1 Unit introduction

Student will be exposed to ways of how research is purely driven by curiosity and a desire to expand our knowledge. The postgraduate students will know that, this type of research tends not to be directly applicable to the real world in a direct way, but enhances their understanding of the world around us.

11.2 UNIT OUTCOMES

- to differentiate various research disciplines,
- to understand paradigms underlying types of researches

11.3 CONTENT

- Basic or pure research
- Applied research
- Managerial value of business research
- Topics in business research □ Social research

11.4 Learning activities

- Case study analysis
- Identification of research area – group discussion

Business research fulfills the manager's need for knowledge of the organization, the market economy, or other area of uncertainty. It helps the manager to predict how individuals, markets, organizational units, or other entities will respond to his business decisions.

The emphasis of business research is to shift decision makers from risky intuitive decisions to decision based on systematic and objective investigation. A business researcher conducting research may be referred to as a “marketing researcher” an “organizational researcher,” a “director of financial research,” or one of many other titles.

Business and social research is defined as a systematic and objective process of generating information or aid in business decisions or to address social related problem. This research information should be, (1) scientific, not intuitive or haphazardly gathered, (2) objectives, (3) impersonal.

Business research can be used by all types of organizations that engage in some type of business activity.

There are three types of business research:

1. **Basic or pure research** which attempts to expand the limits of knowledge.
2. **Applied research** which is conducted when a decision must be made about a specific real-life problem.
3. **Blue-Sky research.** This kind of research is not necessarily driven by a specific goal, but is simply exploratory: scientists aim to understand the world around them, and tend to stumble across all manner of interesting and applicable surprises along the way. It's vitally important that we fund this so-called 'basic' research, but it's much harder to draw catchy comparisons between the investment we make and the size of the objectives scientists are aiming for—often because, in the curiosity-driven world of blue-skies science, there aren't any objectives other than understanding itself.

Both types of research employ these scientific method, the analysis and interpretation of empirical evidence (facts from observation or experimentation), to confirm or disprove prior conceptions.

15. MANAGERIAL VALUE OF BUSINESS RESEARCH

The prime managerial value of business research is that it reduces uncertainty by providing information that facilitates decision making about strategies and the tactics used to achieve an organisation's strategic goals. The decision-making process involves three interrelated stages.

1. Identifying the existence of problems and opportunities. Business research can help managers to recognize problems and identify opportunities. It can be a diagnostic activity to provide information about what is occurring in an organization or its environment.
2. Selecting and implementing a course of action. Business research is often conducted to obtain specific information to help evaluate the various alternatives, and to select the best course of action on certain performance criteria.
3. Evaluation of the course of action. Evaluation research is conducted to inform managers whether planned activities were properly executed and whether they accomplished what they were expected to do. It serves as an evaluation and control function. Evaluation research is a formal, objective appraisal that provides information about objectives and whether the planned activities accomplished what they were expected to accomplish. This can be done through performance-monitoring research which is a form of research that regularly provides feedback for evaluation and control of business activity. If this research

indicates things are not going as planned, further research may be required to explain why something “went wrong”.

15.1 When is business research needed?

A manager considering whether or not to conduct research must consider four things, which are;

Time constraints: is there sufficient time available before a managerial decision must be made?

Availability of data: is the information already on hand adequate for making the decision? If not, can appropriate information be made available?

Nature of the decision: is the decision of considerable strategic or tactical importance?

Benefits vs. cost: does the value of the research information exceed the cost of conducting the research? If the answer to any of these question is “no” then business research should conducted.

15.2 Major topics in business research

There are major topics that benefit from business research. Some of the major topics are;

General Business,
Economic,
Corporate research,
Financial and accounting research,
Management and organizational research,
Sales and marketing research, and corporate
responsibility research.

15.3 SOCIAL RESEARCH

Social research is more specifically a type of research of research conducted by social scientists (*albeit* not exclusively) to seek answers to puzzling questions about the world we live in, the social world. Characteristically, it is an organized system used by

scientists to advance knowledge in their field of study. In applied settings, research is undertaken so that decisions can be made and researchers are guided not only by what is happening but also why it is happening and how it could be

changed. Given the complexity of some research questions today, research is now usually conducted in multidisciplinary teams.

Largely, social research is complex and it is a very involved process. At best it brings forth a new understanding about a new phenomenon, or introduces a fresh perspective on an issue of interest in an original way. To do this, a researcher must of necessity think logically, follow rule, and repeat steps over and over to be able to reach a meaningful conclusion. A researcher combines theories or ideas with facts in a systematic way and uses their imagination and creativity. Ethical and moral concern is key to the research process especially as they pertain to handling and dealing with participants/subjects/sample etc. Communication of findings must be clear and unequivocal. Needless to say, the language of research is by definition scientific.

More specifically, Social Research can be regarded as a collection of scientific methods researchers use systematically to produce knowledge. Without question, discovery of new things requires persistence, personal integrity, tolerance for ambiguity, interaction with others and ride in doing quality work.

Arguably, research enhances what we know about our social world. However, there are alternatives to knowing about the social world. Neuman (2000:2) cautions that knowledge from the alternatives is often dubitable, but knowledge based on research is more likely to be true and has fewer potential errors.

The following are alternatives to knowing about the social world;

- Authority
- Tradition
- Common sense
- Media myths
- Personal experience

The context of Social Research is set by general principles of the Scientific Community in respect to norms of practice. These are as follows:

- Universalism,

- Organised skepticism
- Disinterestedness
- Communication, and
- Honest

15.4 ASSESSMENT OF UNIT 1

Every student will be expected to confine his/her research project within business or social discipline.

16. UNIT 2 – DEFINING RESEARCH

Introduction of the Unit

Introduction to research allows students to better understand research and published works, learn to balance collaborative and individual work, determine an area of interest, and jump start their careers as researchers. Through exposure to research many students discover their passion for research and continue on to graduate studies and faculty positions

16.1 Unit outcomes

- Define research
- Define and compare different empirical questions

16.2 Content

- Research Types
- Business Research
- Empirical Questions

16.3 Learning activities

- Group discussing analysing case studies on research types

16.4 Unit content

What is research?

“Research” is not an academic banality; it is a vital and dynamic force that is indispensable to modern progress. Ultimately, perhaps, research may be the last

hope of the human race and the key to the very existence of the human species on this planet” Paul Leedy (1997) Practical Research: Planning and Design, sixth Edition. The author further defined a research as;

1. the systematic process of collecting and analysing information (data) in order to increase our understanding of the phenomenon about which we are concerned or interested,
2. finding out something and making it public,
3. a means of generating, testing and validating knowledge,
4. an organised system used by scientists to advance knowledge in their field of study,
5. at best research introduces a new understanding about a new phenomenon, or introduces a fresh perspective on issue of interest in an original way,
6. a systematic process of investigation, the general purpose of which is to contribute to the body of knowledge that shapes and guides academic and/or practice disciplines.

i. The question still remains, why do we do research?

The following discussion is an attempt to explain some of the reasons why;

- we do research to find out what happened, how it happened, and if possible, why it happened,
- inevitably, what underlies all of research attempt is knowledge,
- if what we know about a phenomenon has gaps, is inconsistent, is not based on facts then research is an important process to be undertaken,
- as we all know, the goal of scientific endeavour, research being one of the them, is to explain, predict, control and intervene, and

II. Purpose and types of research questions

- **Exploration:** first stage in a sequence of studies – acquiring more knowledge about a phenomenon (“beginning at the beginning”). Examples here could be conducting a needs assessment, focus groups mainly to find out what future prospects exist on a particular topic.

- **Description:** presents a detailed, accurate picture of a situation, social setting, or relationship. Questions asked include “how” and “who”. Survey research is a good example of this descriptive approach to research.
- **Explanation:** test a theory’s predictions or principle by answering the question “why”. The attempt is to look for causes, influences, reasons for the occurrence of a phenomenon. It is possible to conduct an experiment to explain the causes of a phenomenon.
- **Evaluation:** evaluate specific outcomes and to provide the explanations for why and how a particular result occurred. This focuses on problem solving and measuring the results and specific outcomes of the implementation of various social programmes and policies.

Example - Empirical question

Question type	Question	Examples
Exploratory questions	What is the case What are the key factors	What are the critical success factors of a profitable company? What are the reasons for the carnage on South African roads?

Descriptive questions	How many?	How many people died of AIDS in SA last year?
	Are x and y related	Is there any correlation between parental support and scholastic achievement
Explanation question	Why?	What are the main causes of malnutrition in a rural community?
	What is the cause of Y?	Is smoking the main cause of lung cancer?
Evaluation question	What was the outcome of X?	Has the new HIV awareness programme produced a decline in reported HIV causes?
	Has Y been successful?	Has the introduction of a new refrigeration technology led to more cost-effective production?

Example – Non empirical questions

Question type	Question	Examples
Conceptual questions	What is the meaning of concept x?	What is the meaning of 'sexual harassment'?
Theoretical question	What are the most plausible theories or models of x?	What are the most widely accepted models or definitions or theories of 'competitiveness'?
Philosophical or normative question	What is the ideal profile of x?	What is meant by an equitable educational system? Do animals have rights?

ii. How research begins

Research begins when you already have some knowledge about a phenomenon, and that knowledge indicates that there is something we do not know. However, by studying available literature, a problem is manifested in one of three ways;

- i) a noticeable gap as a results of investigation, ii) when the results of several inquiries conflict / contradict each other, and
- iii) When a “fact” exists in the form of unexplained information

When we propose a problem to be studied, it must be testable, relevant, true or false. Sometimes problems are unsolvable because, they are unstructured, inadequately

defined or no data can be collected on the problem. By definition, a problem must have value.

There are several sources available (largely scientific literature) on which problems can be based. One of this is a literature review;

- involves the systematic identification, location, and analysis of documents containing information related to the research problem. The purpose is to determine what has already been done that relates to your problem,
- it also points out research strategies and specific procedures and measuring instruments that have and not have been found to be productive in investigating your problem,
- being familiar with previous research also facilitates interpretation of the results of the study,

16.4 ASSESSMENT OF UNIT 2

This will form part of Assignment Project where students will be expected to follow one of the above types.

17. UNIT 3 - STEPS IN THE RESEARCH PROCESS

17.1 Introduction of the Unit

Students will be exposed to the process of gathering the necessary data for an industry to be successful. This will include business research which is synonymous with market research, but companies typically use every type of market research available to fully analyze their business situation: industry analysis, product research, and even identifying key customer groups. The business research process is necessary to assist managers in making major business decisions

17.2 Unit outcomes

- Formulation of the research topic
- Critically evaluate research design and methodology

- Define and compare sampling techniques
- Compare methods of validity and reliability
- Critically evaluate research process

17.3 Unit Content

- Research design
- Time dimension in research
- Types of research approaches
- Population and sampling
- Critical components in every research
- Literature review

17.4 Learning activities

- Group discussing analyzing case studies on research types

17.5 Unit content

The best research results are based on a carefully planning of the whole process. Newman (2001:2) listed several steps in the research process. It should be borne in mind that, research itself is more of an interactive process in which steps blend into each other. The steps are;

- Choose a topic
- Focus a research question
- Formulate the problem statement
- Design the study
- Collect data
- Interpret data
- Inform others (communicate findings usually in form of research reports)

Bless and Higson-Smith (1995) gives the following explanatory list of steps in the research process;

Selection and formulation of the research problem

- selecting a topic for research: identification of the problem
- formulating the research problem

- acquiring knowledge on current theory and research : literature review
- identifying and labeling the variables
- defining concepts and establishing operational definitions □
formulating the hypothesis

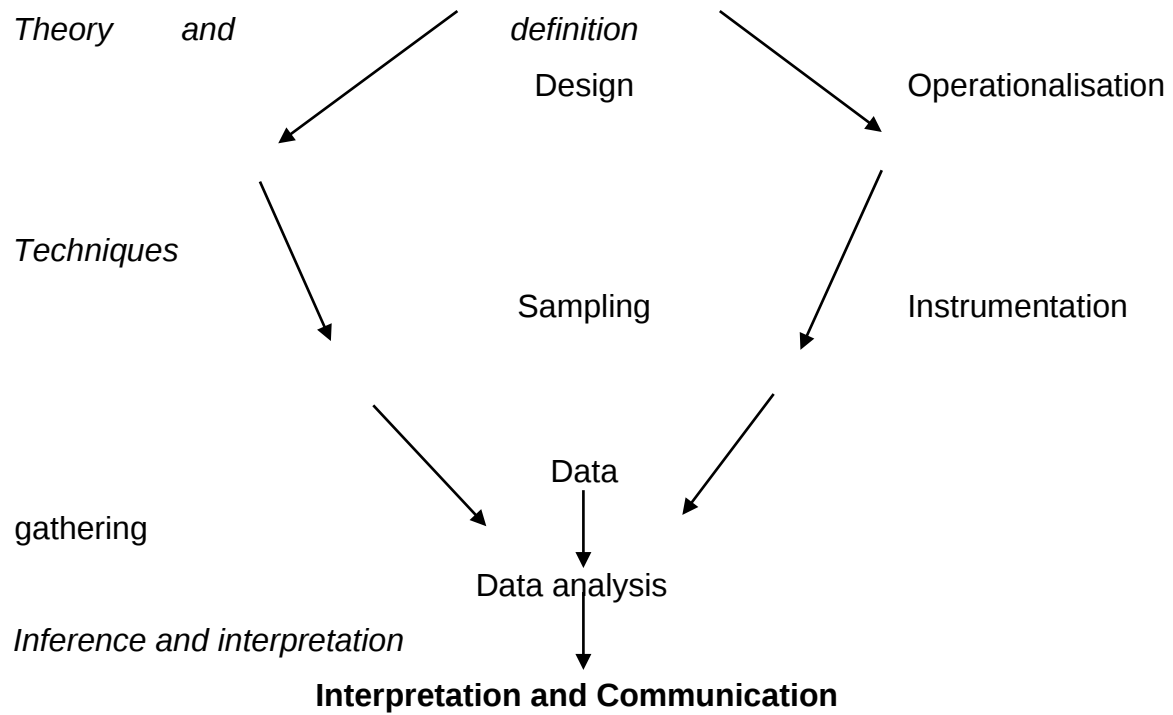
18. RESEARCH DESIGN

When constructing a building, there is no point ordering material or setting critical dates for completion of project stages until you know what sort of building is needed. The first decision is whether you need a high rise office building, a factory for manufacturing machinery, a school, a residential home or apartment block. Similarly, social research needs a design or a structure before data collection or analysis can commence. The function of a research design is to ensure that the evidence obtained enable us to answer the initial question as unambiguously as possible. Design is a logical task undertaken to ensure that the evidence collected enables us to answer questions or to test theories as unambiguously as possible. Therefore, obtaining evidence entails specifying the type of evidence needed to answer the research question, to test a theory, to evaluate a programme or to accurately describe some phenomenon. In other words, when designing research we need to ask, given this research question (or theory), what type of evidence is needed to answer the question (or test the theory) in a convincing way?

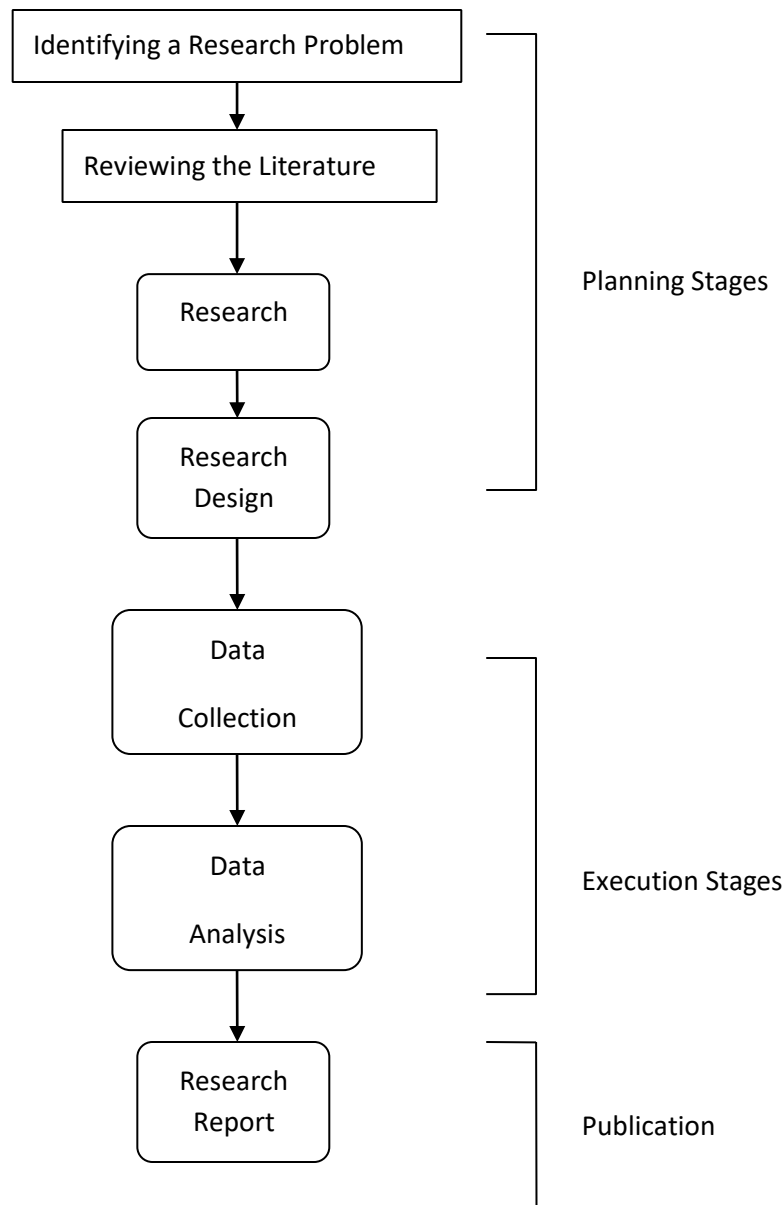
- research format and design
- description of the samples
- sampling procedure

However, Rubin (1983) proposed the following steps in research process;

Conceptualisation



On the other hand, Terre Blanche et al. (2006) in their book “research in practice”, propose the following as steps in the research process.



The best research results are based on a careful planning of the whole process. It should be borne in mind that research itself is more of an **interactive** process in which steps blend into each other.

18.1 Time dimension in research

Research questions/issues incorporate time in different ways. One question may require the measurement of an observation at one point in time only (cross-sectional research) another may require observation at multiple points in time (longitudinal research).

- **Cross-sectional research:** researcher observe at one point in time only (only after the fact!). It is not possible to measure change at all. Pertinent example may be the measurement of perceptions, attitudes, opinion and so forth.
- **Longitudinal research:** it examines features of people or other units at more than one point in time. It is more powerful when researchers are seeking to answer questions about social change. Example of longitudinal research are time series (same type of information is collected on a group of people or other units across multiple periods), panel study (exactly the same people are observed across time period), cohort analysis (a category of people sharing a similar life experience in a specific period of time are studied)
- **Case studies:** researchers examine in depth many features of a few cases over duration of time. Cases can be individuals, groups, organizations, movements, events or geographic units.

18.2 Types of Research Approaches

There are basically two approaches to research, namely the **inductive** and the **deductive** approaches. These approaches as you will find out also define the main types of research namely, quantitative, qualitative and mixed methods research.

18.2.1 Quantitative approaches deal with numerical measurements (i.e. quantities) and by contrast, *qualitative* approaches, comprising of narrative data collected in a natural setting, deal with how people understand their experiences of the world around them or their context (i.e. qualities). While these two approaches to research are often presented in most texts as if they were in binary opposition to one another or indeed in opposition to one another, they can also be used to

complement one another in a so-called mixed methods approach. Although the two are also covered in the module, emphasis will largely be on quantitative research techniques.

Quantitative Research is often linked to a *positivist approach* precisely because of its demand for measurement, accuracy, standardized method and procedures and so forth.

There are a number of important concepts used in quantitative research which often get used such as variables, hypotheses etc. A **variable** is a characteristic /property /attribute of a person or object that can change from person to person or from object to object. Examples include the length of car, age, socio-economic status. It is characterised by the following:

- an emphasis on the quantification/measurement of constructs,
- central role of variables in describing and analysing human behaviour,
- important role given to control for sources of error in the research process, and
- statistical computations play an important role.

18.2.2 Types of variables in quantitative approach

There are basically two types of variables, namely, an independent variable and a dependent variable. Other types of variables arise from the characteristics of these two in terms of whether they come before the independent variables (*antecedent variable*) or between independent and the dependent variables (*intervening, mediating, moderating variables*). By definition, an **independent variable** is the variable the researcher manipulates and it lies outside the research subject's control whereas a **dependent variable** - experimenter measures to see if the manipulation had an effect.

Variables by their very nature are having their own characteristics. Some variables are merely labels such as in the case of your identity number, house number etc. Others represent inequalities and are simply qualitative gradations such as in 1st, 2nd, 3rd positions. The first two characteristics render the numbers non-manipulable mathematically, i.e., one cannot add, subtract, divide or multiply them. In other cases variables represent numbers which are manipulable using mathematical operations such as in distance measurements, temperature gradations etc.

There are 2 other variables that are related to the independent variable viz., the *antecedent variable* and *intervening variable*. The ***antecedent variable*** appears *before* the independent variable and determines it. A good example of this variable is the relationship between age and height. What we know from nutritional studies and biometry is that if a child has a poor nutritional status, they are more likely to suffer from stunting (be shorter, so that Danino advert is quite apt!). If the antecedent variable is held constant, the relationship between the independent and the dependant variables still exists. The ***intervening variable*** is a consequence of the independent variable and it determines the variation of the dependent variable. It falls between the independent and dependent variables so that if it is held constant, the dependent variable, will not vary. A classical example of an intervening variable is the availability of study materials for students in a University if one looks at the relationship between type of university and quality of student it produces.

Some conditions can exist outside of an experimental situation and impact the measurement of the relationship between the independent and dependent variables. If you look at the classical example above, the relationship between the University and various industries influences the quality of students indirectly. This is an ***extraneous variable***. Thus a researcher needs to introduce a ***control variable*** to neutralise this effect.

Generally, variables have 2 properties viz., *discrete* and *continuous*. **Discrete variables** are fixed and do not vary across time. Examples of these are gender (male or female), age categories (17-21, 22-25 etc.), colour (green or yellow) etc. These variables can assume only a limited number of values which makes them categorisable. **Continuous variables** on the other hand can take on as many values as possible from the lowest to the highest on some measuring scale, e.g., speed 0 km/h to x km/h, distance 0 km to x km, etc. These 2 properties of variables determine the nature of **data analysis** that is possible. Discrete variables are more amenable to **descriptive data analysis** whereas the continuous variables are more useful if analysed using **inferential statistical tests**.

All variables are measurable on some specific scale such as nominal scale, ordinal scale, ratio scale and interval scale. Data comes in various sizes and shapes and it is important to know about these so that the proper analysis can be used on the data. There is a critical relationship between these scales of measurement and the analytical procedures that can be applied to them. Review these scales of measurement in your textbook as they also influence the **hypothesis** to be tested in quantitative research.

18.2.3 Hypothesis

The hypothesis as an aspect of quantitative research. A **hypothesis** is a tentative statement about the expected relationship between 2 or more variables. The hypothesis is tentative because its accuracy will be tested empirically. It can be supported by a set of established facts; it can be a rough prediction backed by some tentative theory or set of studies; it could also be a guess in the absence of adequate information. A hypothesis is never proven but can be disproved.

Stated differently, problems are questions about relationships between and among variables and hypotheses attempt to give tentative, concrete, and

testable answers to such problems. Hypotheses, not only provide tentative answers, but also guide the research process.

There are 2 major types of hypotheses viz. the **null hypothesis** and the **alternative hypothesis**. The null hypothesis is a hypothesis of “no difference”. It simply states that “there is no difference between variable A and variable B. H_0 is usually used to represent this hypothesis. The alternative hypothesis on the other hand predicts some difference between 2 variables either specifically or not (H_1). When a non-specific difference is predicted, it is called the alternative non-directional hypothesis. It would then state that there is a difference between variable A and variable B (without specifying where the difference is). In the second case the hypothesis predicts some specific difference in which case it will state that Variable A is more than variable B in terms of a specific phenomenon.

The following guidelines can be used to sharpen a hypothesis: a hypothesis should predict a particular relationship between 2 or more variables;

- a hypothesis should be stated clearly and unambiguously, usually in the form of a declarative sentence;
- a hypothesis must be specific;
- a hypothesis should be testable with available techniques (i.e., it should be possible to collect data to test it); and □ a hypothesis must have empirical referents.

Example; you come home late after work, open the front door and reach inside to turn on the lamp that stands on a nearby table. Your finger finds the switch, and you turn it on, then no light. At this point, you begin to construct a series of reasonable guesses (hypothesis) for cause of the lamp failure;

- the bulb has burned out,
- the lamp is not plugged into the wall outlet,
- a late afternoon thunderstorm interrupted the electrical service,
- the wire from the lamp to the wall outlet is defective, □ you forgot to pay your electricity bill.

Each of the above hypotheses provides direction for exploration to locate the information that may resolve the problem of the malfunction. Now you go to search for information to determine which of your hypothesis may be correct. The data will either support or reject the hypothesis.

18.2.4 Population and Sampling

To appreciate the importance of sampling a context is required in terms of the goals of research. Research has the following goals: to explore, describe, explain, and predict social phenomena. In the study of social phenomena, social scientists seek to establish the broadest possible generalisations applicable to large classes of events based on a smaller group of observations. It is almost always impossible to study complete classes of phenomena and thus social scientists for reasons of time, resources, accessibility choose smaller but representative groups to be able to generalise to the larger classes of events. Sampling thus has to do with the selection of a smaller class of events to represent the larger class of events. The larger class of events is known as a **population** which is a complete set of observations, people, objects etc. and the smaller class of events is known as a **sample**. Usually, the population is too large for the researcher to attempt to survey all of its members. A small, but carefully chosen sample can be used to represent the population. The sample reflects the characteristics of the population from which it is drawn. It is important to note that the population is defined in keeping with the objectives of the study.

Sometimes, the entire population will be sufficiently small, and the researcher can include the entire population in the study. This type of research is called a *census* because data is gathered on every member of the population. However, owing to lack of time, money, and sometimes accessibility of total populations, a sample is drawn and studied by the social researcher and estimates are made about the total population based on information derived from the sample. Indeed sometimes it happens that when an entire population is studied such

as in the case of attitudes, by the time the study is completed, the attitudes might have changed and thus the information rendered obsolete/out of date.

A sample must be large enough to give a good *representation* of the population, but small enough to be manageable. In this section the two major types of sampling, random and non-random, will be examined.

Sampling methods are classified as either **probability or non-probability**. In probability samples, each member of the population has a known non-zero probability of being selected. Probability methods include random sampling, systematic sampling, and stratified sampling. In non-probability sampling, members are selected from the population in some nonrandom manner. These include **convenience sampling, judgment sampling, quota sampling, and snowball sampling**. The advantage of probability sampling is that sampling error can be calculated. Sampling error is the degree to which a sample might differ from the population. When inferring to the population, results are reported plus or minus the sampling error.

In non-probability sampling, the degree to which the sample differs from the population remains unknown. Non-random sampling is useful when descriptive comments about the *sample itself* are desired. However, it can be difficult to draw conclusions about the population based on information derived from a sample, as samples are often *unrepresentative* of the population.

18.2.5 Sampling methods

5.2.1.4.1 Probability Sampling Method

Random sampling is the purest form of probability sampling. Each member of the population has an equal and known chance of being selected. When there are very large populations, it is often difficult or impossible to identify every member of the population, so the pool of available subjects becomes biased.

Systematic sampling is often used instead of random sampling. It is also called an *nth* name selection technique. After the required sample size has been calculated, every *nth* record is selected from a list of population members.

As long as the list does not contain any hidden order, this sampling method is as good as the random sampling method. Its only advantage over the random sampling technique is simplicity. Systematic sampling is frequently used to select a specified number of records from a computer file.

Stratified sampling is commonly used probability method that is superior to random sampling because it reduces sampling error. A stratum is a subset of the population that share at least one common characteristic. Examples of strata might be males and females, or managers and non-managers. The researcher first identifies the relevant strata and their actual representation in the population. Random sampling is then used to select a *sufficient* number of subjects from each stratum. "*Sufficient*" refers to a sample size large enough for us to be reasonably confident that the stratum represents the population. Stratified sampling is often used when one or more of the strata in the population have a low incidence relative to the other strata.

Non-Probability Sampling Method

Convenience sampling is used in exploratory research where the researcher is interested in getting an inexpensive approximation of the truth. As the name implies, the sample is selected because they are convenient. This non-probability method is often used during preliminary research efforts to get a gross estimate of the results, without incurring the cost or time required to select a random sample.

Judgment sampling is a common non-probability method. The researcher selects the sample based on judgment. This is usually an extension of convenience sampling. For example, a researcher may decide to draw the entire sample from one "representative" city, even though the population includes all cities. When using this method, the researcher must be confident that the chosen sample is truly representative of the entire population.

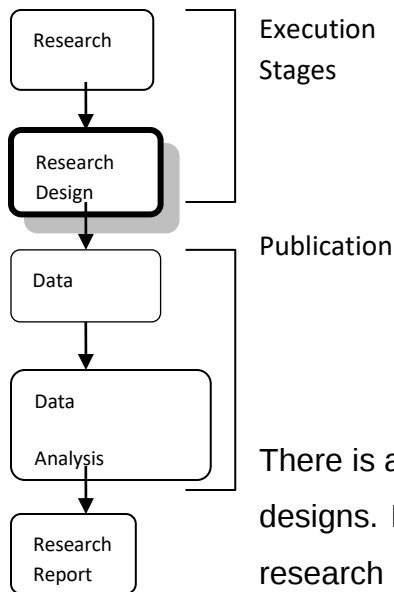
Quota sampling is the non-probability equivalent of stratified sampling. Like stratified sampling, the researcher first identifies the strata and their proportions as they are represented in the population. Then convenience or judgment sampling is used to select the required number of subjects from each stratum. This differs from stratified sampling, where the strata are filled by random sampling.

Snowball sampling is a special nonprobability method used when the desired sample characteristic is rare. It may be extremely difficult or cost prohibitive to locate respondents in these situations. Snowball sampling relies on referrals from initial subjects to generate additional subjects. While this technique can dramatically lower search costs, it comes at the expense of introducing bias because the technique itself reduces the likelihood that the sample will represent a good cross section from the population.

18.3 Research Designs in Quantitative Research

Research designs are defined as plans for data collection. They presuppose that you have developed your research question, identified a reading list, and planned the outline for your literature review and now you are ready to select a research design. There are two key, current applications for developing your knowledge about quantitative research design: Firstly, you need to look at how your research question can be examined through a variety of different designs. Secondly, you need to understand and describe the research designs used in the empirical literature which you are reading for your literature review. The figure below summarises these thoughts:

Planning Stages



There is a potentially infinite array of possible quantitative research designs. It is possible that there is as many designs as there are research questions (perhaps an overgeneralisation). Three

research designs are usually discussed in quantitative research: experimental, quasi-experimental and survey designs. It is important to consider a range of possible quantitative research designs and their strengths and weaknesses, before adopting any particular design.

18.3.1 Selecting a research design

In selecting a research design, decisions need to be made along 4 dimensions, namely;

- purpose of the research,
- theoretical paradigm informing the research,
- context, and
- techniques for collecting and analyzing data. Thus, the important questions to keep in mind while making a design decision could be summarised as follows:

✓ Purpose of the research

What are the units of analysis?

What information do you require from these units of analysis? Can you identify variables?

What type of study is best suited to answer the research question? Are the goals of the research exploratory, descriptive, or explanatory?

Are the findings to be used for applied or basic purposes?

Is the kind of information required and the analytic strategy to be followed quantitative or qualitative?

✓ **Theoretical paradigm informing the research**

What paradigm fits the best with the research question?

Is there coherent fit between the paradigm and the research design?

✓ **Context/Situation**

Does the research question require experimental control and manipulation to identify casual factors?

What impact could the researcher and setting have on the results?

✓ **Techniques for collecting and analyzing data**

How should the sample be collected (and size) to ensure that the study can answer the research question?

What specific measures, interview questions, or observation technique will be used to collect data? Is it important to have 'objective' measures or should categories 'emerge'?

What specific quantitative or qualitative technique of data analysis should be applied? Does data allow such techniques?

The following are guidelines that could be used to critique **a research design**:

- Given the nature of the research questionnaire, what type of design is most appropriate? How does this correspond to the type of design?
- Does the design used in the study involve an intervention? If yes, was a true experimental, quasi-experimental or pre-experimental design used – and was this the most appropriate design?

- If the design is non-experimental, why didn't the researcher manipulate the independent variable? Was the decision regarding manipulation appropriate?
- Was the study longitudinal or cross-sectional? Was the number of points of data collection appropriate, given the research questionnaire?
- What type of comparisons was called for in the research design (e.g. was the study design within-subjects or between-subjects)? Are these comparisons the most appropriate for illuminating the relationship between the independent and dependent variables?
- Can the study be described as a survey, evaluation, needs assessment, methodological study or meta-analysis?
- What procedures, if any, did the researcher use to control external (situational) factors and intrinsic (subjects characteristics) factors? Were these procedures appropriate and adequate?
- To what extent is the study internally valid? What type of alternative explanations must be considered (i.e. what are the threats to the study's internal validity)? Does the research design enable the researcher to draw casual inferences about the relationship among study variables?
- To what extent is the study externally valid? Can the design be criticized for its artificiality?
- What are the major limitations of the design used? Are these limitations acknowledged by the researcher and taken into account in interpreting the results?

The research designs and methods used in an evaluation have a direct effect on whether or not a program is perceived effective. Thus, as Einstein says: *"It is the theory that decides what can be observed."*

Types of quantitative research designs

A **true experimental design** is a design in which subjects are randomly assigned to program and control groups. With this technique, every member of the target population has an equal chance of being selected for the sample. The fact that every member of the target population has an equal chance of being selected for the sample makes this design the strongest method for establishing equivalence between a program and control group.

Quasi-experimental group design differs from true experimental group design by the omission of random assignment of subjects to a program and control group. As a result, you cannot be sure that the program and the control group are equivalent. The use of random experimental design to randomly assign subjects to a program and control group, controls for all threats to *internal validity*. Issues of internal validity arise when groups in the study are nonequivalent. Your ability as a researcher to say that your treatment caused the effect is compromised.

Survey design includes cross-sectional and longitudinal studies using questionnaires or interviews for data collection.

Questionnaires

Questionnaires are probably one of the most widely used instruments to collect data in Survey research. A questionnaire is a printed list of questions which respondents are asked to answer. These instruments are commonly used and as commonly abused. It is easy to compile a questionnaire; it is not easy to compile an effective one. Effectiveness requires planning beforehand to ensure that the data can be objectively analysed afterwards.

Open (or unstructured) questions can be used in a preliminary surveyor to get a feel for the subject. Here respondents answer questions in their own words. Closed (or structured) questions are used in large-scale data collection. Here respondents choose from a collection of alternatives (for example true/false) or assign a numerical score or ranking. Closed questions often use Likert-type scales, for example:

Question: The call-centre provides solutions to my problems:

☐ Strongly Agree

☐ Agree

☐ Disagree

☐ Strongly

Disagree A 4-point scale forces a decision, a 5-point scale allows a neutral answer.

Types of questionnaires

- ✓ Self-administered questionnaire

These are best when:

- measuring variables with numerous values or response categories that are too much to read to respondents in an interview or on a telephone
- investigating attitudes and opinions that are not easy to observe
- describing characteristics of a large population, and
- studying behaviours that may be stigmatising or difficult for people to tell someone else face to face.

- ✓ Computer-assisted and web-based surveys

- ✓ Interviews and,

- ✓ Telephone surveys

A good questionnaire; is complete: gets all the data you need, including demographic questions asked at the start of the questionnaire, is short: does not make unreasonable demands on the respondent's time or concentration, asks only relevant questions, gives clear instructions, is precise, unambiguous and easily understandable questions, has questions that don't suggest answers,

starts with general questions and proceeds to more specific ones, sequences questions correctly with more sensitive questions, put towards the end, uses mostly closed-ended questions that contain appropriate response options that respondents can merely tick off, and with few open-ended questions that

require of the respondents to formulate answers in their own words, often with a 4-point scale.

You have no right to expect total frankness from your respondents. Some participants will not like to answer questions that relate to intensely personal aspects of their lives, and could be inclined to give noncommittal or socially correct answers to such questions. These problems can be minimised if you take the following precautions:

- activate a very deep-seated human reflex, known as the *reciprocation reflex* in the minds of prospective respondents. This reflex compels humans to respond in the same manner as they feel treated.
- Give someone a gift and s/he feels obligated to reciprocate by giving a gift in return.
- Insult or threaten someone and s/he feels compelled to do the same to you to get even.
- Special-looking, but inexpensive pens, credit card-sized calendars, redeemable vouchers and the like are often used by mail order companies to activate prospective clients' reciprocation reflex and ensure higher rates of return.

To ensure good returns/response rate;

- post your questionnaire in good quality envelopes;
- appeal for the respondent's assistance to activate the reciprocation reflex;
- reinforce the activated reflex by means of a small gift;
- state under whose authority you are conducting the research;
- state the benefits of the research to ordinary people;
- include a self-addressed and stamped return envelope;
- use professional looking questionnaires;
- reassure your respondents that their personal identities will not be made public;
- elevate the status of your respondents throughout by using expressions that signal courteousness and gratitude;

- keep the questionnaire short;
- sequence your questions correctly, beginning with demographic questions and keeping sensitive questions for last; □ make the instrument easy to use.
- explain the importance of the research.
- directly appeal to respondents to really state what is on their minds.
- emphasise that it is a voluntary and constructive research project.
- assure respondents that they will not be personally identified when the results of your research is made public.
- be courteous, and thank participants in advance for their assistance.
- offer to share your conclusions;
- provide a stamped, self-addressed envelope if it is a posted survey.

A particular problem with questionnaires is that of non-returns. If you get 80 returned questionnaires from 100 you've distributed (which is a high return rate), what do you do about the “missing 20” responses? (No, you don't pretend that you did not disseminate them). Unfortunately, you *cannot* just rely on 80 forming a big enough sample, as there is the problem of bias. The particular bias involved is determined by people's reasons for not returning the questionnaire, for example they are too disorganised? Too lazy? Offended by the questionnaire? Didn't understand it? Their area didn't receive it? (Hopefully a little light bulb just went on in your mind as you thought: “Aha! The interpretivist dilemma in research design!”)

This problem with questionnaires is a specific case of the general problem with human volunteers. The fact that volunteers are unlikely to be representative of a population (more adventurous? poorer?) means that studies using volunteers are open to criticism.

Interviews

An interview involves a one-on-one verbal interaction between the researcher and the respondent. Much of what was said above for questionnaires is true for interviews. An interview should have a plan. The researcher must not influence the person's answers through his tone of voice or through the way he phrases the question.

One area where you would need to use interviews rather than questionnaires would be in getting information from people who can't read. Other advantages of an interview over a questionnaire are that one can clarify answers and one can follow up on interesting answers. Some advantages of a questionnaire over an interview are that the answering of the questionnaire can be done at a time suitable to the respondent, and the respondent may not be as inhibited in answering. A questionnaire is also the only practical approach when dealing with large numbers of respondents, though.

Other advantages of using interviews over questionnaires are that the "presence" of an interviewer can increase cooperation rates and make it possible for respondents to get immediate clarifications.

The main requirement for good interviewers is an ability to approach strangers in person or on the telephone and persuade them to participate in the survey. Once a respondent's cooperation is acquired, the interviewers must maintain it, while collecting the needed data - data that must be obtained in exact accordance with instructions.

For high-quality data to be collected, interviewers must be carefully trained through classroom instruction, self-study, or both. Good interviewer techniques are stressed, such as ... how to make initial contacts ... how to conduct interviews in a professional manner ... and how to avoid influencing or biasing responses. Training generally involves practice interviews to familiarize the interviewers with the variety of situations they are likely to encounter.

Time must be spent going over survey concepts, definitions, and procedures. A question-by-question approach is needed to be sure the interviewers can deal with any misunderstandings that may arise.

In most reputable survey organizations, the interviewers are also required to take a strict oath of confidentiality before beginning work.

Survey materials must be prepared and issued to the interviewers. For traditional paper and pencil in-person interviews, ample copies of the questionnaire, plus a

reference manual, information about the identification and location of the *households*, and any cards or pictures to be shown to the respondents must be given to the interviewers.

Before conducting in-person interviews, send an advance letter to the sample respondents, explaining the purpose of the survey and that an interviewer will be calling soon.

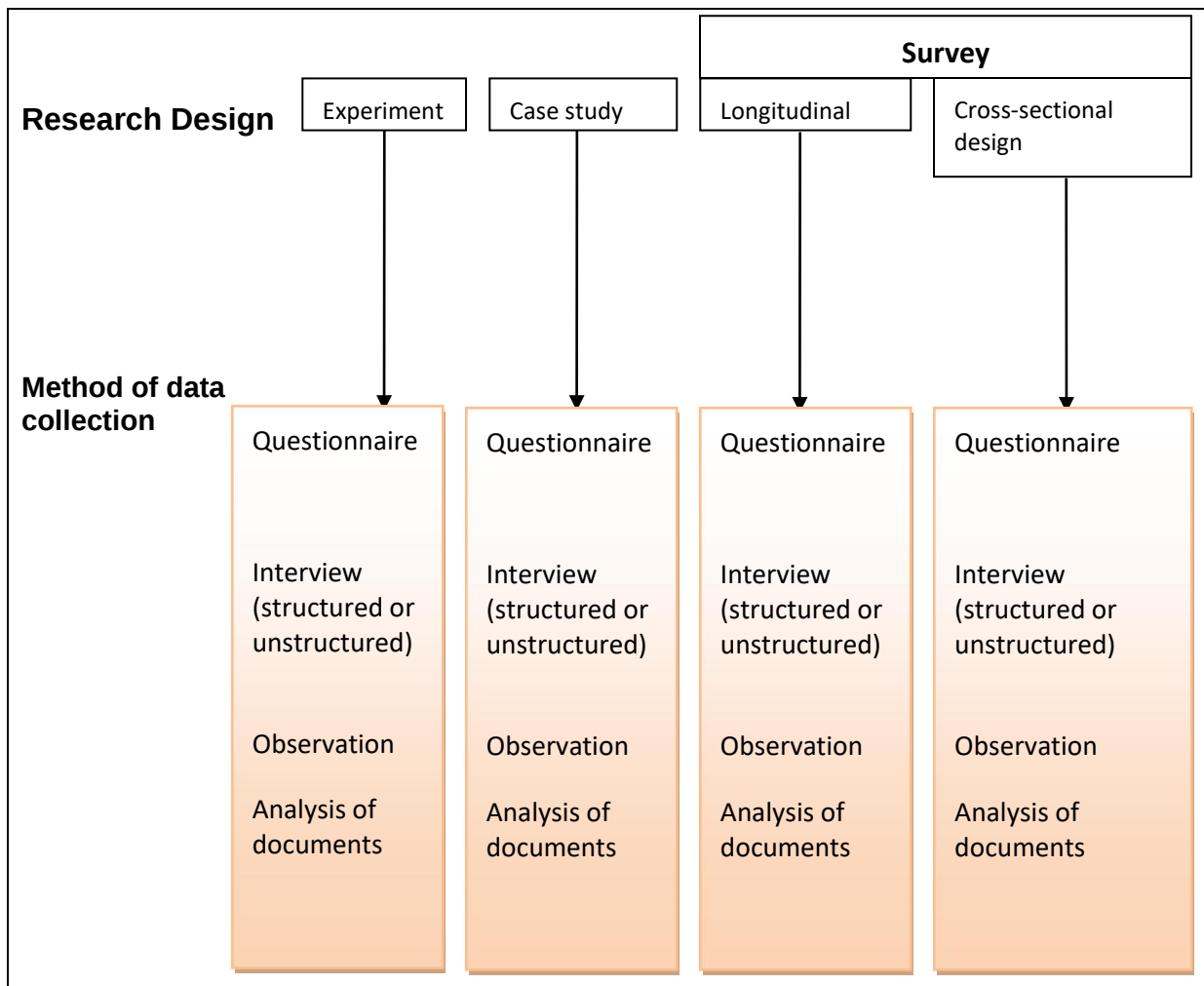
In many surveys, information must be given to the respondents regarding the voluntary or mandatory nature of the survey and how the answers are to be used.

Visits to sample units are scheduled with attention to such considerations as the best time of day to call or visit, and allowance is made for repeated attempts (i.e. call-backs) in not-at-home situations.

Difference between Research Design and Methodology

Research design is different from the method by which data are collected. Failing to distinguish between design and methodology could lead to poor evaluation of design. Social surveys and experiments are frequently viewed as prime examples of quantitative research and are evaluated against the strength and weaknesses of statistical, quantitative research methods and analysis. Case study on the other hand, are often seen as prime example of qualitative research, which adopts an interpretive approach to data, studies “things” within their context and considers the subjective meaning that people bring to their situation.

Therefore, the central role of research design is to minimize the chance of drawing incorrect causal inferences from the data.



Reliability and Validity

Reliability and validity are very important in all measurement. Both concern how measures are connected to constructs, e.g., a scale on life satisfaction and to what extent it may measure quality of life consistently and across a few domains. These concepts (*reliability* and *validity*) are important because a lot of concepts in the social sciences are quite fuzzy, e.g., there are more than 100 definitions on *quality of life* alone and different researchers measure it in various other ways.

Perfect reliability and validity are almost impossible to achieve.

Reliability

Reliability is defined as the consistency of a score across time. The concept of *dependability* has also been used to define reliability. All in all, it suggests that

when a phenomenon is measured under identical/similar conditions, it must yield the same score. The following are types of reliability:

- **Stability Reliability:** This is reliability across time. The question asked for example is: *does the measure deliver the same answer when applied in different periods?* The **test-retest method** can be used to examine an indicator's or scale's stability reliability.
- **Representative Reliability:** This is reliability across sub-populations or groups of people. It addresses the question: *does the measure deliver the same answer when applied to different groups?*
- **Equivalence Reliability:** applies when researchers use multiple indicators e.g., when several items in a questionnaire all measure the same construct. It addresses the question: *does the measure yield consistent results across different indicators?* The **split-half method** and **inter-coder reliability** are used to test for this type of reliability.
- **Cronbach's alpha** is a reliability coefficient which indicates how well the items in a set are positively correlated to one another. Internal consistency estimates determine if the items measure the respective constructs they are supposed to measure. It is computed in terms of the average Interco relations among the items measuring the concept. At least a measure of .7 is regarded as adequate.

Validity

Validity suggests truthfulness and refers to the match between a construct and its measure or the way a researcher conceptualises the idea in a definition and in a measure. Alternatively, it refers to how well an idea about reality represents that reality, e.g., quality of life means having the latest cellular phone : very clearly ownership of this gadget cannot be a substitute for many other things which are supposed to measure quality of life. The following are types of validity:

- **Face Validity:** a judgment that an indicator really measures what it purports to measure e.g., 120 minutes on a stop watch means 2 hours; a clock on the wall does precisely the same thing, measure time! Arithmetic ability in a preschooler can be judged by among others having a number concept – counting from 1 – 20.
- **Content Validity:** Is the full content of a definition represented in a measure? e.g., you are measuring arithmetic ability and the question you use for measuring it is “Who was the first South African to go into space?”
- **Criterion Validity:** The validity of an indicator is verified by comparing it with another measure of the same construct. The relationship between age and maturity is a bad example but close enough. There are two types of criterion validity: Concurrent Validity and Predictive Validity
- **Construct Validity:** This is based on the logical relationship among variables - if the measure is valid, various indicators must operate in a consistent manner, e.g., a model of marital satisfaction will predict that dissatisfied wives and husbands are more likely than satisfied ones to cheat on their spouses. There are two types of construct validity: Convergent Validity and Divergent Validity

Qualitative Research Approach

Qualitative Research is the collection analysis and interpretation of comprehensive narrative and visual data in order to gain insight into a particular phenomenon of interest. The *purpose of qualitative research* is to promote a deep and holistic or complex understanding of a particular phenomenon, such as environment, a process or even belief. The *central focus of qualitative research* is to provide an understanding of a social setting or activity viewed from the perspective of the research participants. Thus, it involves the collection of a variety of empirical materials that describe routine and problematic moments and meanings in individuals lives. Although some people

say that qualitative research is much more subjective than quantitative research and uses very different methods of collecting information, qualitative research is multidimensional in focus (cutting across several disciplines and epochs) involving interpretive, naturalistic approach to its subject matter.

The following are some characteristics of qualitative research;

- Study of human social action from the **insider's** view (*emic perspective*).
- Goal is to describe and understand human social action from the perspective of the human being (*verstehen*).
- Uses such methods as observation, interviews, personal documents to ascribe meaning.
- An exploratory and descriptive focus (*In what ways do people in informal settlements build social networks?*)
- Emergent designs
- A purposive sample (*increased likelihood of variability*)
 - Data collection in the natural setting (*context is important*)
 - Emphasis on “human-as-instrument”
 - Early and ongoing inductive data analysis
 - A case study approach to reporting research outcomes (*presenting with a rich narrative, allowing subjects to speak for themselves*)

Therefore, qualitative research is an exploration of what is assumed to be a dynamic reality. It does not claim that what is discovered in the process is universal, and thus, replicable. Participants are asked to respond to general questions and the interviewer or group moderator probes and explores their responses to identify and define people's perceptions, opinions and feelings about the topic or idea being discussed and to determine the degree of agreement that exists in the group. The quality of the finding from qualitative research is directly dependent upon the skills, experience and sensitive of the interviewer or group moderator.

Strengths and weaknesses of qualitative research designs;

Qualitative is singularly given regard to viewing behaviours in its natural setting; depth of understanding; and flexibility. Chiefly among its weaknesses the following are often cited: a possible violation of Rights of Human Subjects (especially under severe conditions of high secrecy and total participation); Legal, Moral and Injury Risks; Floundering (unstructured data collection can lead to no meaningful findings) and loss of detachment (over-identifying with participants – Patty Hearst).

Qualitative Design Issues: The language of qualitative research is **interpretation**. Researchers explain how people attach meanings to events and learn to see events from multiple perspectives. A qualitative researcher begins with a research question and little else – starting with a general topic and notions of what will be relevant, the topic is focused and refined as the process unfolds. Theory develops during the data collection process – **inductive method**. Theory is essentially built from data or grounded in the data. Concept formation occurs as evidence develops. **Conceptualisation** is precisely how a qualitative researcher organizes and makes sense of data. A qualitative researcher analyses data by organizing it into categories on the basis of themes, concepts, formulations, definitions can be developed based on this. As data is analysed, the researcher could ask themselves these questions: what was the sequence of events? How does the way it happened here differ from the way it happened over there? Are these the same or different, general, or specific cases?

A qualitative researcher conceptualises by developing clear, explicit, definitions of constructs. **Operationalisation** is a detailed description of how a researcher collected and thought about the specific data that becomes the basis for concepts.

Reliability and **validity** are not as crucial in qualitative research as they are in quantitative research. Rather the concept of trustworthiness is applied. **Trustworthiness** is the credibility and validity of qualitative research that can be considered from two different perspectives depending on the epistemological foundation of the research and the epistemologically biased arguments of the

evaluation. The following 4 principles are important for establishing trustworthiness: credibility, transferability, dependability and confirmability. Given the unique occurrences of events, reliability is difficult to achieve in qualitative research. In the process of obtaining a rich, intimate understanding of a people and their ways, the researcher is likely to lose some objectivity – too much objectivity robs data of its imaginative, impressionistic feelings about how members of a group being studied define themselves and their world.

Qualitative Research Designs: These designs are characterised by the following: Emphasis is on studying human action in its natural setting; the context is seen through the eyes of the actors themselves; and the emphasis is on detailed description and understanding of phenomena within the appropriate context.

Qualitative research designs are characterised by the following: a detailed engagement with the object of study; selecting smaller cases to be studied; an openness to multiple sources of data (*multi-method approach*); flexible design features that allow the researcher to adapt and make changes to the study where and when necessary.

Finally, qualitative research designs are based on the following: There is not a single reality. Secondly, reality is based upon perceptions that are different for each person and change over time. Thirdly, what we know has meaning only within a given situation or context.

Approaches to Qualitative Research:

APPROACH	KEY QUESTION
Case study	What are the characteristics of this particular entity, phenomenon, or person?
Ethnography	What are the cultural patterns and perspectives of this group in its natural setting?
Ethnology	How do the origins, characteristics, and cultural of different societies compare to another?
Ethnomethodology	How do people make sense of their everyday activities in order to behave in socially accepted ways?

Grounded theory	How is an inductively derived theory about a phenomenon grounded in the data in a particular setting?
Phenomenology	What is the experience of an activity or concept from these particular participants' perspective?
Symbolic interaction	How do people construct meanings and shared perspectives by interacting with others?
Historical research	How does one systematically collect and evaluate data to understand and interpret past events.

Interviewing in qualitative research

An **interview** is a conversation with a purpose to gather information. It is essentially a cognitive process that assumes that a respondent can reasonably give a response to a stimulus question put to them. Interviews provide a meaningful form of access. The use of interviewing is dependent on the nature of the research question at hand. There is no consensus on how to conduct an interview. However, orientations, strategies, procedures, and repertoires exist on how interviews could be conducted.

Types of interviews: There are basically 3 types of interviews: standardized/formal, unstandardized/informal, and the semi-standardized/guided-semi structured.

The Standardized interview

- uses a formally structured schedule of interview questions to elicit the respondents thoughts, opinions, and attitudes regarding some specific phenomenon of interest to the researcher;
- the rationale is to offer each respondent the same stimulus so that responses to the questions will be comparable;
- researchers using this type of interviewing have fixed ideas about the things they want to uncover during the interview.

These questions are typical of a standardized interview schedule:

When is the first time you eat or drink on a typical day?

What is the first thing you eat/drink?

When is the next time you eat or drink?

What do you eat or drink?

What else you eat or drink on a typical day?

The unstandardized interview

- Interviewers begin with the assumption that they do not know in advance what all the necessary questions are;
- Thus, interviewers generate questions and follow-up probes appropriate to the given situation and the central purpose of the research or investigation;
- This results in appropriate and relevant questions arising from interactions during the interview itself.
- Important for establishing rapport;
- Also useful when the researcher is unfamiliar with the the respondent's life style, religious orientation, culture or such similar attributes.

The semi-standardized interview

- Exists between standardized and unstandardized formats.
- Involves the use of a number of predetermined questions and/or special topics asked in a systematic and consistent order with probing to clarify answers given by respondents.
- Questions in a semi-standardized interview can reflect an awareness that respondents understand the world in different ways.

5.8. Question order, content, and style:

The sequence, phrasing, level of language, limit to subject matter, and general style of questions depend on the educational and social level of the respondents as well as their ethnic or cultural roots, age, etc. Questions must be worded so that they will provide the necessary data and motivate the respondents to answer as completely and honestly as possible. The arrangement or ordering of the questions may affect the results – interviews begin with mild non-threatening questions that are easy for the respondents to answer, develop rapport through eye contact and more complex and sensitive ones can be asked at a later stage.

Types of questions to be included in an interview schedule: essential questions, extra questions, throw-away questions and probing questions. *Essential questions*, exclusively concern the central focus of the study and geared to eliciting specific desired information. They may be placed together or scattered throughout the interview schedule. *Extra questions* are roughly equivalent to the essential questions but worded slightly differently. These are included to ascertain reliability of the responses. *Throw-away questions* are used largely to develop rapport and also to set the pace of the interview. They may also serve the purpose of 'cooling off' the respondent especially after sensitive questions have been asked. Finally, *probing questions* provide interviewers with a way to draw out more complete stories from respondents. They frequently ask respondents to elaborate on what they have already answered in response to given questions; "could you tell me more about that", "What happened next", "How come", etc.

Common problems in question formulation: Among the more serious issues in question formulation are the use of emotively charged words (affectively worded questions), double-barreled questions and overly complex questions. ***Affectively worded questions*** may arouse in most people an emotional response, usually negative with the possibility of closing down an interview prematurely or inhibit respondents. Such questions associated with a punitive connotation e.g. "Do you cheat on the taxman?" – "About how many times did you forget to forward all of your financial statements to the taxman?" ***Doublebarrelled questions*** ask the individual to respond simultaneously to two issues in a single question, e.g. "How many times have you been to a classical music concert, or have you only been to a jazz one?" The analysis of such a question is virtually impossible. ***Complex questions*** are characteristically long-winded questions that may confuse the respondents and not elicit the necessary information. When one person is speaking, the other is listening, anticipating, and planning how to respond and thus a long questions defeats this purpose. Keeping questions short, concise allows clear responses and more effective analysis of the answers.

Assessing the interview schedule: The following questions are pertinent to ask in this assessment: Has the researcher included all of the questions necessary to test the research hypothesis? Do the questions elicit the types of responses that were anticipated? Is the language of the interview schedule meaningful to respondents? Are there other problems with the questions, such as double meaning or multiple issues embedded in a single question? Finally, does the interview schedule, as developed, help to motivate respondents to participate in the study? **A careful pretest of the instrument saves a lot of time and cost in the long run.**

Focus Groups

Focus groups were originally called "focused interviews" or "group depth interviews". The technique was developed after World War II to evaluate audience response to radio programs. Since then social scientists and program evaluators have found focus groups to be useful in understanding how or why people hold certain beliefs about a topic or program of interest.

A focus group could be defined as *a group of interacting individuals having some common interest or characteristics, brought together by a moderator*, who uses the group and its interaction as a way to gain information about a specific or focused issue. It is in essence a group interview. Gathering people together to share thoughts regarding the questions/issues you have about the most pressing community problems can be an efficient way of collecting a lot of data.

The participants are selected because they have certain characteristics in common that relate to the topic of the focus group. The moderator or interviewer creates a permissive and nurturing environment that encourages different perceptions and points of view, without pressuring participants to vote, plan or reach consensus. The group discussion is conducted several times with similar types of participants to identify trends and patterns in perceptions. Careful and systematic analysis of the discussions provide clues and insights as to how a product, service, or opportunity is perceived by the group.

A focus group has these basic features: a carefully-crafted agenda, with five or six major questions at most; emphasis on gathering perspectives, insights, and opinions of participants through conversation and interaction; identification of major points of agreement and divergence of opinion; minimal presentation of material to set context and subject; gleaning, not shaping, of opinions or perspectives; eight to twelve participants (*these numbers change relative to the orientation of the researcher*); and understanding that the participants' role is to give personal insights and perspectives.

Advantages of focus groups: Like other qualitative methods, focus group give insights into not just *what* participants think, but also *why* they think it. Can reveal consensus and diversity of participants' needs, experiences, preferences, and assumptions. Allows group interaction such that participants are able to build on each other's ideas and comments to provide an in-depth view not attainable from individual questioning. Unexpected comments and new perspectives can be explored easily. The rapport between the moderator and the group members can encourage participants to express their feelings fully and honestly.

Disadvantages of focus groups: Samples are typically small and may not be representative. All participants must be able to congregate in the same place at the same time, which is particularly difficult if the potential participants live in geographically distant regions. Can generate a large amount of qualitative data that is often difficult to analyze. The information collected may be more likely biased by subjective interpretation than is the case with quantitative methods. More outspoken individuals can dominate the discussions. Viewpoints of less assertive people are often difficult to assess. Both the quality of the discussion and the usefulness of the information depend on the skill of the moderator. The moderator's job is to both encourage discussion and to maintain focus. Too much moderator control means you hear little of the participants' own perspectives. Too little moderator control means you hear less about the topic that interests you.

WHAT FOCUS GROUPS CAN TELL YOU:

- Give information on **how groups of people think or feel** about a particular topic

□ Give greater insight into **why certain opinions are held** □ Help improve the **planning and design of new programs** □ Provide a means of **evaluating existing programs** □ Produce insights for **developing strategies for outreach**

WHAT FOCUS GROUPS CANNOT TELL YOU:

- Valid information about **individuals**
- Valid "before-and-after" information (**how things have changed over time**) □
Information that you can **apply generally** to other groups of people.

Because the idea of focus groups is to take advantage of group interactions, it is important to *use the information at the group level, not the individual level*. Focus groups are *not a valid way to find out how much progress an individual client or participant has made* toward his or her own goals. Also, because focus groups are usually made up of a very small number of people who voluntarily participate, you *cannot assume that their views and perceptions represent those of other groups* that might have slightly different characteristics. They are not "random samples".

QUANTITATIVE PARADIGM (Positivist viewpoint)

QUALITATIVE PARADIGM (Phenomenologist viewpoint)

Basic Beliefs: The world is external and objective The world is socially constructed and subjective

Observer is independent

Observer is part of what is observed

Science is value-free

Science is driven by human interests

Researcher

Should:	focus on fact and fundamental laws reduce phenomenon to simplest elements	focus on meanings look for causality try to understand what is happening look at the totality of each situation
---------	--	---

formulate hypothesis

develop ideas through induction

Preferred Methods Include:	Operationalising concepts so they can be measured	using multiple methods to establish different views of phenomenon
	Taking large samples	small samples investigated in depth Or over time

Adapted from Easter by-Smith, Thorpe and Lowe, 1981, 27.

Research Paradigms	
Quantitative	Qualitative
<i>Synonymous terms</i> • <i>Traditional</i> • <i>Positivist</i> • <i>Experimental</i> • <i>Empirical</i>	<i>Synonymous terms</i> • Interpretive • Constructivist • Naturalistic • Post-positivist or post-modern

<i>Characteristics</i> • Reality is objective and singular, apart from the researcher. • Researcher is independent from that being researched. • Unbiased and free of values. • Language is: Formal; Based on set definitions; Impersonal. • Research process is: Deductive; Involves showing cause and effect; Contains generalisations leading to prediction, explanation and understanding; Accurate and reliable through validity and reliability.	<i>Characteristics</i> Reality is subjective and multiple as seen by participants in a study. • Researcher interacts with that being researched. • Value-laden and biased. • Language is Informal; Based on evolving decisions; Personal. • Research Process is: Inductive; Emerging design – categories identified during research process; Context-bound; Patterns, theories developed for understanding; Accurate and reliable through verification.
<i>Nature of the Research Problem\</i> □ Previously studied by other. • Variables are known • Based on existing studies	<i>Nature of the Research Problem</i> • Exploratory research • Variables are unknown • May lack theory base for study

Adapted from Cresswell (1994)

Quantitative Research	Quantitative Research
Activities	

Counts occurrences across a large population.

Uses statistics and replicability to validate generalisation from survey samples and experiments.

Attempts to reduce contaminating social variables.

Looks deep into the quality of social life.

Locates the study within particular citations which provide opportunities for exploring all possible social variables; and set manageable boundaries.

Initial foray into the social settings leads to further exploration as themes and focuses emerges.

Beliefs

Conviction about what is important to look for.

Conviction that what is important to look for emerge.

Confidence in established research instruments.

Confidence in an ability to devise research procedures to fit the situation.

Reality is not so problematic if the research instruments are adequate; and conclusive results are feasible.

Reality contains mysteries to which the researcher must submit and can do no more than interpret.

Steps

First decided the research focus (for example testing some research questions).

Decide the subject is interesting.

Then devise research instruments (for example questionnaire).

Explore the subject.

The approach to the subject.

Let focus and themes emerge.

Devise research instruments during process.

Rigour

Disciplined application of established rules for statistics, experiment and survey design.

Principled development of research strategy to suit the scenario.

Adapted from Johnson and Harris (2002) provides aspects of differentiation between the qualitative and quantitative paradigms as above.

Combining qualitative and quantitative approaches

There are instances where both qualitative and quantitative research approaches could be applied together in a study. The notion of triangulation represents the application of both these approaches.

Advantages of combining quantitative and qualitative of research

1. research development (one approach is used to inform the other, such as using qualitative research to develop an instrument to be used in quantitative research)
2. Increased validity (confirmation of results by means of different data sources)
3. Complementarily (adding information, i.e. words to numbers and vice versa)
4. Creating new lines of thinking by the emergence of fresh perspectives and contradictions.

PHILOSOPHICAL ASSUMPTIONS OF RESEARCH

In any discipline, there will always be a number of underlying philosophical predispositions in the projects of scientists. Some of these predispositions involve the nature of social knowledge itself, the nature of social reality, and the locus of human control in action. As social scientists, we must understand the three philosophical assumptions that influence social research, which are epistemology, ontology, and methodology.

Epistemology means knowledge and how it is acquired (Bryman, 2001). It concerns clarification of the researcher's beliefs about how knowledge is created. There are two contrasting views: normative epistemology and interpretative epistemology. The normative view holds that research creates knowledge by building on the foundations of accepted and rationally defensible theory (positivism). The interpretative view is that research must set aside existing knowledge and discover new knowledge from internal coherence (constructivism).

Epistemology

Epistemology in the positivist paradigm supports the idea that the social world can be investigated through natural science methodologies. Hypotheses have to be tested by empirical approaches. Data need to be objectively analysed through scientific methods. In contrast, epistemology in the constructivist paradigm supports the idea that knowledge can be acquired by investigating the phenomena in many ways, because the social context is different from natural science.

Ontology

Ontological assumptions concern the nature of the world and human beings in social contexts (Bryman, 2001). Ontology in positivism assumes that social phenomenon is independent from other factors. It assumes that social phenomena can be defined and studied objectively apart from the people who make it. This means that different researchers can have different conclusions from one study.

Methodology

Methodological assumptions focus on analysis of the methods used for gathering research data (Louis Kohen, Lawrence Manion, Keith Morrison, 2001). In positivist paradigms, the scientific method (quantitative) is used to observe the phenomena. It uses mathematics calculations to generalize the finding and test the theory. In contrast, the constructivist paradigm uses qualitative methods (observations, fieldwork notes, interviews) to investigate the phenomena. Social science scholars and researchers are moving away from the idea that social science should reflect the aims and methods of natural science through a critique of these methods

Objectivity

Objectivity is sine qua non of the scientific - method. It means the willingness and ability to examine evidence dispassionately. It is the first condition of research. Objectivity means basing conclusion on facts without any bias and value judgement. The conclusion should be independent of one's personal beliefs, likes, dislikes and hopes. Both the data and the inference drawn from their analysis must be free from bias and prejudices. Objectivity, along with generalization and explanation, are considered as fundamental characteristics of a science. It is often assumed that if our

values do not enter into our research, the findings are objective and above criticism. Objectivity is, therefore, defined as the basic conviction that there is or must be some permanent, ahistorical matrix or framework to which we can ultimately appeal in determining the nature of rationality, knowledge, truth, reality, goodness, or rightness (Bernstein, 1983). According to Durkheim (1964), the social scientist must study social phenomena in the same state of mind as the physicist, chemist or physiologist when he probes into a still unexplored region of the scientific domain. In order to achieve objectivity, the researcher must be detached from the topic under investigation.

The challenge for social researchers is how they can be detached from their studies. In the early days objectivity was associated with 'hard', experimental, standardizing and quantifying research methods whilst 'soft', interpretative, open and qualitative descriptive methods have been considered as subjective. Positivist (quantitative) researchers speak of not becoming 'over involved' with participants. Over-identifying with the 'subject' of the research was said to prevent 'good' research. The researcher should be detached and hence objective. According to positivists, qualitative social research findings suffer from lack of validity and generalization. However, according to constructivist (qualitative) researchers the idea that 'rigorous research' involves the separation of researchers from the subject of their research was not only a mythical aim, but also an undesirable one which disguises the myriad of ways in which the researcher is affected by the context of the research or the people who are a part of it. If the aim of positivism is to collect and assemble data on the social world from which we can generalize and explain human behaviour through the use of our theories, then it shares with empiricism the belief that there are 'facts' which we can gather on the social world, independently of how people interpret them. Objectivity brings us to the understanding that there is a world out there that we can record and can analyse independently of people and even our own interpretations of it. Thus objectivity is defined in terms of researchers' detachment from the social world, as well as the accuracy of their data collection instruments. Social researchers, simply need to refine their instruments of data collection in order that they are neutral recording instruments much as the ruler measures distance and the clock, time. Instead of seeing people in the research process as simply sources of data, social

science researchers argue that research is a two way process that must employ both quantitative and qualitative methods and is influenced by both objectivity and subjectivity.

Subjectivity

Contrary to the contentions of positivists that social researchers must be detached from their investigations, Qualitative researchers such as Moustakas (1994) have argued that social researchers, cannot know this world independently of people's interpretations of it. The only thing that we can know with certainty is how people interpret the world around them. The central interest of social researchers, is focused upon people's understandings and interpretations of their social environments, part of which has been termed a 'phenomenological' approach to researching the social world (Moustakas 1994). Social research thus becomes more than a reflection of our opinions and prejudices: it substantiates, refutes, organizes or generates our theories and produces evidence which may challenge not only our own beliefs, but also those of society in general.

The historical development of social research theory

It was during that time that many thinkers developed theories about society, followed later by methodologies for testing theories and developing new ones. Theory helps social scientists make sense of patterns observed in everyday society. It also helps keep researchers from being taken in by patterns that could just be flukes. Theory also helps shape social research and gives it direction. In this way, theory acts as a guide, pointing researchers to the most interesting issues of society, including its politics, economics and other interactions. Finally, theory helps researchers understand social phenomena in such a way that can suggest actions.

Inductive vs. deductive methods

Deductive reasoning was first described by the ancient Greek philosophers such as Aristotle. The deductive approach refers to the process of "drawing conclusions by applying rules or principles; logically moving from a general rule or principle to a specific solution" (Woolfolk, 2001, p. 286). Deductive methods involve beginning with

a general concept or given rule and moving on to a more specific conclusion. Deductive reasoning is the process of reaching a conclusion that is guaranteed to follow, if the evidence provided is true and the reasoning used to reach the conclusion is correct. The conclusion must also be based on the evidence previously provided.

The deductive method starts with a few true statements (axioms) with the goal of proving many true statements (theorems) that logically follow from them. The inductive method starts with many observations of nature, with the goal of finding a few, powerful statements about how nature works (laws and theories). In the deductive method, logic is the authority. If a statement follows logically from the axioms of the system, it must be true. In the inductive (scientific method), observation of nature is the authority. If an idea conflicts with what happens in nature, the idea must be changed or abandoned.

This reliance on empirical evidence or personal experience was an important step in the direction of scientific inquiry. The deductive method of Aristotle and the inductive method of Bacon gave birth to two research paradigms – positivism and constructivism. Mertens (2005) argues that Aristotle's logical deductive approach to research heavily influenced the positivist (quantitative) paradigm and Bacon's inductive approach has been associated with the constructivist (qualitative) paradigm.

Charles Darwin's idea of the integrated deductive – inductive process has led to the support for the pragmatic paradigm (the quantitative – qualitative approach). The earliest attempt to integrate the deductive – inductive methods was made by Charles Darwin in the nineteenth century. However since the time of Charles Darwin social researchers and scholars have been engaged in a polemic debate about the methodological appropriateness of each of these three approaches to social research.

RESEARCH PARADIGM DEBATE

A research paradigm is a way of looking at the world. It is an assemblage usually comprising the researcher's ontology, epistemology, methodology and axiology (Moore, 2007). It is composed of certain philosophical assumptions that guide and

direct thinking and action of the researcher. Researchers such as Lather (1992) and Lincoln and Guba (2000), have identified three major paradigms that have influenced social research: Positivism, Constructivist, and Pragmatism. The present discussion focuses on how these three paradigms have influenced the development of social research theory and social research methods. According to Guba (1978), most research work is guided by either positivism (quantitative) research paradigm or constructivism (qualitative) research paradigm or a mixture of the two paradigms (pragmatism). Each approach represents a fundamentally different inquiry, and researcher actions are based on the underlying assumptions of each paradigm (Patton, 1990).

Positivism

This was the dominant paradigm that guided early social research. It is commonly referred to as the quantitative paradigm. Positivism is based on the rationalistic, empiricist philosophy that originated with the deductive approach of Aristotle, John Lock, August Comte, and Emmanuel Kant (Mertens, 2005). The deductive method argues that knowledge must proceed from the general to the specific. Under a deductive methodology, a researcher begins with a hypothesis, then makes observations or collects data to test that hypothesis. Based on empirical evidence from the study, the researcher then decides whether to accept or reject the hypothesis. The deductive methodology, in short, tests theories and hypotheses.

Positivism assumes that the social world can be studied in the same way as the natural world and there is a method for studying the social world that is value free and that explanations of a causal nature can be provided and events or observations are influenced by a single theory or paradigm. The adoption of a positivist perspective is accompanied by a broad commitment to the idea that the social sciences should emulate the natural sciences (Lee 1989). Epistemologically, positivist studies are premised on the existence of *a priori* fixed relationships within phenomena capable of being identified and tested via hypothetic-deductive logic and analysis. Causal relationships, which are the basis for generalized knowledge, can predict patterns of behaviour across situations. Ontologically, positivist research assumes an objective

physical and social world that exists independently of humans. The researcher is seen to play a passive, neutral role, and does not intervene in the phenomenon of interest. Keeping in spirit with this set of beliefs, a theoretically grounded positivist study is likely to be conducted with the ideas of establishing appropriate measures (qualitative and/or quantitative) for the constructs being studied; establishing or testing causal relationships; determining the domain to which the study's findings can be generalized; and demonstrating that the inquiry is value free. The criteria for judging the quality of such positivist studies, in opposition to interpretive and critical case studies are related to the traditional validity and reliability tests used in the natural sciences (Yin 1994).

The positivist perspective has long been associated with “scientism” the view that the methods of the natural sciences may be applied to all areas of investigation, be it philosophical, social scientific, or otherwise. Positivist (quantitative) research reflects the traditional scientific approach to problem solving. It uses experimental methods and numerical data to test hypothetical generalizations. It assumes that there is a single reality that can be broken down into variables. The purpose of this type of research is to test hypotheses that have been developed before the research project started and to form conclusions that can be generalized to other situations. The emphasis in this approach is upon measurement, comparison, and objectivity.

Constructivism

The constructivist paradigm emphasizes that research is the product of the researchers and cannot be independent of them. (Mertens, 2005). The most obvious distinction between quantitative and qualitative research is the form of data collection and presentation. The fundamental difference between constructivism and positivism, however, lies in the realm of theory. Data within positivism is theorydriven and designed to test the accuracy of the theory. Constructivism, on the other hand, is a method of research which has not referred explicitly to the theory guiding its data collection procedures. Theory is grounded in the study and develops as the study is conducted. Lincoln and Guba (2000) identify qualitative methods as the preferred methods for researchers working in the constructivist paradigm.

Pragmatism

Pragmatism is a paradigm that provides the underlying philosophical framework for mixed methods research. This research design involves methods that use mixed data (numbers and text) and additional means (statistics and text analysis). A mixed method uses both deductive and inductive scientific methods, has multiple forms of data collecting and produces eclectic and pragmatic reports. Pragmatic philosophers have rejected the scientific notion that social science enquiry was able to access the truth about the real world solely by virtue of a single scientific method. To this end, the most appropriate paradigm is the mixed research approach in which the researcher is not confined to one research method. A mixed research design is a general type of research that includes quantitative and qualitative research data, techniques and methods. All these paradigm characteristics are mixed in one case study. According to Mertens (2005) mixed methods can be applied at four different levels: problem identification, data collection, data analysis, and discussion of research findings. Greene and Caracelli (2002) argue that social researchers mix methods to a varying degree at various points in their research and still call their work mixed method researchers called their research work qualitative.

A quantitative component of a mixed research assumes the usage of deductive scientific method while qualitative component assumes inductive scientific method. Moreover, a quantitative approach collects quantitative data based on exact measurement applying structured as well as validated information collection. For instance, rating scales, closed ended items and responses. This approach produces statistical reports with correlations. A qualitative component uses qualitative information from interviews, field notes, open ended questions etc. This approach considers a researcher to be the major means of information collection. At the end of a research this approach supposes a narrative report with context description, quotations taken from research material. The aim of a mixed method design is to summarize positive aspects of two approaches and produce a highly accurate data. Bryman (2001) argues for genuine integration, where qualitative and quantitative findings are mutually informative and talk to each other—a conversation—to construct

a negotiated account. The triangulation metaphor has been a hindering factor; it should not be just a matter of testing data against each other, but about forging an overall or negotiated account of the findings that brings together both components of the conversation or debate.

19. CRITICAL COMPONENTS IN EVERY RESEARCH

19.1 Research problem

The research begins when we already have some knowledge about a phenomenon, and that knowledge indicates that there is something we do not know. This is a “**problem**”. A problem is usually expressed as a general question about the relations between 2 or more variables. A well-formulated research problem is already part of the solution.

A sound research problem requires a good background that is often provided by a good literature review. A literature review is the systematic identification, location, and analysis of documents containing information related to the **research problem**.

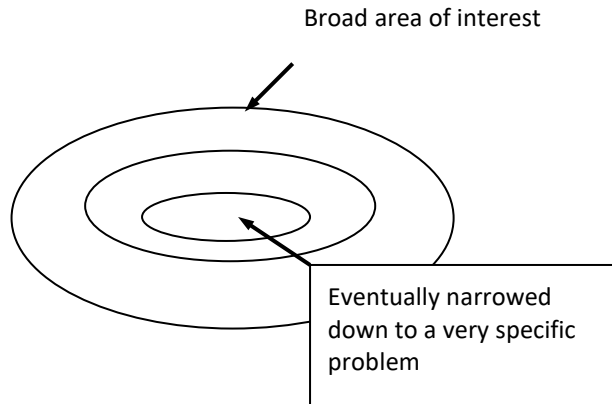
Characteristics of a research problem: - A research problem must;

- fill a research gap
- permit generalisation to broader principles of theory
- sharpen the definition of an important concept or relationship
- have many implications for a wide range of practical problems
- create or improve an instrument for observing and analysing data
- a problem must be workable

The research problem should not be too broad nor should it consist of too many issues that need to be addressed. You should be cautious and avoid a problem that is:

- too wide in scope,
- very technical in nature,

- deal with trivial issues that will not interest anyone else,
- a schematic representation of “narrowing” an area of interest to a specific problem. Having identified a specific area of interest, you then need to investigate what are the possible issues (or problems) in this area that requires the attention of a researcher.



Some problems are unsolvable because;

- they are unstructured
- inadequately defined
- no data can be collected on the problem

19.2 Research topic

Remember that a critical success factor is choosing a topic for which you have a personal affinity. Struwig & Stead (2001:31) suggest that research generally originates in a problem situation, and that "questions and problems arise from your perception of a problem, how you observe the problem and the extent to which you are aware of the components inherent in the problem that need to be investigated".

Moreover, Struwig & Stead (2001: 32) offer the following advice in respect of considerations to keep in mind when searching for a topic:

- Try to choose a topic that relates to your immediate environment. Topical issues are an important source for research topics. Such topics can be valuable as they are relevant to current situations.
- Previous studies in a specific field can also provide suggestions for possible topics. In the discussion or conclusion sections of a dissertation or articles, there are normally recommendations for further research.
- Experts in a particular field of study can also provide you with some ideas of possible areas for research.
- In any field of study many ideas and assumptions are accepted, but have not yet been researched. It may be worthwhile to challenge some commonly held assumptions in your field of interest and determine if they can stand up to your scrutiny.
- Another area for possible research involves testing the reliability or validity of previous research findings.

Additionally, the title should not be too long (not more than 12 words). Sometimes you can leave out other words such as; 'the study is investigating', at the same time, the title should not be so brief that it becomes obscure, such as; 'Crime and Unemployment'. Say what aspect of crime and unemployment are being considered, eg 'The relationship between violent crime and unemployment in Mafikeng'. Therefore, the reader should have a fair idea of the study's main focus immediately.

Introduction

Under the introduction, you need to contextualize the research by giving the reader a good idea of what you will be investigating. It should be engaging such that the reader wants to find out more. The following is useful;

- State the broad research question and why it warrants investigation,
- Explain how the problem under the investigation fits into a bigger theoretical, academic, history or even practical framework,

19.3 Problem Statement - The Heart of a Study

Is there something societally wrong, theoretically unclear or in dispute, professionally disturbing, or historically worth studying? Is there a program that needs evaluation and assessment? Try to develop a question which your study would attempt to answer. Then preface that question with enough of an explanation of the problem so that others will understand the question when you finally give it.

A problem statement is a *statement*, not a question. Statements are subject to verification, while questions are not. From a purely logical point of view a positive statement like *females use more cooption strategies to include fellow communicators in conversations than males do* is more easily subjected to verification than a negative statement like *males do not use as many cooption strategies to include fellow communicators in conversations as females do*.

In order to formulate a researchable problem statement you must envisage two scenarios, namely an ideal scenario where a system is functioning optimally and a real-world scenario where the system is malfunctioning. The objective of research is to solve the identified problems (1) by elimination through your literature survey, which among others should indicate to what extent the problems that you identified have been solved by other researchers, and (2) by your own empirical research regarding the problems that have not been solved through your literature survey.

Complex problems can usually be decomposed into sub-problems, of which some would be basic and others applied sub-problems. The whole is composed of the sum of its parts.

Example; suppose you want to get from your town to a town with 50 km away. Then your principal goal is to get from one location to the other as expeditiously as possible.

Main problem – how do I get from Town A to Town B

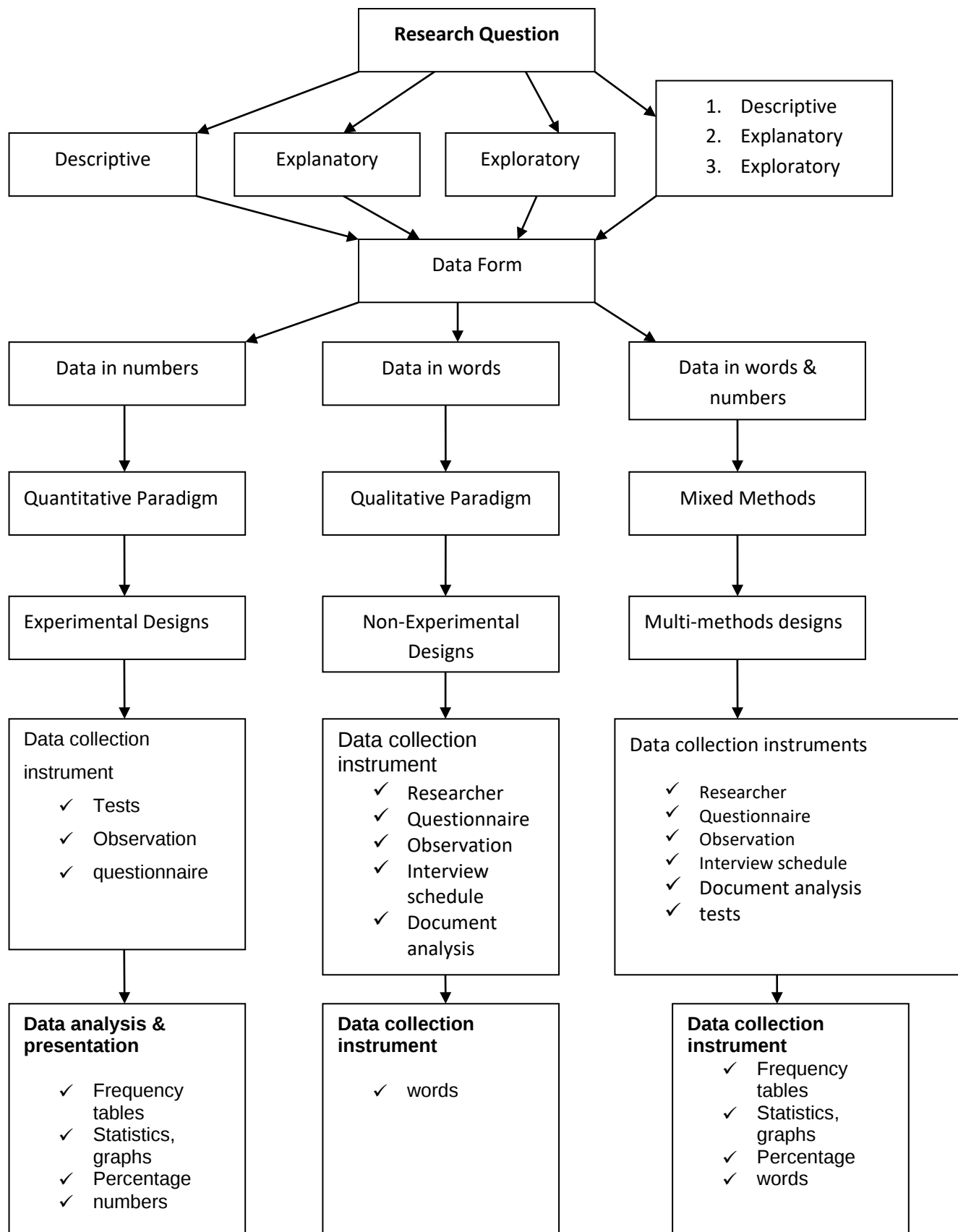
Sub-problems:

1. What is the most direct route from here to the desired town?
2. How far do I travel on the thruway?
3. What is the number of the exit I take in leaving the thruway?

The researcher usually cannot deal with the principal (main) research problem in total. Therefore, by resolving sub-problems finally resolve the main problem.

Research questions are sentences that elicit further information about aspects of one's research that one hopes to answer by means of empirical research:

- Is service quality ...?
- Is there a relationship between underpricing and long run performance of?
- How have IPOs in South Africa performed since 1997?
- What critical success factors govern?



Research Objectives

Research objectives are future-oriented statements that bind one's research problems to one's literature survey and through that to one's research methodology. Each objective begins with "to", followed by a knowledge related verb as shown below:

- To determine if □ To measure to what extent ---
- To critically evaluate
- To compare

Goals/aims:

Are overall intention of the research project. They answer the question: what do you intend to research?

Hypothesis

As discussed above, a hypothesis is a tentative statement about the expected relationship between 2 or more variables. The hypothesis is tentative because its accuracy will be tested empirically.

The null hypothesis is a hypothesis of "no difference". It simply states that "there is no difference between variable A and variable B. The alternative hypothesis on the other hand predicts some difference between 2 variables either specifically or not.

The following are some characteristics of hypotheses

- a hypothesis should predict a particular relationship between 2 or more variables,
- a hypothesis should be stated clearly and unambiguously, usually in the form of a declarative sentence
- a hypothesis must be specific,
- a hypothesis should be testable with available techniques (i.e., it should be possible to collect data to test it), and
- a hypothesis must have empirical referents

Importance/Purpose of the Study

Is this really what you want to concentrate on? Why? Give at least 2-3 reasons why the problem you have chosen is important and valid. To you? To the profession? To society?

In other words, think about;

- solving a practical problem in your area
- developing or filling a research gap
- permitting generalisation to broader principles of social interaction or general theory
- sharpening the definition of an important concept or relationship
- creating or improving an instrument for observing and analysing data
- providing possibilities for a fruitful exploration with known techniques
- developing better theoretical models
- influencing policy
- changing the way people live or do their jobs

20. LITERATURE REVIEW

The purpose of the literature review is to determine what has already been done that relates to study your problem. It also points out research strategies and specific procedures and measuring instruments that have and have not been found to be productive in investigating your problem.

Familiarity with previous research also facilitates interpretation of the results of the study.

Therefore the literature review must be characterised by:

- definition of the key concepts referring to the key features of the phenomenon to be studied,
- integrating or embedding the research problem within a larger body of knowledge – with distinct conceptual framework that is

embedded within both theoretical and empirical work in the particular field of study,

- offer the possibility of acquainting one with the problems, framing of hypotheses, and results obtained by previous research,
- discovering connections, analogies or other relations between different research results by comparing various investigations,
- Studying definitions (conceptual and operational) used in previous works,
- Possibility of exploring new approaches rather than just emphasising the already established frameworks

20.1 Purposes of literature review

- establish the theoretical and historical perspective for the topic
- prevents re-invention
- get new ideas
- evaluate and critique of past work
- position your study (yours should add something “new”)
- saves time and money
- helps students to communicate in the language of the area
- compare results

Critical reading on literature review:

- goes beyond mere description to offer opinions
- relates different writings, show their differences and contradictions and highlights what is lacking
- being explicit about values and preferred theories
- shows understanding of power relations in research

How to criticize

Taylor (1989: 69) mentioned the most common motives which govern academic writing are these;

- agreeing with a particular point of view
- proposing a new point of view
- conceding that an existing point of view has certain merits but needs to be qualified in certain respects
- formulating an existing point of view such that the new version makes a better explanation
- dismissing a point of view or another's work because of its inadequacies
- rejecting another's argument on various reasoned grounds
- reconciling two opposing positions by appeal to some higher or deeper principle
- retracting one's previous position in the face of new arguments or evidence

Criticising does not mean rubbishing

□ do not accept anything at its face value □

criticism is evaluation, it should be:

- ✓ careful
- ✓ considered
- ✓ justified
- ✓ even handed
- ✓ The essence of criticism:

Blaxter et al. (1998: 219) stated that “placing your work within the context of that of others; acknowledging the deficiencies of that work, both yours and theirs; and then moving the debate forward”

Anything may be criticised

- underlying assumptions

- arguments
- methodologies
- accuracy of data collected
- Interpretation of the data

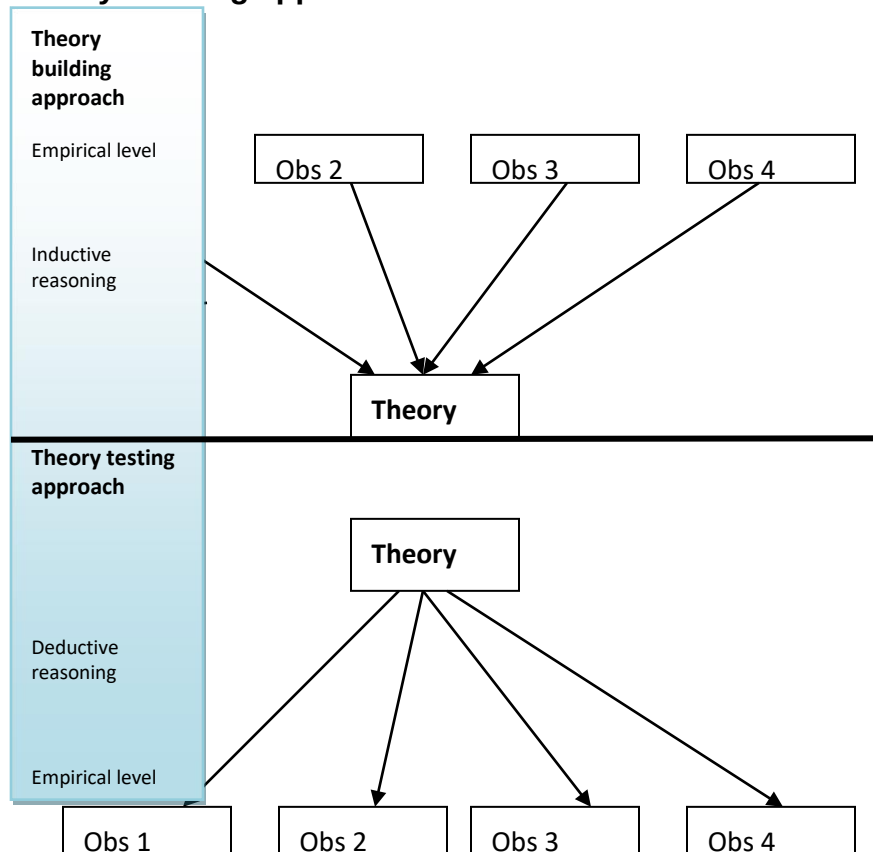
21. THEORY TESTING AND THEORY CONSTRUCTION

Attempting to answer the “why” question in social science are theories. These theories vary in their complexity (how many variables and links), abstraction and scope. To understand the role of theory in empirical research it is useful to distinguish between two different styles of research; theory and theory building.

21.1 Theory building

Theory building is a process in which research begins with observations and uses inductive reasoning to derive a theory from observations.

Theory building approach



These theories attempt to make sense of observations. Because the theory is produced after the observation are made, it is often called *post factum theory* or *ex facto theorising*.

This form of theory building entails asking whether the observation is a particular case of a more general factor, or how the observation fits into a pattern or a story. For example, Duiker observed that the suicide rate was higher among Protestants than Catholics. But is religious affiliation a particular case of something more general. Of what more general phenomenon might it be an indicator? Are there other observations that shed light on this? He also observed that men were more suicidal than women, urban dwellers more than rural dwellers and the socially mobile more than the socially stable.

He argued that the common factor behind all these observations was that those groups who were most suicidal were also less well socially integrated and experienced greater ambiguity about how to behave and what is right and wrong. He theorized that one of

the explanations for suicidal behaviour was a sense of normlessness, a disconnectedness of individuals from their social world. Of course, there may have been other ways of accounting for these observations but at least Duiker's explanation was consistent with the facts.

21.2 Theory testing

In contrast, a theory testing approach begins with a theory and uses theory to guide which observations make; it moves from the general to the particular. The observation should provide a test of the worth of the theory. Using deductive reasoning to derive a set of propositions from the theory does this. We need to develop these propositions so that if the theory is true then certain things should follow in the real world. We then assess whether these predictions are correct, if they are correct, then the theory is supported. If they are not hold up then the theory needs to be either rejected or modified.

For example, we may wish to test the theory that it is not divorce itself that affects the wellbeing of children but the level of conflict between parents. To test this idea, we can make predictions about the wellbeing of children under different family conditions. For the simple theory that it is parental conflict rather than divorced that affects a child's wellbeing there are four basic "conditions". For each condition the theory would make different predictions about the level of children's wellbeing that we can examine.

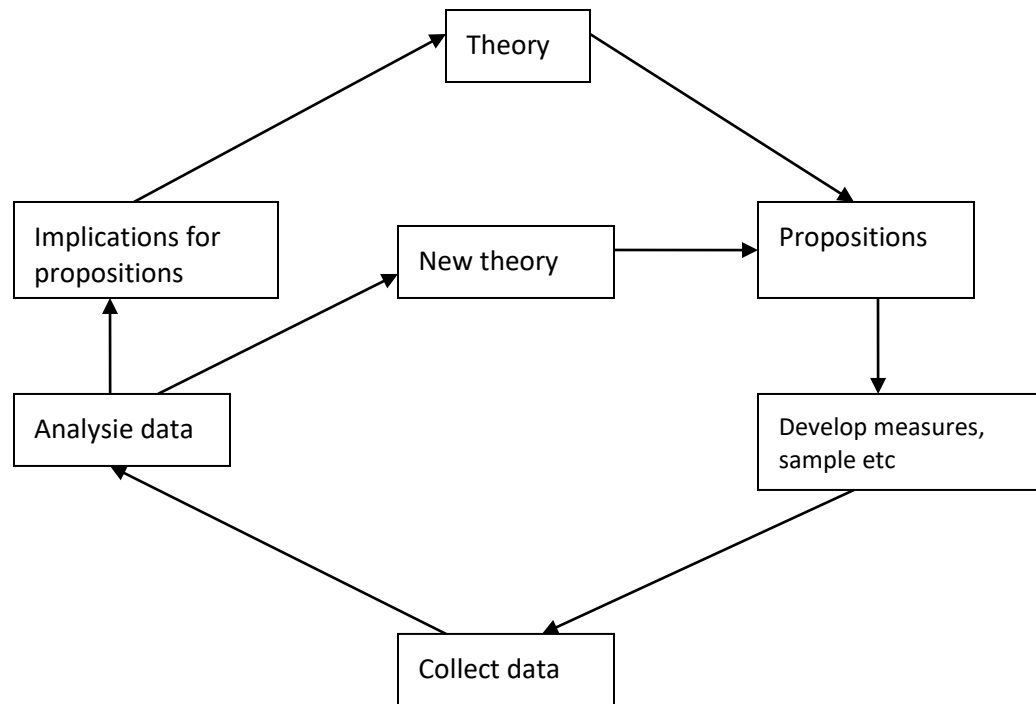
Figure 1: Relationship between divorce and parental conflict

	Parents divorced?	
	No	Yes
Low	(a)	(b)

If the theory that it is parental conflict rather than parental divorce is correct the following propositions should be supported:

- **Proposition 1:** children in situation (a) and (b) would be equally well off. That is, where parental conflict is low, children with divorced parents will do just as well as those whose parents are married.
- **Proposition 2:** children in situation (c) and (d) should equally poorly off. That is, children in conflictual couple families will do just as badly as children in post-divorce families where parents sustain high conflict.
- **Proposition 3:** children in situation (c) will do worse than those in situation (a). That is, those with married parents in high conflict will do worse than those who have married parents who are not in conflict.
- **Proposition 4:** children in situation (d) will do worse than those in situation (b). That is, those with divorced parents in high conflict will do worse than those who have divorced parents who are not in conflict.
- **Proposition 5:** children in situation (b) will do better than those in situation (c). That is, children with divorced parents who are not in conflict will do better than those with married parents who are in conflict.
- **Proposition 6:** children in situation (a) will do better than those in situation (d). That is, children with married parents who are not in conflict will do better than those with divorced parents who are in conflict.

Starting point of theory testing



Starting point of theory building

No single proposition would provide a compelling test of the original theory. Indeed, taken on its proposition 3, for example, would reveal nothing about the impact of divorce. However, taken as a package, the set of proposition provides a stronger test of the theory than any single proposition. Although theory tests and theory building are often presented as alternating modes of research they should be part of one ongoing process. Typically, theory building will produce a plausible account or or explanation of a set of observation. However, such explanations are frequently just one of a number of possible explanations that fit the data. While plausible they are not necessarily compelling. They request systematic testing where data are collected to specifically evaluate how well the explanation holds when subjected to a range of crucial tests.

22. Ethical Consideration

In this section explain how you obtained permission from the decision-makers in organisations to conduct research in their organisations and how you obtained ethical clearance from the university before you start conduction your research.

Participants – data collection

- The right to choose whether or not to participate in a study

- awareness of the right not to participate awareness of
- adequate information to make an informed choice awareness
- of opportunity to end participation, if so desired
- The right to safety in terms of the avoidance of any physical or mental harm
- guarantee of the protection of
- anonymity freedom from stress freedom
- from deception
- The right to be informed about all aspects of the research
- the right to debriefing
- The right to be informed as to the research results
- clients' rights
- The right of confidentiality of the working relationship
- confidentiality of proprietary data confidentiality
- or anonymity of client
- The right to be informed of critical research results
- awareness of research results which may affect the health and wellbeing of the
- general public
- the right to expect objective research results
- the right to expect complete reporting of research
- The right to expect research that is unbiased and scientifically sound.

23. Limitations of the Study

If you foresee factors (like convenience sampling rather than random sampling, for instance) that will limit you to generalise your results from your sample to a broader population, state them here. Again, the limitations of the methods that you used, and

how these limitations influenced your data analysis and interpretations. Keep in mind, one cannot provide ultimate answers in research, but can only present tentative solutions that are always subject to subsequent scrutiny and critical assessment by other researchers. Show how your particular research methodology and your theoretical assumptions limit the validity of your results.

Set limits to the study:

geographical
; sector;
level; time;
and period

PRESENTATION OF THE ASSIGNMENT PROJECT

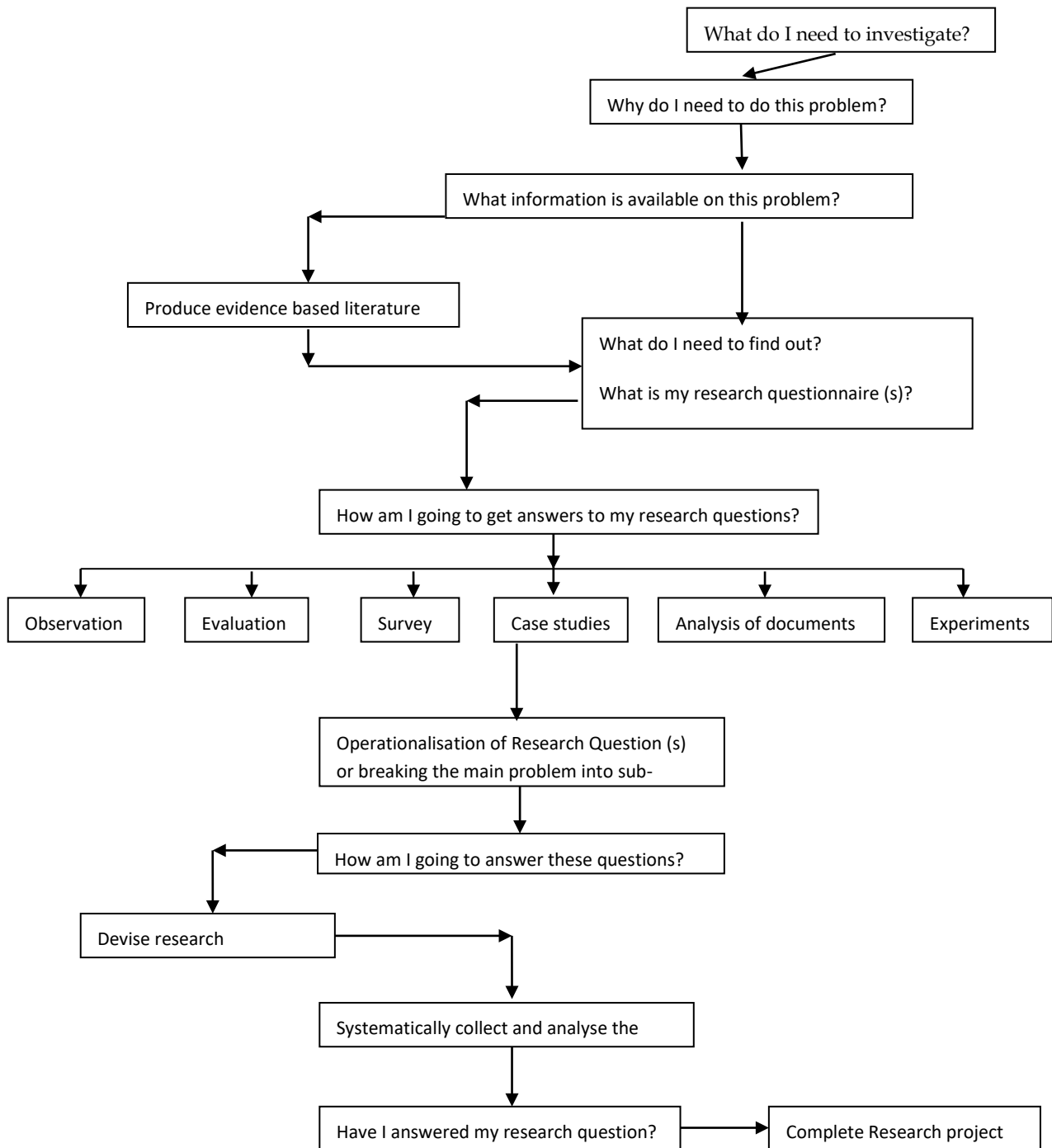
do:

- produce a professional looking project
- interesting piece of work
- be informative
- write in a way that is easy to read
- use clear headings and sub-headings
- be concise and precise
- use simple language where possible
- construct clear arguments
- check your spelling and grammar
- reference your work fully, using an acceptable format don't:
 - use words when you are not absolutely certain of their meaning
 - use difficult words to impress your reader
 - use overly simplistic language
 - repeat yourself
 - digress
 - use first, second, third.....persons (i.e., i, me, them , their.....)

ABSTRACT

A brief, comprehensive summary of the contents of the research project. A good abstract is accurate (does not include information that does not appear in the body of the project); self-contained; concise and specific; and coherent and readable (write in clear and vigorous prose).

FLOW CHART OF THE RESEARCH FLOW



PLAGIARISM – READ FROM PAGE 6 TO 31 FROM THE MANUAL FOR POSTGRADUATE STUDIES.

I. General Document Guidelines

- A. *Margins*: One inch on all sides (top, bottom, left, right)
- B. *Font Size and Type*: 12-pt. font (Times Roman or Arial are acceptable typefaces)
- C. *Spacing*: One and half throughout the paper, including the title page, abstract, body of the document, references, appendixes, footnotes, tables, and figure captions.
- D. *Alignment*: Flush left (creating uneven right margin)
- E. *Paragraph Indentation*: 5-7 spaces
- F. *Pagination*: The page number appears one inch from the right edge of the paper on the first line of every page, beginning with the title page.
The only pages that are not numbered are Figures.
- G. *Order of Pages*: [Title Page](#), [Declaration](#), [Acknowledgement](#), [Abstract](#), [Body](#), [References](#), [Appendixes](#).

II. **Title Page**, refer to the attached sample

III. **Declaration**, your own declaration about the study

IV. **Acknowledgement**, your own acknowledgement

V. **Abstract**: The abstract is a one-page, self-contained summary of the most important elements of the study.

VI. **Table of content and appendix List of tables and figures**

VII. Body

- A. *Pagination*: The body of the paper begins on a new page (page 3).
Subsections of the body of the paper do *not* begin on new pages.

- 1. Main headings (when the paper has either one or two levels of headings) use centered uppercase and lowercase letters (e.g., Method, Results, Discussion, and References).
- 2. Subheadings (when the paper has two levels of headings) are italicized and use flush left, uppercase and lowercase letters (e.g., *Participants*, *Apparatus*, and *Procedure* as subsections of the Method section).

VIII. HARVARD REFERENCING STYLE

Text citations (refer to Manual for Postgraduate Studies): Source material must be documented in the body of the paper by citing the author(s) and date(s) of the sources. The underlying principle is that ideas and words of others must be formally acknowledged. The reader can obtain the full source citation from the list of references that follows the body of the paper.

- A. When the names of the authors of a source are part of the formal structure of the sentence, the year of publication appears in parentheses following the identification of the authors. Consider the following example:

Wirth and Mitchell (2014) found that although there was a reduction in insulin dosage over a period of two weeks in the treatment condition compared to the control condition, the difference was not statistically significant. **[Note: and** is used when multiple authors are identified as part of the formal structure of the sentence. Compare this to the example in the following section.]

- B. When the authors of a source are *not* part of the formal structure of the sentence, both the authors and years of publication appear in parentheses, separated by semicolons. Consider the following example:

Reviews of research on religion and health have concluded that at least some types of religious behaviors are related to higher levels of physical and mental health (Gartner, Larson, & Allen, 1991; Koenig, 1990; Levin & Vanderpool, 1991; Maton & Pargament, 1987; Paloma & Pendleton, 1991; Payne, Bergin, Bielema, & Jenkins, 1991). **[Note: &** is used when multiple authors are identified in parenthetical material. Note also that when

several sources are cited parenthetically, they are ordered alphabetically by first authors' surnames.]

- C. When a source that has two authors is cited, both authors are included every time the source is cited.
- D. When a source that has three, four, or five authors is cited, all authors are included the first time the source is cited. When that source is cited again, the first author's surname and "et al." are used. Consider the following example:

Reviews of research on religion and health have concluded that at least some types of religious behaviors are related to higher levels of physical and mental health (Payne, Bergin, Bielema, & Jenkins, 1991).

Payne *et al.* (1991) showed that ...

- E. When a source that has six or more authors is cited, the first author's surname and "et al." are used every time the source is cited (including the first time).
- F. Every effort should be made to cite only sources that you have actually read. When it is necessary to cite a source that you have not read ("Grayson" in the following example) that is cited in a source that you have read ("Murzynski & Degelman" in the following example), use the following format for the text citation and list only the source you have read in the References list:

Grayson (as cited in Murzynski & Degelman, 1996) identified four components of body language that were related to judgments of vulnerability.

- G. To cite a personal communication (including letters, emails, and telephone interviews), include initials, surname, and as exact a date as possible. Because a personal communication is not "recoverable" information, it is not included in the References section. For the text citation, use the following format:

B. F. Skinner (personal communication, February 12, 1978)
claimed ...

- IX. **Quotations:** When a direct quotation is used, always include the author, year, and page number as part of the citation.

- A. A quotation of fewer than 40 words should be enclosed in double quotation marks and should be incorporated into the formal structure of the sentence. Example:

Patients receiving prayer had "less congestive heart failure, required less diuretic and antibiotic therapy, had fewer episodes of pneumonia, had fewer cardiac arrests, and were less frequently intubated and ventilated" (Byrd, 1988, p. 829).

- B. A lengthier quotation of 40 or more words should appear (without quotation marks) apart from the surrounding text, in block format, with each line indented five spaces from the left margin.

- X. **References:** All sources included in the References section must be cited in the body of the paper.

- A. *Pagination:* The References section begins on a new page.
- B. *Heading:* References (centered on the first line below the manuscript page header)
- C. *Format:* The references (with hanging indent) begin on the line following the References heading. Entries are organized alphabetically by

surnames of first authors. Most reference entries have three components:

1. Authors: Authors are listed in the same order as specified in the source, using surnames and initials. Commas separate all authors. When there are seven or more authors, list the first six and then use "et al." for remaining authors. If no author is identified, the title of the document begins the reference.
2. Year of Publication: In parentheses following authors, with a period following the closing parenthesis. If no publication date is identified, use "n.d." in parentheses following the authors.
3. Source Reference: Includes title, journal, volume, pages (for journal article) or title, city of publication, publisher (for book). Italicize titles of books, titles of periodicals, and periodical volume numbers.

D. *Example of Referencing, refer to Manual for Postgraduate Studies*

You are not allowed to use Wikipedia. It is not a credible source.

THE STRUCTURE/FORMAT OF THE ASSIGNMENT PROJECT COMPLIES WITH THE SOUTH AFRICAN JOURNAL FOR BUSINESS MANAGEMENT

- title page (refer to the attached sample on Annexure B)
- declaration
- acknowledgements
- abstract
- table of contents and appendix
- list of tables
- list of figures

SUBMISSION FORMAT

1. PHASE ONE (1) PROPOSAL STRUCTURE

A. Introduction

half to 1 page

B. Background of the problem

half to 1 page

- B1. Statement of the problem half page
- B2. Main research question and sub-questions
- B3. Objectives and/or hypotheses
- C. Scope of the study quarter to half page
- D. Justification or importance of the study
- E. Definition of key concepts (as they appear in the title, problem statement, purpose, research questions, hypothesis or objectives, literature review, and methods section)
- F. Abridged Literature review 2 pages
- G. Research Methodology
 - a. Research paradigm and design
 - b. Research methodology to be used
 - c. Study Population
 - d. Sampling technique to used
 - e. Method of data collection/Questionnaire
 - i. Data Collection procedure to be used
 - ii. Data Analysis Method to be used
 - f. Validity and Reliability
 - g. Ethical consideration
- H. List only references cited in the text;
 - a. References listed alphabetically
 - b. Consistency and completeness of citation
- I. Anything listed under appendices should have be cited in the text. Examples are correspondence and instruments

2. PHASE TWO (2)

Theoretical Foundation & Literature review > 10 pages
 (minimum of 12 accredited articles to be used on the literature review) **Please refer to literature example on Annexure C**

3. PHASE THREE (3)

- J. Data analysis (the discussion needs to be linked to the theory and literature)
- K. Discussion of the results (needs to be linked with the theory and literature)
- L. Conclusion and Recommendations (you need to draw overall project conclusion)
- M. List only references cited in the text
- N. References listed alphabetically

- O. Consistency and completeness of citation
- P. Anything listed under appendices should have been cited in the text.
examples are correspondence, questionnaire and other instruments

CONTINUOUS ASSESSMENT PLAN

To determine how well the student has accomplished the learning outcomes for Assignment Project module, the student will be assessed throughout the semester by means of four individual tasks and submission of the final project due on the 22 October 2018. The four individual tasks contribute a total of 60% towards the final mark, whilst the final assignment project will contribute 40% towards the final mark of this module.

ASSESSMENT OF FOUR TASKS

Statistical Research (pre-module) – 20%

- Has data being presented effectively and interpreted a range of summary statistics?
- Has descriptive techniques being computed (i.e., graphs and tables of the data sets),

- Is intuitive understanding of statistical techniques through explanations developed?
- Is the relevant theories aligned to the results?
- Are tables and figures clearly numbered and easy to understand?
- Did relationships between variables established?
- Is information contained in management data interpreted sufficiently?
- Is methods and interpretation of real business problems relevant and authentic?
- Did correlation and regression analysis to identify the strength and form a relationship between variables being applied?
- Has hypotheses test about the population parameters performed?

Proposal – 25%

Is there a statement of the problem?

What is the context of the problem? Where does it stand in relation to the broader body of knowledge in the relevant discipline?

Is the problem “researchable”, i.e., can it be investigated through the collection and analysis of data?

Is background information on the problem presented?

Is the significance of the problem discussed?

What is the importance of studying this problem?

Does the problem statement indicate the variables of interest and the specific relationship between and among those variables that are being investigated?

Are the variables conceptually and operationally defined?

Literature Study – 30%

Is the review comprehensive?

Is the referencing according to the standard (Harvard referencing Style)?

Are all references cited appropriately?

Is there any gap identified from the literature?
Are the sources recent or outdated (old)?
Is there a critical analysis of references in terms of comparing and contrasting the results of various studies?
Is the review organised?
Does the review conclude with a brief summary of the literature and its implications for the problem investigated?
Is minimum of 12 accredited journal articles consulted?

Methodology, Results and Findings – 25%

Is there a description of the major characteristics of the sample used including the size of n?
How was the sample selected?
Is the method of selection clear and also relevant to the type of design used?
Does the sample seem biased or representative?
What are the limitations of the selection of such a sample?
Does the sample size meet the suggested guideline minimum sample size appropriate for the method of research represented? Is there a specific paradigm and design for the study stated?
Is the paradigm and design appropriate for research objective or testing the hypotheses of the study?
Are there any limitations for using such a design?
Are there clearly identifiable instruments used to study the research question/s?
Is there a rationale given for the selection of the instruments used?
Are the instruments appropriate for measuring the intended variables? If instruments were specifically developed for the study, are then procedures for validation and reliability analysis described?

If an instrument was developed for the study, are administration, scoring, and interpretation procedures fully described?

Is evidence presented to show that each instrument is appropriate for the sample studied?

Is instrument validity discussed and reliability coefficients given where appropriate?

Continuous assessment = 20% + 25% + 30% + 25% = 100%

FINAL ASSIGNMENT PROJECT WILL BE MARKED OUT OF 100%

Final Mark = 60% (continuous) + 40% (Final Project)

KNOWLEDGE, SKILLS, ATTITUDES AND VALUES TO BE OBTAINED FROM THE ASSIGNMENT PROJECT MODULE

1. Knowledge of:
related areas/disciplines issues related
to knowledge generation
2. Skills literature searching skills skills in obtaining data ability
to analyse data textual skills: writing, summarization, text
management, etc.
rhetorical skills: how to create a persuasive and logical argument
computer skills planning and time management skills
interpersonal skills: how to work with others and develop
networks
3. Attitudes and Values awareness of standards: what is good or
poor quality research being self-critical, but without self-
paralysis awareness of own strengths and weaknesses
creative ability, originality and innovativeness

emotional resilience: the ability to cope with emotional highs and

lows endurance: the ability to keep going over long periods ability to

improvise, to find ingenious ways of overcoming obstacles

ANNEXURE A

Required Sample Size[†]

Population Size	Confidence = 95%				Confidence = 99%			
	Margin of Error				Margin of Error			
	5.0%	3.5%	2.5%	1.0%	5.0%	3.5%	2.5%	1.0%
10	10	10	10	10	10	10	10	10
20	19	20	20	20	19	20	20	20
30	28	29	29	30	29	29	30	30
50	44	47	48	50	47	48	49	50
75	63	69	72	74	67	71	73	75
100	80	89	94	99	87	93	96	99
150	108	126	137	148	122	135	142	149
200	132	160	177	196	154	174	186	198
250	152	190	215	244	182	211	229	246
300	169	217	251	291	207	246	270	295
400	196	265	318	384	250	309	348	391
500	217	306	377	475	285	365	421	485
600	234	340	432	565	315	416	490	579
700	248	370	481	653	341	462	554	672
800	260	396	526	739	363	503	615	763
1,000	278	440	606	906	399	575	727	943
1,200	291	474	674	1067	427	636	827	1119
1,500	306	515	759	1297	460	712	959	1376
2,000	322	563	869	1655	498	808	1141	1785
2,500	333	597	952	1984	524	879	1288	2173
3,500	346	641	1068	2565	558	977	1510	2890
5,000	357	678	1176	3288	586	1066	1734	3842
7,500	365	710	1275	4211	610	1147	1960	5165
10,000	370	727	1332	4899	622	1193	2098	6239
25,000	378	760	1448	6939	646	1285	2399	9972
50,000	381	772	1491	8056	655	1318	2520	12455
75,000	382	776	1506	8514	658	1330	2563	13583
100,000	383	778	1513	8762	659	1336	2585	14227
250,000	384	782	1527	9248	662	1347	2626	15555
500,000	384	783	1532	9423	663	1350	2640	16055
1,000,000	384	783	1534	9512	663	1352	2647	16317
2,500,000	384	784	1536	9567	663	1353	2651	16478
10,000,000	384	784	1536	9594	663	1354	2653	16560
100,000,000	384	784	1537	9603	663	1354	2654	16584
300,000,000	384	784	1537	9603	663	1354	2654	16586

[†] Copyright, The Research Advisors (2006). All rights reserved.

ANNEXURE B



TITLE

Student names and surname

Student no:

Assignment project submitted in partial fulfilment of the requirements for the post graduate diploma inat the (Mafikeng campus) of the North-West University

Supervisor:

Month and Year

ANNEXURE C

LITERATURE REVIEW (PHASE TWO) Tasks entailed in the Theoretical Foundation & Literature review

- a. Graphically illustrate (draw a picture) the existing relationships between the variables of your study (dependent and independent).
- b. Based on the relevant 12 accredited articles chosen,
 - ✓ Identify definitions of the identified research variables and constructs
 - ✓ Establish main communalities and differences on those definitions
 - ✓ Determine if the existing definitions can be grouped into different “schools of thought” or if definitions changed over time
 - ✓ Develop or adopt a suitable definition for each variable and the construct, and justify its appropriateness in relation to your study
 - ✓ Discuss how the problem at your workplace does not/fit into the above definition
- c. Review relevant theories, conceptual frameworks and/or models used to explain the identified variables and construct above. Comment on:
 - The communalities and differences
 - The contextual boundaries
 - Implicit and explicit assumptions underlying theoretical perspectives
 - Empirical evidence available
 - Unresolved issues and questions
 - Areas of improvement
 - Discuss areas of strength and weaknesses on the problem at your workplace based on the above theoretical knowledge

Hint:

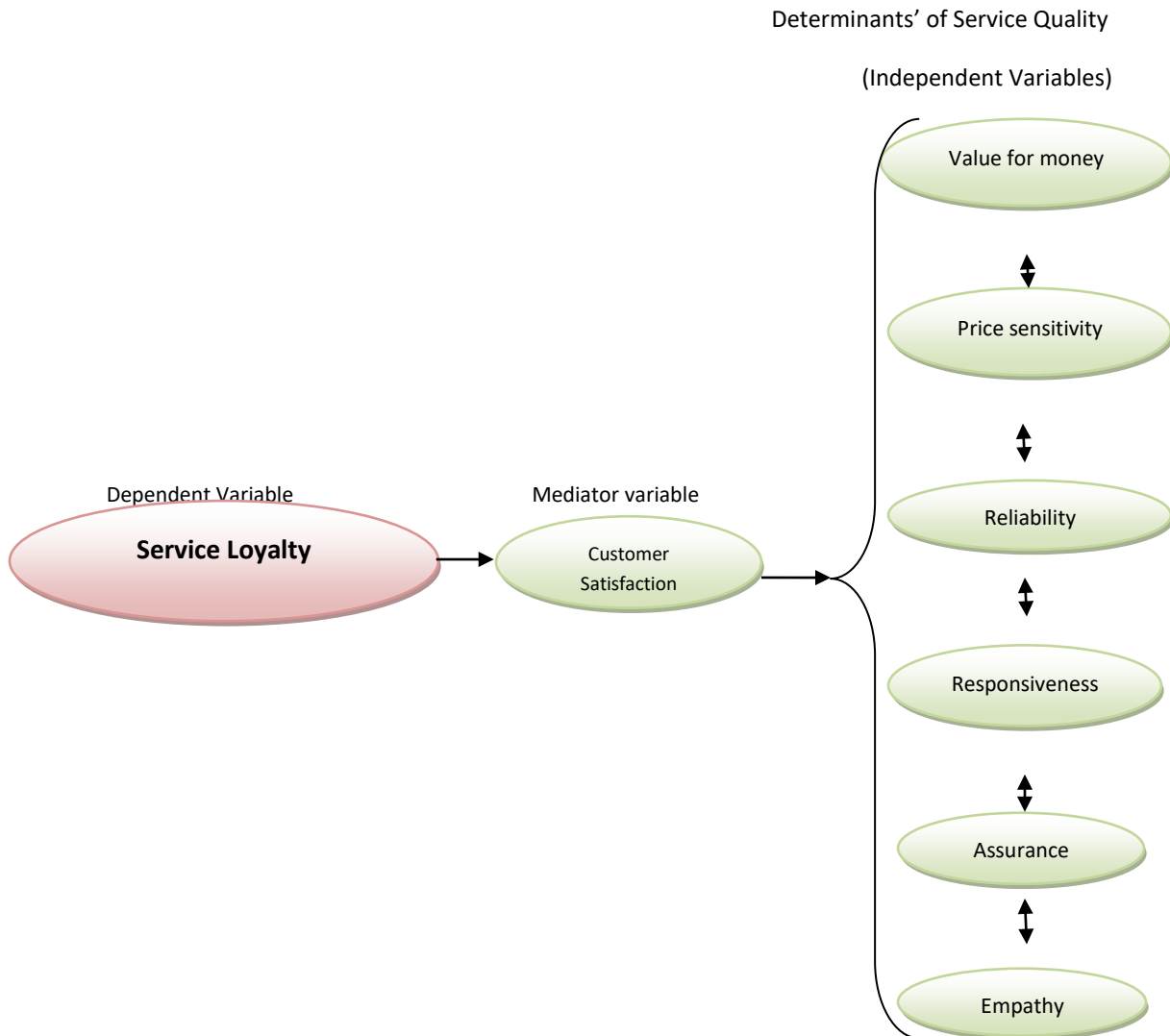
Note: A good literature review and theoretical framework:

- It critically evaluates previous research efforts by summarising, comparing and contrasting previous research. The review needs to point out areas of agreement, disagreement, omissions, biases and unresolved issues (gaps) as well as methodological weaknesses. □ It highlights trends and acknowledges opposing perspectives in the literature.
- It provides strong, logical arguments for the writer’s own point of view on the topic.
- It does not merely summarise previous studies on a study-by-study basis, but rather reorganises and synthesises the work of others.
- It is clearly linked to the goals and objectives of the current study indicated in the study’s problem statement/core research question and research objectives/specific research questions.
- It has a logical storyline.

EXAMPLE

SERVICE QUALITY

- a. Graphically illustrate (draw a picture) the existing relationships between the dependent and independent variables.



- b. Definitions of the research variables and construct for “service quality”

1. Review different definitions of the variable

1.1 Service Loyalty

According to Jin-Li and Chien-Wei (2015), service loyalty can be considered as is both attitudinal and behavioural tendency to favour one product over others; it can be due to customer satisfaction with the product or service, its performance or convenience, comfort and familiarity. However, Rajaguru (2015) define service loyalty as a state of commitment to allegiance. Other credible scholars viewed and defined quality service differently, for example; Shahid (2015) observed the definition of service loyalty as brand loyalty. These authors justified that; any business with high service quality services will undoubtedly meet customer needs whilst remaining economically competitive. On the same light, Begoña Guirao, Antonio GarcíaPastor, María Eugenia López-Lambas (2016) considered service quality as a measure of how well a service is delivered, compared to customer expectations.

1.2 Customer satisfaction

Satisfaction is a construct that can be measured in two ways: as a dependant variable which is determined by customer and service characteristics, and as an independent variable which is predictive of behavior. Shahid (2015) defined customer satisfaction as a psychological outcome emanating from experiences obtained and perceived value by clients or customers. The second article by Jin-Li and Chien-Wei (2015) considered customer satisfaction as a key predictor that influences consumers' behavioural intention by facilitating the intention to purchases the product in the future and recommending the product to other potential customers. In furtherance, the latest definition is derived from Guirao *at el.* (2016), who echoed that customer satisfaction can be viewed as either a valuation process or outcome variable. Another author Rajaguru (2015) defined customer satisfaction as a measure of how products or services supplied by a company meet or surpasses a customer's expectation. This author argued that, in this way, it provides marketers and business owners with a metric that they can use to manage and improve their businesses to meet customer satisfaction.

1.3 Value for money

According to Jin-Li and Chien-Wei (2015), value for money is the total utility received by customers from products and services by a company. Jin-Li and Chien-Wei (2015) perceived value for money as a relative term which evolved from two key perspectives of consumer behavior; the utilitarian and the psychological perception. On the other hand, Rajaguru (2015) believed that value for money can be scientifically expressed as a trade-off between the consumer sacrifices and receivables. Guirao *at el.* (2016) observed value for money is an indicator that can easily assist marketers to anticipate customer satisfaction and to develop pricing and promotion strategies.

Similarly, Shahid (2015) shared same sentiments with Guirao *et al.* (2016) when he reflected that, value for money predicts the customer repurchase intentions, word-of-mouth publicity and loyalty.

1.4 Price sensitivity

Guirao *et al.* (2016) defined price sensitivity as the extent to which price is an important criterion in the consumers' decision-making process. The author Jin-Li and Chien-Wei (2015) similarly defined price sensitivity as the degree to which the price of a product or service affects customer purchasing behaviours. Therefore, the degree of price sensitivity varies from product to product or service to service and from customer to the other.

1.5 Reliability

Shahid (2015) defined product reliability as the probability that a product will perform and maintain its required function, considering stated conditions for a specific period of time. Comparable definition was made by Jin-Li and Chien-Wei (2015) that, product reliability is the likelihood that a product will perform satisfactorily for a specified period of time under stated use conditions. Equally, Guirao *et al.* (2016) defined product reliability as any chance of product's inability to perform its defined mission.

1.6 Responsiveness

Jin-Li and Chien-Wei (2015) defined responsiveness as willingness to assist clients and ability to provide immediate service. Shahid (2015) believed that responding to customers instantly, is another dimension that affects service quality which can be considered as responsiveness. Almost similar definition was made by Guirao *et al.* (2016) that, responsiveness is the ability to give fast and high quality service to customers.

1.7 Assurance

Rajaguru (2015) defined assurance as possession of skills, knowledge, and authenticity of staff; and the staff ability to utilize their expertise to inspire trust and confidence on consumers. All the other authors equally agreed that, knowledge and courtesy of staff members and their ability to convey trust and confidence is considered to be an assurance.

1.8 Empathy

Guirao *et al.* (2016) defined empathy as personalized attention given to customer. However, Shahid (2015) emphasized that access, communication, and understanding the customer are good measures of empathy.

2. Identify main communalities and differences

Regarding service quality, the authors mostly agreed about key aspects of what service quality stands for. Among the similarities of their communalities are; consumer expectations against product performance. However, Jin-Li and ChienWei (2015) differed slightly with them on the aspect of observing service quality as a predicator of consumer satisfaction and loyalty. In other words according to this author's definition, service quality can be used by planners or marketers to determine the possible product consumption based on the predicted service quality.

Predominantly all authors agreed in many aspects of service quality variables, for example, Shahid (2015) and Rajaguru (2015) shared similarities on their definition where they coupled customer expectations and their experience on products services purchased. However, Jin-Li and Chien-Wei (2015) differed with the above two authors that customer satisfaction is a predictor that influences consumers' behavioural intention to purchase. Therefore, according to this author, there is a gap between the consumers' expectations and the actual performance of the product/service leads to consumer satisfaction. Guirao *at el.* (2016) emphasized customer satisfaction valuation process or outcome variable.

Moreover, Rajaguru (2015) mentioned trade-off between the consumer sacrifices and receivables regarding value for money, whilst Chien-Wei (2015) coupled utilitarian and the psychological on the same aspect. Guirao *at el.* (2016) disagreed with others by indicating that value for money predicts the customer repurchase intentions, word-of-mouth publicity and loyalty. This implies that, post purchase behaviour of consumers towards a product, service and or experience stem from the initial expectations the consumers have had in their black box. Furthermore, Guirao *at el.* (2016) considered price is an important criterion in the consumers' decisionmaking process. Similar view was shared by Jin-Li and Chien-Wei (2015) when he emphasized how price of a product or service affects customer purchasing behaviours. These authors believe that companies need to turn themselves as price competent service providers.

Undoubtedly, all the authors shared same sentiment about product reliability. They all emphasized the product performance against its required function and specified period. Further, similar notions were identified among all author regarding responsiveness. They all mention willingness to assist customers and providing immediate or timous services.

3. Determine if the existing definitions can be grouped into different “schools of thought” or if definitions changed over time

Expectation Fulfillment Model (EFM), Lehtinen, 1982. This model predicts experience that is congruent with expectation will result in satisfaction and that which differs will result in dissatisfaction. Zeithaml and Bitner (1996) proposed Means-End Model (MEM), which echoes strongly that the envisaged value is a direct precursor to consumer satisfaction and purchase intention. This theory emphasized that the perceived value is considered to be a higher level construct which is derived from price based value and quality. The main standing point of MEM theory is that, individuals are goal directed and they use product or service attributes as means to achieve desired consequences. On the other hand, the Affective Events theory (AET) argues that staff members react emotionally to developments taking place at their work, and this reaction influences their job performance and satisfaction which automatically impact on the quality of the services they render. AET reveals that emotions are a feedback to accidents in the work place. Such work accidents probes either positive or negative emotional reactions instantly influences a variety of performance and satisfaction variables.

In view of the definitions above against the listed schools of thoughts, the MEM accommodates all the different views of definitions on service quality. The definitions do not appear to be changing over time. The key emphasis of all the definitions revolves around consumer expectations against product performance and how service quality becomes the predictor for consumer loyalty and satisfaction. However, “value for money”, appear to be changing over time. This claim is supported by similar views shared among authors published their findings in 2015 to Guirao *et al.* (2016) and Shahid (2015) when they concurred that, value for money predicts the customer repurchase intentions, word-of-mouth publicity and loyalty. Interestingly, there is common view on price sensitivity and reliability. Subsequently, AET put emphasis on how emotions can play a role in influencing performance and satisfaction.

4. Develop or adopt a suitable definition each variable and the construct

- Service quality - correlation between what customer expect against product performance.
- Customer satisfaction – it is how well the product performance meets or even exceeds customer expectation. Satisfaction as a construct can well be defined as a pleased feeling as a result of something that happened to you.
- Value for money – can be defined as the combination of quality, cost, and sustainability to meet customer requirements. Value as construct

as be defined as something held to deserve, the worth, the importance, or usefulness of something.

- Price sensitivity - is well defined as the degree to which the price of a product or service affects customer purchasing behaviours.
- Product reliability - as any chance or likelihood of a product's ability to perform its defined mission.
- Responsiveness - is the ability to give fast and high quality service to customers.
- Assurance – is best defined as possession of skills, knowledge, and authenticity of staff; and the staff ability to utilize their expertise to inspire trust and confidence on consumers.
- Empathy – is well defined as personalized attention given to customer

5. Discuss how the problem at your workplace does not/fit into the above definition

c. Review theories, conceptual frameworks and/or models used to explain the construct. Comment on:

1. The communalities and differences

Dynamic Process Model (DPM) of service quality provide fundamental believe that, every person gets into each service transaction with previous expectations about what "will" and "should" take place on each of the range of service. This translate into previous expectations of individuals and the actual delivered of service which subsequently lead to aggregate perceptions of the delivered service on each range, together with existing expectations for each dimension of what "will" and "should" happen in future transactions.

Considering Expectation Fulfillment Model (EFM), this theory attempt to anticipate the know-how instead of previous expectations about what "will" and "should" take place as the above model stands. EFM emphasizes customer expectations that directly lead to satisfaction, which in turn, if deviates will result in dissatisfaction. However, Zone of Tolerance Model (ZTM) proposes the notion of zones of tolerance to expound why satisfaction levels differs widely depending on the notion of being evaluated. The gravity of ZTM relies in distinguishing between expectations of outcome and process. Further disparity was viewed through Cognition-Affect Model of Satisfaction (CAM) which solely considers the relationship between the varieties of components of satisfaction has on the disconfirmation paradigm positioned between the pre-

conditions of expectations, attribute performance, and the outcome of satisfaction itself. Lehtinen and Lehtinen (1982) justified the position of Assimilation-Contrast Model of Perceptions (ACMP). According to these authors, ACMP model has a potential of linking the actual product performance' and the discerned product performance with expectations ranging from low to high.

2. The contextual boundaries

In view of the above identified fundamental models, the key elements contained within the models appear to be changing as the result of a different context. An example is the finding made by EFM which claims that experience is aligned with expectations and which directly result in customer satisfaction and that which differs will result in dissatisfaction. Another varying key element is the envisaged value which is considered to be a direct precursor to consumer satisfaction and purchase intention. It is worth noting another varying element of the model, which is rooted around the know-how rather than of previous expectations about what "will" and "should" take place. In conclusion, zones of tolerance took its own stand by expounding why satisfaction levels vary depending on the notion of being evaluated. Therefore, there is clear evidence from the above models that, relationship between the key elements of service quality and satisfaction changes.

3. Implicit and explicit assumptions underlying theoretical perspectives

Guirao *et al.* (2016) on his paper quoted Lehtinen and Lehtinen (1982) on Dynamic Process Model indicating and assumption that the usual SERVQUAL instrument ought to be minimised to the determinants of service quality's key variables of; assurance, responsiveness empathy and reliability. Arguably, Jin-Li and Chien-Wei (2015) mentioned (Lehtinen and Lehtinen (1982) on Assimilation-Contrast Model of Perceptions assumed that SERVQUAL that the measures of service quality in Information Technology companies differs compared to individual Information Technology applications, by measuring and contrasting user expectations and perceptions of the Information Technology. Rajaguru (2015) also evaluated the instrument and suggested that the constructs of service quality be added to the DeLone and McLean model. Interestingly other scholars endorsed this assumption, whilst obviously others refuted it. However in his paper Shahid (2015), he warned utilization of SERVQUAL instrument due to its nature of computing the comparative process as a difference score. The author encouraged avoidance of different scores of SERVQUAL instrument; he advised scholars to use only the perceived performance portion of the instrument.

4. Empirical evidence available

The empirical evidence witnessed from the findings of the paper written by Shahid (2015) suggests that there are only four key dimensions of service loyalty, which are; purchase intentions, word-of-mouth communication; price sensitivity; and complaining behaviour. Guirao *et al.* (2016) on his study on “Importance of service quality attributes in public transportation: Narrowing the gap between scientific research and practitioners' needs”, their analysis yielded an intricate behaviour of service loyalty correlation at the stage of individual dimensions with remarkable differences across industries. It is worth noting that Jin-Li and Chien-Wei (2015) revealed that, the process and management related factors include all the centre of quality systems, particularly the human element.

5. Unresolved issues and questions

The main questionable demand could be aligned to the appropriate definition of service quality, the appropriate and relevant model for service quality measurement. Also lack of a conceptual basis of a dynamic process is considered to be an unresolved issue. Furthermore, unresolved issues can be attributed to consumer expectations, the structure of the measurement instrument and the dimensionality of service quality in various contexts.

6. Areas of improvement

There is a need to establish the relationship between the conceptual frameworks (theories) on service quality and quality improvement strategies. Further, there is an importance for improvement of concepts on the role played by customer expectations and context-specific instead of generic functional and technical quality dimensions.

7. Discuss areas of strength and weaknesses on the problem at your workplace based on the above theoretical knowledge

NB: THESE NOTES ARE BY NO MEANS COMPREHENSIVE; THEY ARE MERELY A TOOL TO FACILITATE FURTHER LEARNING. YOU THE STUDENT, HAVE THE RESPONSIBILITY TO CROSS-CHECK AND REFERENCE THE MATERIAL TO OTHER SOURCES.