

Master One Research Methodology Syllabus

Section of English, Faculty of Letters and Foreign Languages

Lecture Three:

Theme 2, Sections: 1 t

I. Objectives

At the end of the theme, you should be able to:

- introduce the concept at the heart of any research project- the research problem;
- describe how a research problem is selected; and
- discuss how a research problem is delimited, and evaluated.

II. Content

- 1. Scientific Thinking
- 2. What is a Research Problem?
- 3. Selecting a Research Problem
- 4. Sources of the Problem
- 5. Defining a Problem

1. Scientific Thinking

In social sciences, a research work is often oriented towards the solution of a problem or to seek an answer of a question. The first step of this process is to identify a problem. To do this, a researcher is required to use scientific thinking. But, what is scientific thinking?

Scientific thinking is usually defined as an inductive-deductive mode of thinking or reasoning. In this sense, induction is to move from particular to general; whereas, deduction is backward. It is to move from general to particular. Ultimately, in such a mode, a researcher is expected to explain the uniformities of nature by appealing to experiences.

The scientific thinking starts with facts and continually returns to facts to test and verify its hypotheses. It often aims to establish the relationships between the variables through evidences. The sources of these evidences are based on some methods. Examples of these methods are customs and traditions, authority, personal experiences, self-evident, proposition, and scientific inquiry (Singh, 2006).

2. What is a Research Problem?

A research problem, in general, refers to some difficulty which a researcher experiences in the context of either a theoretical or practical situation and wants to obtain a solution for the same. Thus, a research problem is one which requires a researcher to find out the best solution by which cause of action the objective can be attained optimally in the context of a given environment. This stage requires an enquiring mind, an imagination, and an eye for inconsistencies and inadequacies in current measure. It is often useful in identifying a specific problem (Kothari 1990; Walliman, 2001).

In particular, some components that make-up a research problem can be examples like the ones that we state below:

- There must be an individual or a group which has some difficulty or the problem.
- There must be some objective (s) to be attained at. If one wants nothing, one cannot have a problem.
- There must be alternative means for obtaining the objective (s) one wishes to attain. This means that there must be at least two means available to a researcher for s/he has no choice of means, s/he cannot have a problem.
- There must remain some doubt in the mind of a researcher with a regard to the solution of alternatives. This means that research must answer the questions concerning the relative efficiency of the possible alternatives.
- There must be some environment (s) to which the difficulty pertains (Kothari, 1990).

Thus, this initial stage in research requires an awareness of current issues in the subject and inquisitiveness and questioning mind. On this point, Walliman (2001) suggests a list of features that one should follow and look for it in order to obtain a research problem. This list concerns the following ideas:

- The research problem should be a great interest to you.
- The research problem should be significant.
- The research problem should be delineated.
- The researcher should be able to obtain the information required.
- The researcher should be able to draw conclusions related to the problem.
- The researcher should be able to state the problem clearly and concisely (p. 22).

3. Selecting a Research Problem

The research problem undertaken for study must be carefully selected. A problem must spring from the researcher's mind. The factors which need to be considered in the selection of research problem are both external and internal criteria. External criteria have to do with matters, such as novelty, and importance for the field. Internal criteria, on the other side, involve considerations as interest, training, cost, and time.

According to Good and Scates cited in Sing (2006), the criteria for the selection of the problem include matters, such as:

- Novelty and avoidance of unnecessary duplication.
- Interest, intellectual curiosity and drive.
- Training and personal qualifications.
- Importance for the field.
- Special working conditions.
- Approachability of the sample.
- Cost.
- Administrative cooperation.
- Time factor.

Singh (ibid) referred to McShan who has proposed an objective guide for judging the merits of a problem. A set of questions may be raised for this purpose. These are:

- Is the problem really important?
- Is the problem interesting to others?
- Is the chosen problem a real problem?
- Am I able to state hypotheses from the problem?
- Do I understand something new from this problem?
- Will I be able to select a sample from which I can target the population?
- Will my proposed data-gathering instruments actually give the information which I want?
- Is the study, including the application of its results, practical?

4. Sources of the Problem

To select a research problem, a researcher can consider some sources. Examples of these are:

- Personal experience of the researcher in the field.
- Literature review on a research topic.
- New innovations, changes, and developments in a given research area.
- Research contacts with experts in a given research area.

5. Defining a Problem

According to a number of research methodologies, a problem clearly stated is a problem half-solved. This means that there is a need for defining a research problem as an initial step in a research process. Besides, it is usually recommended by research methodologists that the investigated problem must be defined unambiguously to discriminate the relevant data from irrelevant data. A proper definition of a research problem will enable the researcher to be on the right track; whereas, an ill-defined problem may create hurdles (Kothari, 1990).

For Singh (2006), to define a problem means to pinpoint the problem or defining a problem to reach the core of a problem i.e., threads are analysis'.

(a) Need of defining a problem:

The definition of a problem serves the following purposes:

- The definition of a problem sets the direction of the study.
- The definition reveals the methodology or procedure of the study.
- The definition helps the researcher to control subjectivity.
- The definition of the problem suggests and specifies the variables to be taken up into the investigation through a problem involved in so many variables.
- The definition makes the research work practical.

(b) Precautions are to be taken in identifying the problem:

The following precautions should be taken into consideration for identifying a problem.

- The words used for defining a problem should have a single meaning.
- The statement of the problem must be brief but comprehensive.
- The assumptions are to be recognised for the study.
- The problem should have practical importance in the field.
- The definition or statement of the problem should have certain rationale.

(c) The following steps are to be followed in defining a problem:

- The researcher should have to develop a conceptual framework of the problem.
- Delimiting the elements of the problem.
- Classifying the elements in the homogeneous group.
- Locating the key-concepts in the conceptual framework.
- Evaluating the theoretical security of the problem.
- The final form of the statement can be given into verbal form to a conceptual framework of the problem.
- Deciding the practical difficulty in conducting the study (p.27).