LECTURE- 6

Steps in Research Problem Formulation

If one does not know to single out the research problem, he cannot enter into research work. Therefore, he should know how the problems are understood and formulated. In a scientific inquiry, the formulation of general topic into a specific problem is the formulation of research problem. The researcher must try to understood the whole problem thoroughly and then rephrasing the same into meaningful terms from an analytical point of view. Therefore, the following points are suggested as the steps for the formulation of research problem.

• Statement of problem in general way

• Understanding the nature of the problem

• Surveying the available literature

• Developing the ideas through discussion

• Rephrasing the research problem.

Criteria of a Good Problem

Fred. N. Kerlinger has defined a good problem as an inquisitive sentence statement that asks what relation exists between two or more variables. The research questions, research objectives and the hypotheses of the research lie on the problem statement of the research work. So for selecting research questions, setting research objectives and the hypothesis of the research selected problem should be an ideal one. An ideal research problem must have the following three main criteria:

1. *The problem should express a relation between two or more variables.* The topic of the research work reflects the research problem and it would be inquisitive and interesting if stated in terms of relation between variables.

2. *The problem should be stated rigidly and unambiguously.* If a research problem has ambiguity and haziness in its interpretation consequently it affects research design and the whole research process and hence the result of the study. If a formulation of research topic has some dilemma then these should be identified and eliminated carefully to make a sensible research question

3. *The problem statement should be such as to imply possibilities of empirical testing.* In case, when problem statement expresses the relationship between two variables and is stated rigidly but if the testing the relationship in the circumstances of adopted research design and within the

available facility is impossible then the selected problem cannot be good problem. Thus, a good research problem should always be linked with the research design and it must consider the available facility and capability of the study.

Problem Statement

Developing a problem statement includes some combination of the interrelated tasks like generation of an issue, exploration of an issue, and from that exploration determining worthwhile research questions. The problem statement has thus the following three characteristics:

- It should raise a question about a relationship between variables.
- The relationship between the variables should be stated and explained clearly.
- The problem statement should suggest a method of researching the question.

A statement of problem could be stated either in declarative or in interrogative form.

EXAMPLES

Declarative: Factors contributing to the excessive absenteeism among Nepalese workers.

Interrogative: Why is absenteeism so high among workers in Nepalese organizations?

The following are some examples of well-defined research problems. These are stated in interrogative form:

EXAMPLES

- To what extent do age, education, length of service, level of earning, and place of residence of employees predict occupational aspirations?
- Do long work hours, lack of development opportunities, and discrimination account for the lack of inward mobility of women in civil service?
- Can cultural differences account for the differences in the nature of hierarchical relationships between supervisors and subordinates?

Problem statement that appeared in a research report is given here as an example:

EXAMPLES A review of research studies on leadership and age (Kabacoff & Stoffey, 2001) reveals the controversy and recent interest in examining the relationship between the variables. These studies explain some reasons for the importance of the association between age and leadership. In the first place, they explain that older workers remain in employment for longer years and they work side by side with younger members in various work and leadership roles. It

is no secret that today's workers, as a result of several reasons; live much longer than their counterparts in the last generation.

As older and younger employees abound in organizations there is the need to manage both of them effectively in order to realize organizational goals more fully. Both age groups have something to offer: technology has driven the rapid promotion of younger workers while experience has made the older worker very relevant. In addition, today's flatter organizations give greater interaction between younger and older workers and the practice of leadership is no longer an exclusive domain of the older people, as it used to be. In several organizations, therefore, top management team will comprise of multigenerational members. It is argued that the ability to understand, learn, and effectively leverage multigenerational diversity will be necessary for organizations now and in the future to build and maintain high performance systems (Kabacoff & Stoffey, 2001, p.2).

Another reason that underscores the importance of the study of the relationship between leadership and age is the finding by kakabedse. et al. (1998) that age, along with other time-related dimensions, has a powerful effect in shaping the attitudes and hence the behaviors of senior leaders within organizations. In a study undertaken in Australia, three leader profiles emerged - the radicals, the Bureaucrats and the team players. The radicals were the youngest (between 26- 35years), the team players were the oldest (56 years and over), while the bureaucrats were in between (45-55 years). Older workers were mature, saw challenges and had longer-term perspectives in managing people and systems. On the other hand, younger employees were competitive, result oriented, energetic and adopted an open style management.

There is a need for further study of the leadership styles and behavior of younger versus older organizational leaders. The results of such a study will hopefully identify similarities and differences of younger versus older workers for use by managers in directing the affairs of their organizations towards attaining their goals efficiently and effectively. For example, are there some tasks, such as computer-related activities, which may be better performed by younger, rather than old workers? On the other hand, are there some personnel projects that are better managed by older, rather than younger workers? Answers to such questions may be helpful in formulating and revising some organizational policies.

Source: Oshagbemi, T. (2002). Age influence on the leadership styles, *Employee Relations,* 26 (1), 37-52.

Research Questions

Research is intended to help us learn something new. The research process encloses the research questions, the most important element of any research, for the effective execution of research activity. We often define our research goals in terms of questions and hence research questions

describe the ideas contained in the research objectives. Research questions are the interrogative form of research objectives. Research questions are such questions that can help the researcher learn something new- fruitfully Formulation of research questions is the real starting point in preparation of a research process. The data required to be collected for the study are determined by the help of the research questions. The research design is necessarily based on the research questions; the research method to be adopted for the study of specific problem is also set on these questions. The data analysis tools and methods, result interpretation procedures and writing phases of the reports are also determined by the research questions. The questions have to be related to three aspects: What, Why and How? What question seeks descriptions, why question seek explanation and understanding and how question seek interventions to bring about change. If the researcher does not have clear formulated research questions at the starting point of the research in his practical field, then He (she) may face different challenges to precede the direction of research. In such case he (she) may have some loosely connected ideas about what should be researched.

Types of Research Questions

Generally there are three types of research questions, they are: What questions (concerned with description), Why questions (concerned with explaining causes) and how questions (concerned with bringing about change). 'What questions' pertain to describing the characteristic of trend and pattern in the given situation? For example: What are the types of community involved in transformation of skills?, What are the socio economic characteristics of community?, what are the needs of the community ? etc. Why question relate to the cause or reasons for the characteristics of the particular phenomenon and the behavior of the individual involved. They also explain the relationship between events and activities. For example: Why do drug abusers commit thefts? , Why does stressful living result in heart attacks?, Why do some people use a product while other do not? How questions are concerned with bringing about change and the outcomes of change. For example: How has caste system changed in Nepal in last century?, How does technology create unemployment?, How do MC health service affect infant mortality? Besides these three types of question different authors have proposed different types of research questions. Lin (1993) has proposed four more types of research questions they are Who, Where, How many and How much. Similaly Hedrick et al (1993) had identified four types of research questions as: descriptive, normative, correlative and impact. Marshall and Rossrnan (1995) have classified research questions as theoretical, site-specific and population-specific.

Identification of Research Question

The main purpose of formulating research question is to define the scope of the research. It is used to determine what is to be studied and the extent to which it will be studied. Neuman _ (1997) offered some techniques of developing research questions, which are:

- Record all questions that occur in mind after reading literature or after discussions with other or after thinking on various aspects of study.
- Review all these questions whether each question is necessary and delete those which are beyond the scope of the study. This will also remove overlapping between questions.
- Classify questions on the basis of their nature, i.e. What, Why and How questions
- Examine the scope of the questions for availability of time and money; chose these which can be answered within manageable time and resources.
- Separate major or key questions (which for the core of the research) from subsidiary questions.