Brief Guideline to Develop a Questionnaire for Social Science Research

A questionnaire is a technique for collecting data in which a respondent (the person who responds to the question) provides answers to a series of questions. Developing a questionnaire for collecting data (information) needs effort and time. However, by taking a step-by-step approach to questionnaire development, you can come up with an effective means to collect data that will answer your research question.

Step-1:

- Identify the goal of the questionnaire. Nature of information(s) you want to gather with your questionnaire aiming to your main objective is to be decided.
- Come up with a research question which may be one or more; but this should be the focal point
 of the questionnaire.
- Develop a hypothesis that is to be tested. The questions in the questionnaire should be aimed at testing the hypotheses which may be accepted or rejected following data analysis.

Step-2: Type(s) of question(s) to be chosen

Depending on the gathered information, there are several possible types of questions that may be included in the questionnaire, each with unique pros and cons. Here are the types of commonly used questions on a questionnaire:

Dichotomous question: This type of question generally become of "yes/no" question, but may also be "agree/disagree". It is the quickest and simplest question to analyze, but is not highly sensitive.

Open-ended questions: These questions allow the respondent to respond in their own words. They can be useful for gaining insight into the feelings of the respondent, but can be a challenge when it comes to analysis of data. It is recommended to use open-ended questions to address the issue of "why."

Multiple choice questions: These consist of three or more mutually-exclusive categories and ask for a single answer or several answers. Multiple choice questions allow for easy analysis of results.

Rank-order (or ordinal) scale questions: Such types of questions are asked to the respondent to rank items or choose items in a particular order from a set. For example, the respondent may be asked to order five things from least important to most important.

Rating scale questions: These questions allow the respondent to assess a particular issue based on a given dimension. A scale that gives an equal number of positive and negative choices, like "strongly agree" to "strongly disagree."

NOTE: All these types of questions have both advantage and disadvantages with respect to data analysis. However, these limitations may be ignored by the children for CSC projects. They are free to choose either any one or better combination of questions for their conveniences.

Step- 3: Developing questions for the questionnaire

The questions for the questionnaire should be clear, concise, and direct. This will ensure to get the best possible answers from the respondents.

- The questions need be short and simple. Complex statements or using technical jargon should be avoided, as it will only confuse the respondents and lead to incorrect responses.
- Only one question is to be asked at a time.
- Beware of asking any question related to private or "sensitive" information.
- Determine if you will include an answer such as "I don't know" or "Not applicable to me." While
 these can give your respondents a way of not answering certain questions, providing these options
 can also lead to missing data, which can be problematic during data analysis.
- The questionnaire should begin with the most important questions. This will help in gathering important data even before the respondent may be distracted and/or impatient by the end of the questionnaire.

 Do not ask biased questions. Questions that encourage respondents to answer in particular ways are called biased. Avoid leading or highly inflammatory words

Step-4: Length of the questionnaire

- The questionnaire should be as short as possible as most of the respondents will prefer to answer
 a shorter questionnaire. So, developing a concise questionnaire without compromising the scope
 for collecting necessary information needs careful attention. Unnecessary and irrelevant questions
 must be avoided.
- Only questions that are directly useful to the research are to be incorporated. It may be noted that a questionnaire is not an opportunity to collect all kinds of information about the respondents.
- Asking needless questions to be strictly avoided.

Step-5: Writing your questionnaire

(i) Introduction of interrogator (the person who asks question): There should be an introduction of the interrogator (the person who asks question) explaining who is he or she. The interrogator should clarify if he/she works alone or as a part of a team. Name of the institution or organization he/she belongs to need be spelt out. Here are some examples:"My name is Shyam Sundar and I am one of the creators of this questionnaire. I belong to ABC institution/school".

(ii) Explain the purpose of the questionnaire. Many people will not answer the questionnaire unless understanding its purpose. Explanations need not be long; instead, a few concise sentences will do the trick. Here are some examples:

- I am collecting data regarding the attitudes of people towards organic farming in the area. This information is collected for my/our project.
- This questionnaire will ask you 25 questions about your farming practices and crop production.
 We will attempt to find relation between nature of farming practices and quality of crop for your healthy living.

(iii) Estimate how long the questionnaire will take: Before someone sits down to answer the questions, it may be helpful for them to know whether the questionnaire will take them 30 minutes or 1 hour. This will help the respondent to be mentally prepared to sit for.

Step- 6: A pilot study is a pre-requisite

Prior to starting the survey a test to be carried out with the questionnaire asking some people, known personally (they will not be included in any results stemming from this questionnaire), and be prepared to revise it, if necessary. Plan to include 5-10 people in the pilot testing of your questionnaire. Get their feedback on your questionnaire by asking the following questions:

- Was the questionnaire easy to understand? Were there any questions that confused you?
- Do you feel the questionnaire was worth your time?
- Were you comfortable answering the questions asked?
- Are there any improvements you would make to the questionnaire?

NOTE:

- At the bottom of the questionnaire provision should be kept for signature with date of both Interrogator & Respondent
- 2. It is important to decide the sample size, which must be representative of the target population as well as proportionate for drawing conclusion.
- 3. During tabulation and subsequent analysis of the data gathered through survey, all the respondents should be assigned a number, so that no name of the respondent will appear in the table or analysis. Example: Mr. Ram- Respondent 1; Mrs. Kaveri Respondent 2.. so and so forth.
- 4. Sometimes, it is a standard practice to get the consent of the respondent in a Consent Form where the respondent states that she/he agrees to provide the data and is willing to share the data for the purpose for which it was collected etc. It is better to consult a researcher to see if a written consent is required before the planning of the study.