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“UNDERSTANDING THE CONSTRUCTION OF QUESTIONNAIRE”

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**ABSTRACT:**

The questionnaire is a research tool mainly used for collection of information in various surveys, feedbacks. The questionnaire construction is an important step to be carried out before administering it to the respondents. The questionnaire elicits the information mainly of the attitudes, feelings, and tendencies about a particular topic or concept. **Aims and objectives:** the main objective of the study is to understand the concept of questionnaire designing. **Material and methods:** available books, handbooks, original articles, academic databases, electronic search engines like Google are used to thorough understanding of the concept. **Discussion:** the questionnaire construction is an important technique to be acquired for development of a good questionnaire. Furthermore validity and reliability of the questionnaire is also should be tested for its reproducibility. The questionnaire construction involves important aspects like types of questionnaire, types of questions, modes of administration of questionnaire etc. to be considered. **Conclusion:** The questionnaire consists of various types of questions to be put with a defined order, carefully phrased and to be presented in good aesthetics. There are various modes of questionnaire to be adopted as per study design. Parts of the questionnaire should also be developed sensibly to satisfy the objectives of the questionnaire.

**Keywords:** questionnaire, good questionnaire, questions

## **INTRODUCTION:**

Questionnaire is a group of questions intended to collect the information<sup>1</sup> from people. It is a series of questions to collect the data from people. Questionnaires are used for surveys, satisfaction surveys, feedbacks and marketing business and social research. The question which can elicit the information e.g. what people think, what people feel, what people want, what people know etc. are put together and respondent are identified and data is collected. Typical phenomena like pain, attitudes<sup>2</sup>, belief, behaviors, fear, satisfaction etc. are measured with the help of questionnaire.

The construction of the questionnaire requires understanding the multiple aspects regarding the questionnaire. The most important thing to consider while constructing questionnaire, is to make it simple to be easily understood by the respondents. The questionnaire can have multiple types to be adopted e.g. structured and non-structured interviews, paper and pencil method etc. as per study design. Nowadays online administration through mails, using Google forms with good use of computing technology are common. Every method has its advantages, disadvantages and limitations. Researcher has to think and choose a method as per his study.

The article is the review of concept of questionnaire and understanding the questionnaire construction.

## **AIMS AND OBJECTIVES:**

### **AIM:**

1. To study the concept of questionnaire and its construction

### **OBJECTIVES:**

1. To study the types of questionnaire, characteristics of good questionnaire,
2. To study and understand the types of questions, their ordering, phrasing and modes of administration of the questionnaire
3. To understand the tests of reliability and validity of a questionnaire.

## **MATERIAL AND METHODS:**

All available literature for the conceptual study of questionnaire and its construction in various forms like textbooks, handbooks, magazines, original research articles, and search engines like Google etc. are used and thoroughly studied for the conceptual understanding of questionnaire.

## **LITERATURE REVIEW:**

The questionnaire is one of the research instruments to collect a wide range of information from large number of people. The individuals to whom questionnaire is

administered are called as respondents. Understanding the mentality of the respondents and accordingly planning of the questionnaire is the key for an effective questionnaire. Following are the characteristics of a good questionnaire:

1. **Validity:** questionnaire should measure the variable what it is meant to measure. A variable is a character which keep on vary, which keep on changing.
2. **Reliability:** questionnaire should measure the variable consistently and can be reproducible. If anyone wants to use the same questionnaire in future, it should produce the same results for that variable measurement.
3. **Unbiased:** questionnaire should estimate the real value of the variable.
4. **Discriminating:** it should have the ability to separate between the respondents as per their responses and non-respondents i.e. it should get analyzed with respect to responses.
5. It should be in Simple and understandable language.
6. It has to include all necessary information regarding the variable.

**General Steps<sup>3</sup> to be followed to develop a questionnaire:**

Below mentioned rules are useful while construction of questionnaire:

1. **Check for pre-existing questionnaire:** this is an important start step. If any pre-existing questionnaire is available, relevant to your study, you can use the same with the due authoritative permission. If no questionnaire is available, you have to construct your own one.
2. **Enlisting of the variables:** detailed list of variables under study should be done. The types of variables should be decided e.g. exposure variable, outcome variable, dependent variable, independent variable etc.
3. **Extensive reading and consulting the experts:** the variables under the study should be searched thoroughly and an extensive deep reading and understanding should be done. You can consult 3-4 expertise in the field who may guide you for the type of questions to be included in questionnaire.
4. **Collection of questions and deleting away the irrelevant:** For each variable, make as many as questions covering these with the use of WH type questions. Now delete the question which seems to be irrelevant and less significant or which gives you no information out of it. In this way, you will have less number of questions which are strongly relevant to your variables.

5. Drafting and revising: now write a rough draft questionnaire, revise it and show it to the 3-4 expertise for deleting out more irrelevant questions from it.

6. Pretesting: pre-test the questionnaire on your population of interest. You may pretest it on your friends, colleagues. This will further revise the questionnaire. Now pretest this revised version on a small sample and make the final revision.

7. Pre-coding: this is the final stage. Do the pre-coding of final revised questionnaire; get the printouts by formatting it.

Forms of questionnaire:

1. Structured: It is one in which the sequentially arranged, ordered, pre-scheduled questions are already written, respondents will have to answer them.

These are used in structured interviews, survey form

2. Unstructured: in this, the questions put to the respondent are flexible as per respondent, and has no order or sequence. E.g. interviews taken by reporters

3. Semi-structured: mixture of both above.

Types of questions<sup>4</sup>:

1. Open ended question: the question is ended with a blank space and not given the structured choices. Here the scope is given

to the respondent to express the answer in his words using his knowledge.

2. Closed ended question: the questions are supported with list of all possible answers and a correct answer. Respondent just have to tick or encircle the correct answer.

3. Likert scale questions: these are the questions which can analyze the extent to which respondent agree or disagree to your statement. A balanced range of numbers is given with a midpoint extending to both sides as agree or disagree and respondent just have to encircle the number what he feels as his extent of agreeeness or disagreeeness.

4. Rank ordered questions: the question is given the multiple answers, respondent have to order them by giving the numbers as 1,2,3....

6. Some more types: other types of questions are dichotomous, contingency questions etc. Other forms like story completion, picture completion, sentence completion, word association are also being used.

**Important considerations:**

1. Parts of the questionnaire: the questionnaire starts from introduction which gives the information of the study purpose and explains what it is about. The introduction also covers the basic

information of the respondents like name, age sex, address, (if applicable). It also has the complete details of administrator. General instructions are written in the introduction. An informed written consent is considered in the introduction when the sensitive questions are asked. The declaration of confidentiality is also included in introduction.

The questions comprise main part of the questionnaire. Number of questions depends upon the nature and scope of the variable under the study. last part of the questionnaire is the closing the questionnaire with sincere thanks to the respondents. At the end of the questionnaire the details regarding estimated completion time, deadline for returning, return address and thanking should be done.

2. Your approach: the approach of the researcher is of pivot role to develop the questionnaire. The researcher should figure out the target population, how quickly the information is needed, budget for the survey etc.

3. Timing and convenience: the instructions regarding the deadlines of timing that respondents should submit the questionnaire have to be specified. Or if the respondent can attend the survey, as per his convenience, should be specified.

The feedbacks are generally submitted just after the event. The confidentiality is also should be specified.

4. Phrasing the questions: shorter the questions, easy to be understood and more likely the response rate. The length of question should not be more which may confuse the respondent. If required the medium length introduction and instruction is given for a group of questions. Avoid double questions, avoid confusion in the questions. Avoid unnecessary technical jargon. Make the questions more and simple. Order the questions in the way so that the there should be a unidirectional flow of information elicited from the respondent side.

5. Presentation layout: the appearance of the questionnaire should be made such that it should look professional. The front cover should have title, details of administrator, purpose of the study. Using the booklet format make it looks official. Avoid using graphics. Keep plenty of white space by minimizing the lengths of questions.

6. Use of technical aids: use of advanced technical graphics e.g. satisfaction meters, emoticons etc. in a legible manner makes the respondent easy to answer. It also makes the questionnaire attractive.

7. Methods of delivery and collections: postal, telephonic and Email are some routes of delivery of questionnaire. Face to face interviews are also one of the ways of administration. Choose the method of delivery and collection carefully considering the time and money.

8. Validity and reliability testing<sup>5</sup>: Validity is the degree to which a measurement measures what it meant to measure. Various forms are Face validity, Content validity, Predictive validity, Convergence validity, Discriminant validity, Concurrence validity, Known group validity, Factorial validity, Hypothesis testing validity. Reliability is the degree to which the results obtained by a measurement can be replicated. Various tests for reliability are: Test – retest reliability, Alternate form reliability, internal consistency reliability, Statistical Package for Social Sciences. This can be done by consulting subject-matter experts, using questionnaire construction guidelines e.g. Tailored Design Method, or those produced by National Statistical Organizations. Empirical tests like conducting cognitive interviewing, small pretest of the questionnaire, estimating the measurement quality of the questions: using test-retest, quasi-simplex, or Multitrait-multimethod models etc.

#### **DISCUSSION AND CONCLUSION:**

The presented study was aimed to understand the concept of questionnaire and its construction. The researcher has to first decide the information required. Then the work should be done to identify the target respondents as per needs of the research. Before actual designing of the questionnaire, the method of administration of questionnaire is also should be fixed. Then the process of actual content building of the questionnaire starts. The steps above discussed are helpful to carry out stepwise questionnaire designing. Phrasing, ordering has to be carefully done as per study needs. The pretesting is also should be carried out to increase the relevancy and accuracy of the questions. Finally it will be used to as questionnaire for mass population.

From the above discussion, it can be concluded that, the questionnaire construction is a complex process which needs stepwise quality improvement. An effective questionnaire has relevant questions, which will provide the answers to the research variables. The responses given will be valid if the questionnaire is effective one.

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