

**INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

**NPTEL**

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**Marketing Research**

**Lec -12**

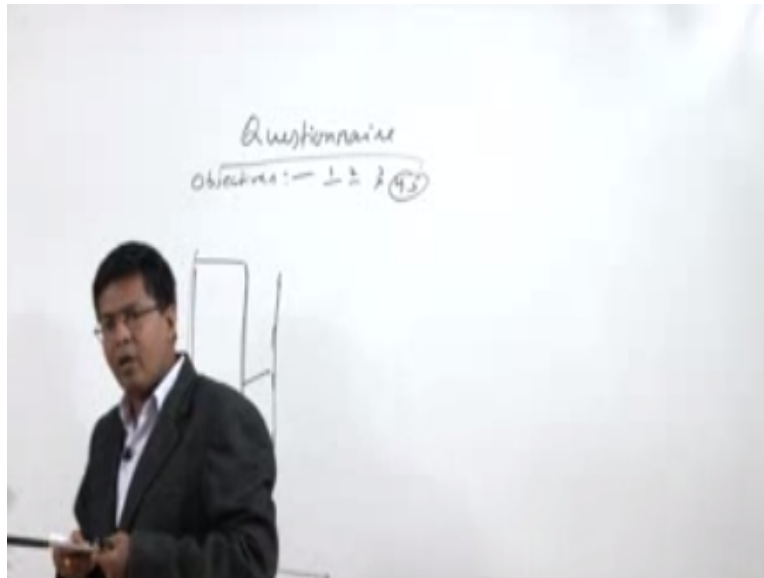
**Questionnaire & Form Design**

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Department of Management Students  
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Welcome friends to the session of questionnaire and form design, in the last session we just finished with scale development process where I explained okay, what is the role of a scale, how scale is important and how should you develop a scale right, so in connection to the scale development in research in social science research we do not have a basically, we do not do it in a lab so what we do is we collect data from the public or the respondent right.

So to how do we collect the data in such a manner that there should be very little error in it, is that an important question. Questionnaire design I always say in any class is one of the most important part of a research process in the social science gambit, so what exactly and why is its I am saying it is important, because you see suppose you if have a questionnaire, a questionnaire is something where.

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You try to collect all the answers to your questions that you have in mind as a researcher right, so suppose you have certain objectives okay, objectives so when you have the, what are the objectives you have in mind let us say 1,2,3 objectives you have in mind. Now to get the answer to these objectives you are asking the questions right, so now the questions could be asking different way.

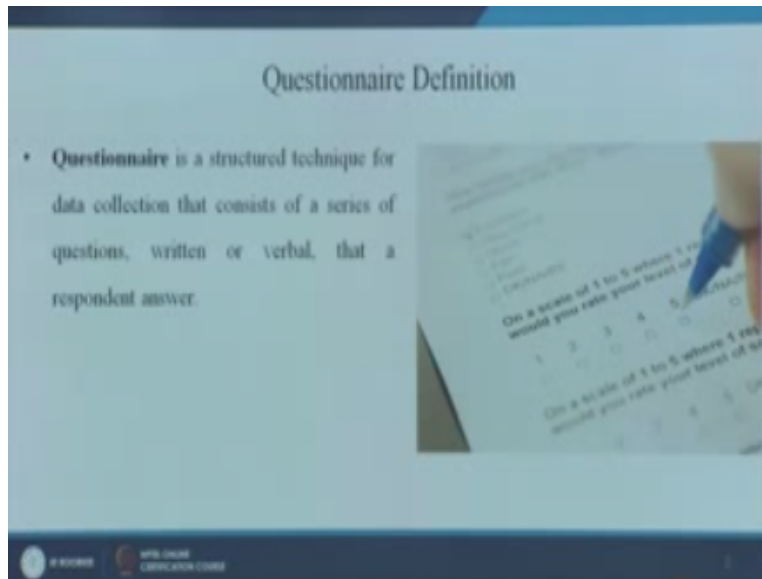
If you are not very serious in designing a questionnaire then you might be sometimes may varying 1 and 2 but you might have missed 3 you do not ask the questions pertaining to the objective 3 or you are ask in a way which is very complicated right, it is not very clear to the public or the respondent, he is not understanding it or it could be like you know you have asked beyond 1,2,3 you have asked something you know more questions which could have been 4 or 5 objective.

But this 4<sup>th</sup> and 5<sup>th</sup> objective are not part of your basic research study, so one has to be careful because everybody has a this is the human habit that we love our child you know we love our basic ideas, we feel that is it is very good and very everything is very important. But it is not so, you have to look it from a different point of view from a different perspective right. Suppose there is a, this is where you should be our question, should be our objective should be you know there has to be a balance.

You cannot cross this boundaries right, you cannot cross this boundaries, your questionnaire cannot be given in extra space you have to stay within this boundary only right, because this is if

we start doing it then there could be numerous questions which can be added up, they might be related to your subject, but that is not exactly your objective of the research. So please be careful do not love your ideas so much that you get into a trap, this is very important.

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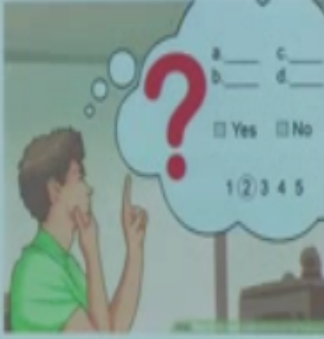
Now a questionnaire is a structure technique for data collection that consists of series of questions written or verbal that a respondent answers, okay. Let me tell you in most of the questionnaires that I have deliver till now in on different research areas it has been never possible for me to develop a questionnaire correctly on the first or second attempt. I have even gone to an you know maximum of I can think is 17 times that are build up questionnaire right.

So then you saw I was very perfect of the first time, so I do not want to be also nobody can be a perfect on the very first hand, so very time you do it, you show it to somebody you see there is an lacuna there is a weakness in the questionnaire, right because once you have designed the questionnaire, once you have collected the data from the respondents in the market then the point is you cannot go back, there is no possibility for you to again redo or revisit the process. So it has to be done only once, so when it has to be done once please be extremely, extremely careful that you do not give away a very poor questionnaire okay. a questionnaire is a formalized set of questions for obtaining the information right.

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### Questionnaire Objectives

- It must translate the information needed into a set of specific questions that the respondents can and will answer.
- A questionnaire must uplift, motivate, and encourage the respondent to become involved in the interview, to cooperate, and to complete the interview.
- A questionnaire should minimize response error.



The illustration shows a person in a green shirt looking thoughtful, with a hand on their chin. A thought bubble above them contains a large red question mark. To the right of the question mark is a small questionnaire form with four options labeled 'a', 'b', 'c', and 'd', two checkboxes labeled 'Yes' and 'No', and a scale from 1 to 5.

Now the objectives, now what are these objectives he is thinking correct, so according to the objectives how should he design his questionnaire right, it must translate the information needed into a set of specific questions that the respondents can and will answer, two things he should be able to answer it is not that if you ask me about let us say something about biotechnology I might not be able to answer right, or if you ask me something on let us say you know on some kind of his space research I might not be able to answer you right.

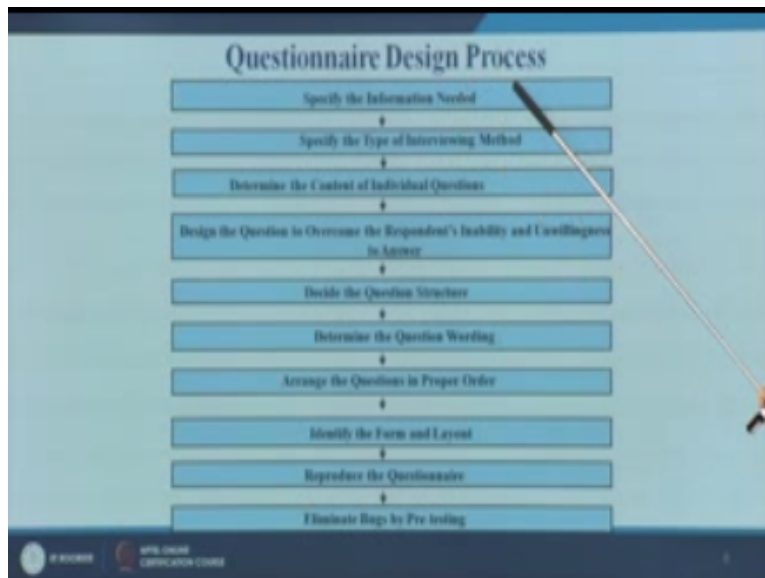
There are two things, one is can he answer second is if you ask me about my personal very sensitive information will I answer you, I might not, so how do you answer their personal information there is a style for it, there you have to use your logic, your brain for it right, he how do I ask him the question so that he will be the respondent will be ready to you know diverge or disseminate the information you know give me the answer, okay.

A questionnaire must please again, it is must uplift, motivate and encourage the respondent to become involve in their interview to cooperate and to complete the interview. Most of the respondents, most of the questionnaires I see sometimes I feel that is so boring so dull and sometimes they show you know difficult to understand that I am not interested even looking at the questionnaire.

See nobody you cannot force a respondent to fill up right, it is not like there is no legal binding right, so I may not answer you right, so you have to have you have to make me get excited and encourage to answer, it should be minimizing the response error so the response error should be

minimum, there should not be too much of response error right. So response error we have already discussed earlier in our classes, right. So what are the board process, let us see how do start with a questionnaire design.

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First specify the information needed right, always I tell it to my students and everywhere that whenever you draw you make a questionnaire before you give it to the final respondent.

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Please write your objective of the study at the beginning of each page, I am repeating this each page so write the objective write here so this is my objective let us say okay. Suppose you have turned the page you have this is page 1 you gone to page 2 please again write it why am I saying this because it will keep on track, if you do not do that and in the you know you can say a laziness or something you do not want to go back and look at it then in the process because you get highly involved in the making the questionnaire there is a probability, there is a chance that you might get diverge you know diverted from the objective okay.

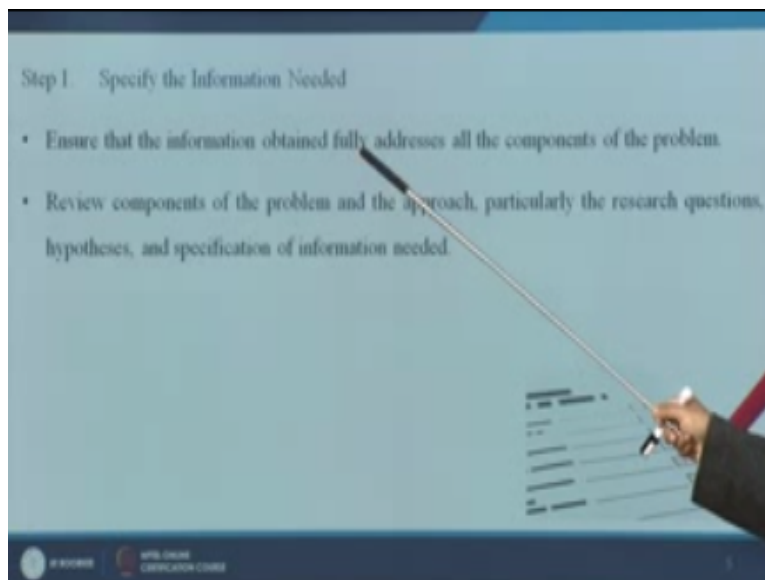
What is your type of interviewing method, how do you want to get, what kind of interview you want to do, how do you want to collect your data is that an important part, is it that like a telephoning interview, do you want to do one to one personal, do you want to send it through mail, how do you want to do it everything with every different mode it varies, determine the content of the individual questions so what is the content.

So we or we in the last session we discussed about items, so what is the item that is going to be here right, each question is like an item. Design the question to overcome the respondents inability and unwillingness to answer, so you should be designing in a way that the respondents inability and unwillingness to answer should be not be there right. What is the structure, now the structure could be like it could be a very lengthy, it should be disguised, it should be straight away you know open.

So how do you want to keep it structure, we will see each of them the question wording now please, please do not ever try to show your English or your language you know your ability to speak good words or something on a questionnaire has to be is meant to be very simple and it should only meet the objectives that is all, right. Ordering we cannot keep a mans head on his stomach and stomach on his head right, we cannot replace that way if you do it then you can understand what will happen right.

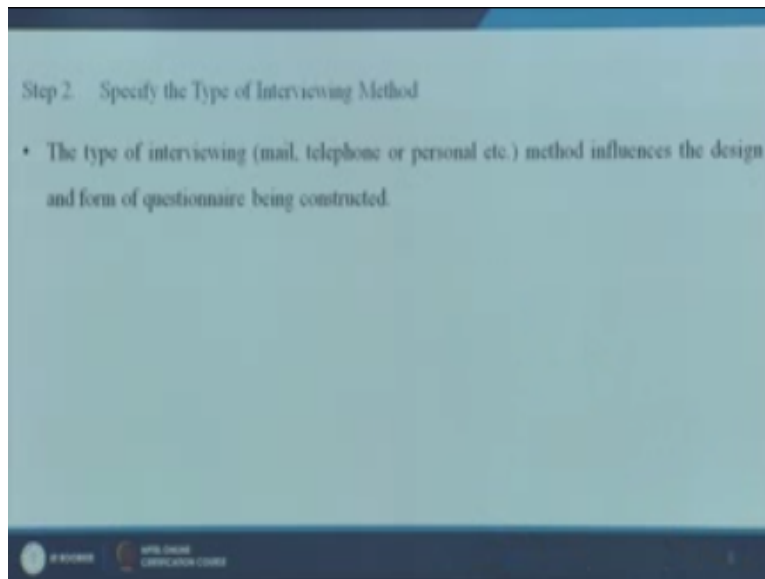
God has made in a way that it is in a logical flow right, so be in questionnaire so the layout how do you want to keep the layout and then you make the questionnaire you have large number of maybe you printed or do something right, so let us see in the start the basic ensure that the information.

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The specify the information needed, now information obtained the fully addresses all the components of the problem it says right, so review the components of the problems and the approach particularly the research questions the hypothesis and the specification of information needed. So what is that I need first of all the researcher has to start with it, what do I need to understand or what objectives do I need to meet, so accordingly my questions have to give me those answers right.

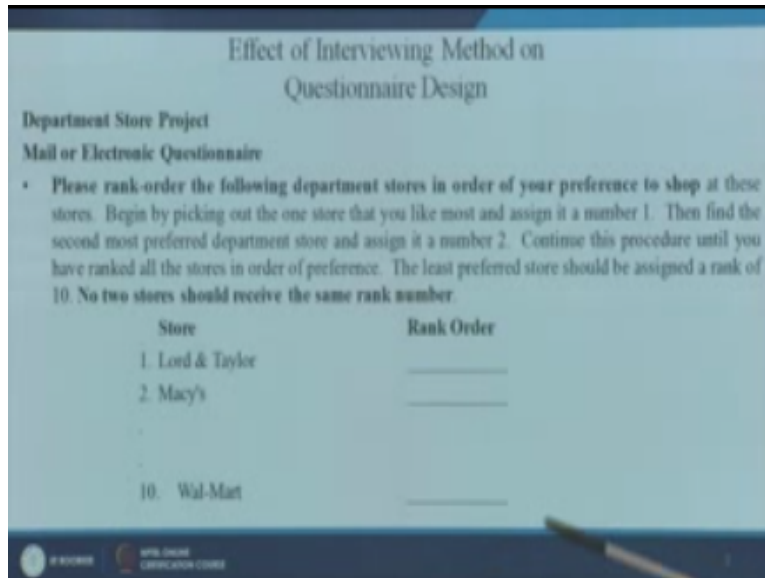
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So as I said the method, the method influences the design and form of questionnaire is it, let us see if it is there or not.

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Now for example, now if you suppose ask somebody okay there are number of stores and please rank this stores okay, now suppose he says this is 1 okay, and out of the 2, 10 now he finds suppose this one is let us say or this one is let us say 2 okay, so then again he has to make a iteration among the remaining 8 items okay which is going to be the third, so third suppose he says this is the third and then the remaining 7 he again makes an iteration to which is the top among them.

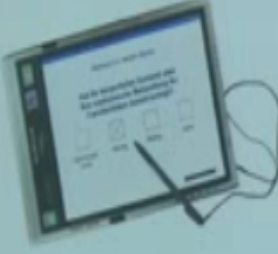
So that is the 4<sup>th</sup>, so while doing it, it is the only possible when the questionnaires is front of you right, that is not possible if you ask a question on a telephone right, so the person cannot remember you do not expect him to remember so much. So mail or electronic questionnaires are basically or personally even you are giving somebody even in personal questionnaire format that is also you can use.

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## Effect of Interviewing Method on Questionnaire Design

### Electronic Questionnaire

- This question for e-mail and Internet questionnaires will be very similar to that for the mail questionnaire.
- In all these methods, the questionnaire is self-administered by the respondent.



The image shows a tablet computer with a stylus resting on the screen. The screen displays a questionnaire interface with a header and several input fields. The text on the screen is partially legible and appears to be a consent form or introductory text for a survey.

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Now electronic questionnaire you see, the questions for email and internet questionnaires are very similar right, he says the question itself administrated by the respondent that means the respondent like a personal you know one to one basis then you do it. Similarly, here the respondent has his own time and space and he can do it whether very feels like, right.

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### Effect of Interviewing Method on Questionnaire Design

**Telephone Questionnaire**

- I will read to you the names of some department stores. Please rate them in terms of your preference to shop at these stores. Use a ten point scale, where 1 denotes "not so preferred" and 10 denotes "greatly preferred". Numbers between 1 and 10 reflect intermediate degrees of preference. Again, please remember that the higher the number, the greater the degree of preference. Now please tell me your preference to shop at .... (READ ONE STORE AT A TIME)

Store	Not So Preferred									Greatly Preferred
1. Nordstrom	1	2	3	4	5	6	7	8	9	10
2. Macy's	1	2	3	4	5	6	7	8	9	10
10. Wal-Mart	1	2	3	4	5	6	7	8	9	10

Telephonic questionnaire on the other hand is something like generally we get calls from different you know call centers and all sir, we want to know about your opinion about our product, how happy are you about our product and all, so they ask us in a scale on a particular let us say either company brand or a particular attribute let us say, how our happy are you with the service of our let us say the connectivity of our let us say you know the mobile connection let us say or, let us say how good, how happy are you with the pricing mechanism or how happy are you with the let us say the offers that we provide, right.

So you basically say only you have to say a number right, may be for the first question 5, for the second question maybe 7, for the third question maybe it is 1 so it that is why it is you do not have to remember only one question at a time.

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## Effect of Interviewing Method on Questionnaire Design

**Personal Questionnaire**

- (HAND DEPARTMENT STORE CARDS TO THE RESPONDENT). Here is a set of department store names, each written on a separate card. Please examine these cards carefully (GIVE RESPONDENT TIME). Now, please examine these cards again and pull out that card which has the name of the store you like the most, i.e., your most preferred store for shopping. (RECORD THE STORE NAME AND KEEP THIS CARD WITH YOU). Now, please examine the remaining nine cards. Of these remaining nine stores, what is your most preferred store for shopping? (REPEAT THIS PROCEDURE SEQUENTIALLY UNTIL THE RESPONDENT HAS ONLY ONE CARD LEFT)

Store Rank	Name of the Store
1.     1	_____
2.     2	_____
10.   10	_____

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Personal questionnaires can be done for both in fact so you can do this way for a kind of ranking or you can also do like you did here it so personal has the biggest advantage it has the most flexible one right, why I am seeing the most flexible because although the mail looks similar to it, but the mail has one disadvantage that you are not there which is possible in a personal you know collection method.

Because your presence there is a researchers presents in front of the respondent helps into sometimes explain the process or the meaning of the question, okay.

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Step 3 Determine Content of Individual Question

- Once the interview method is clearly established, the next step is determining the contents of individual questions
- Following questions are required to be taken care of:
  - ✓ Are several questions needed instead of one to obtain the required information in an unambiguous manner?
  - ✓ Is the question necessary?
  - ✓ Do not use **double-barreled questions**.




Determine the individual question content okay, so please here there are some things like do not ask on ambiguous questions right, the question should be unambiguous first of all find out is the question necessary. Now there are some things people ask both barreled questions like is it hot and tasty, is it cold and tasty, is it good and you know productive now these are two different things being asked at the same, in the same question.

If the respondent wants to answer how do you know which one he has answered, has he answered for hot, has he answered for tasty, has he answered for good, has he answered for productivity what, so do not ask such questions please.

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### Determine Content of Individual Question Is the Question Necessary?

- If there is no satisfactory use for the data resulting from a question, that question should be eliminated.
- Example- A survey on personal computers sponsored by HP may also include questions related to Dell and Apple. It may not be related to immediate problems at hand. So, this types of questions may be eliminated.



AT THIS POINT, THE UMBRELLA WAS UNNECESSARY

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Now this is you see the guy says, at this point the umbrella was unnecessary so why did you have an umbrella but at least this is at least having there is a rain at the background but suppose just imagine he has learned about the forecasting and he has come with umbrella and he now says there is no rain at all, so sometimes unnecessary question should not, is not sometimes every time do not ask unnecessary questions they should be eliminated, okay.

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**Determine Content of Individual Question**  
**Are Several Questions Needed Instead of One?**

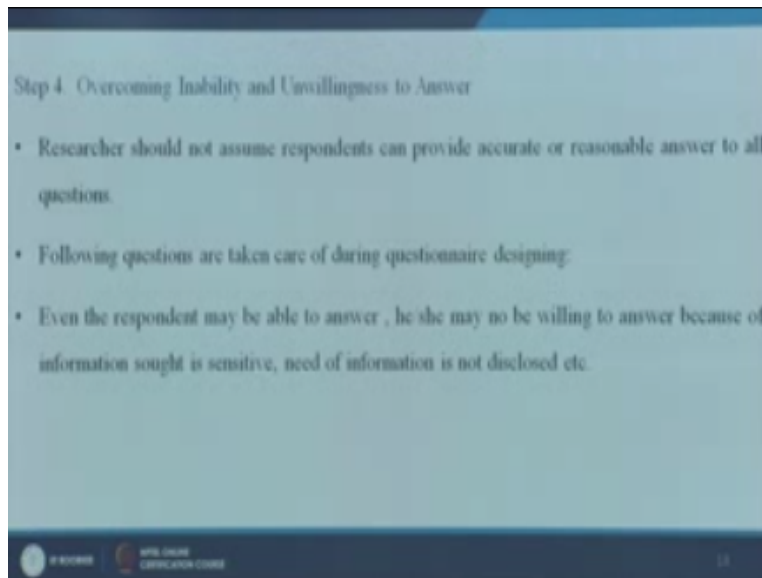
- Sometimes, several questions are needed to obtain the required information in an unambiguous manner. Consider the question,  
  
"Do you think Coca-Cola is a tasty and refreshing soft drink?" (Incorrect)
- Such a question is called a **double-barreled question**, because two or more questions are combined into one. To obtain the required information, two distinct questions should be asked:  
  
"Do you think Coca-Cola is a tasty soft drink?" and  
"Do you think Coca-Cola is a refreshing soft drink?" (Correct)

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Are several questions needed instead of one for example, this is what I was saying double barreled question, do you think coco cola is a tasty and refreshing soft drink, now which is the what is he is going to answer tasty or refreshing, so how is the correct one. Do you think coco cola is a tasty soft drink, plus another question do you think coco cola is the refreshing drink, now with there it could be a problem.

Now why do such as do such things they do it because they want to club it, so that the number of questions will get reduced but your objective is not to only reduce a question your objective is to meet with the, get the right results. So to get the right maybe you have you have be this is such an important question you might have to skip another question if it is getting too long, but then this is the only way you can do it because if you club it then it is becoming completely wrong error.

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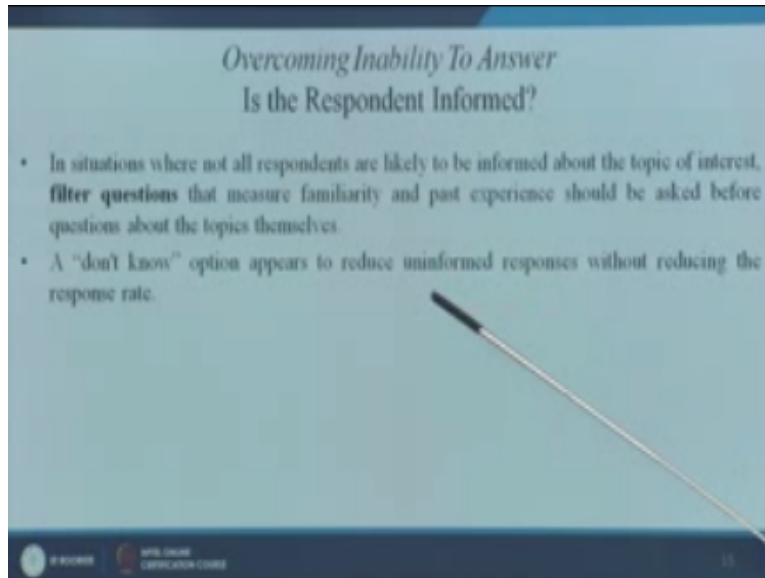
Overcoming the inability and unwillingness, respondents the researcher should not assume that respondents can provide an accurate answer to all questions, do not please assume this, right. Even the respondent maybe able to answer he or she may not be willing so there are two things he might not understand. Suppose you ask a farmer what is his opinion about the farming policies of India or the farming policies of any country.

Now what will he say, sometimes if he is educated which is very, very rare then it is okay but suppose he is not educated he does not understand your question he might not be able to answer although he is in party who is effected, right. Similarly, unwillingness in case of for example, let us say you know cases of very personal matters like sex for example, you know use of contraceptives so these are questions where people are feeling very uncomfortable they do not speak up, right.

So questionnaire might not be the right way of collecting the data for such questions and if you want to do it also there has to be a way you have to think how to ask the question right. So these are some of the things let us move.

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Overcoming the inability to answer is the respondent informed, is he does he know about it, right. In situations where not all respondents are likely to be informed about the topic of interest filter questions that measure familiarity and past experience should be asked before opening of the topic right, that means if you are asking the farmer about something first ask about his response to the pervious things that has happened in his in the past, right.

A do not know option appears to be reduced uninformed responses without reducing the response rate. Suppose you are going to with a question and asking somebody and he says I have never done it for I have never been a part of it, right. How do I you know I do not know anything about it, then you are visiting the sample or going to the sample that respondent itself becomes say unnecessary task, okay.

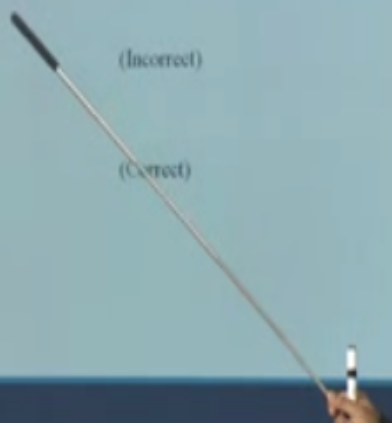
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*Overcoming Inability To Answer*  
Can the Respondent Remember?

How many gallons of soft drinks did you consume during the last four weeks? (Incorrect)

How often do you consume soft drinks in a typical week? (Correct)

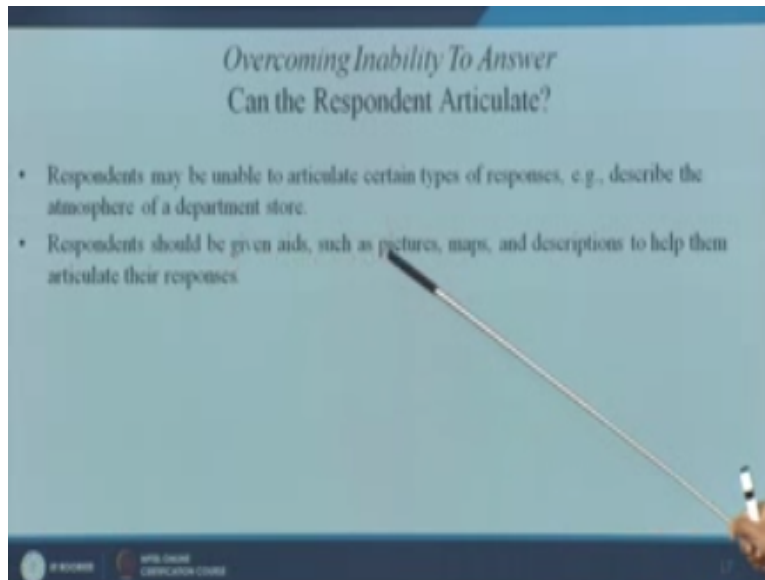
1. \_\_\_ Less than once a week
2. \_\_\_ 1 to 3 times per week
3. \_\_\_ 4 to 6 times per week
4. \_\_\_ 7 or more times per week



Now let us look at this, how many gallons of soft drinks do you consume, did you consume during the last four weeks, do you expect the respondent to remember, if you are thinking then please this is the biggest mistake one of the biggest mistake that we are committing, do not expect the respondent to remember, do not expect the respondent to understand everything it is the respondent is like a consumer and the researcher is like a manufacture, it is the manufacture who has to or the sell who is to understand the problem of the consumer. The consumer is not bound to understand, right.

Rather you can ask it how often do you consume soft drinks in a typical week less than once a week, 1 to 3 times a week, 4 to so he does not remember, he can give you a much closer answer okay.

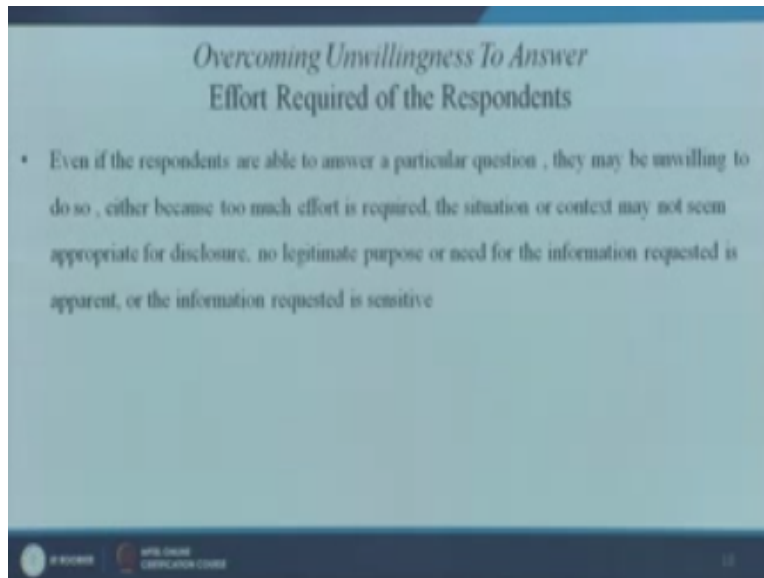
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Articulation becomes another issue, so sometimes articulation becomes a problem for example for children's, for less educated people they are even if you remember I had asked about, I has spoken about continuous scale, so where we are asking you giving them a length and he are saying for example this is the entire length from very large to very low or something, where do you feel it should like now in a diagrammatic representation it is very easy to say somewhere here or somewhere here.

So when you do this automatically it becomes easier so respondent should be given aid such as pictures, similes for example maps, descriptions to help the articulate the responses, okay.

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Sometime there are unwilling as I said earlier, right so because too much effort is required or their might not like the situation or context may not seem appropriate for disclosure, no legitimate purpose are need for the information requested is apparent or the information requested is sensitive. So in such cases respondents have to think of researchers have to think of another way, some other way of collecting the information right. Now overcoming you see unwillingness.

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### Overcoming Unwillingness To Answer

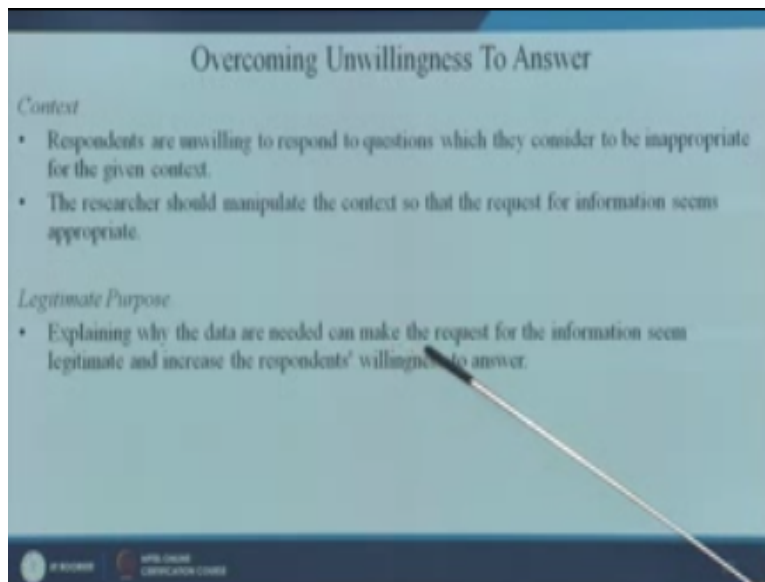
- Please list all the departments from which you purchased merchandise on your most recent shopping trip to a department store. (Incorrect)
- In the list that follows, please check all the departments from which you purchased merchandise on your most recent shopping trip to a department store.

1. Women's dresses \_\_\_\_\_
2. Men's apparel \_\_\_\_\_
3. Children's apparel \_\_\_\_\_
4. Cosmetics \_\_\_\_\_
- ...
16. Jewelry \_\_\_\_\_
17. Other (please specify) \_\_\_\_\_ (Correct)

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Now please list all the departments from which you purchased merchandized on a most recent shopping trip to a department store. Now here the respondent might not be willing to answer right, because you have asked him a very big question rather now let us change the question what you are saying for women's dresses where did you go for men's apparel where did you go, children's apparel where did you go, cosmetics where did you go okay, now this is rather little simpler right he can at least or she can at least answer you because you have not asked him at one go. Here you are expecting him to or her to write down all the things right.

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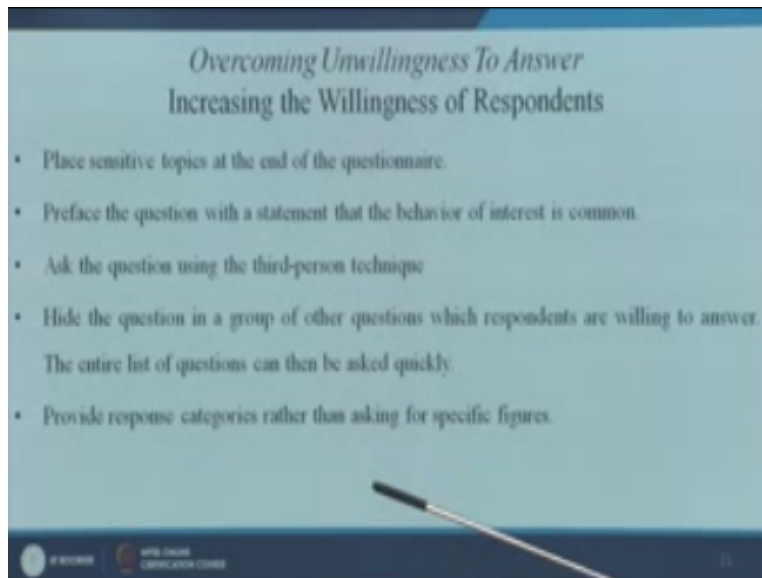


In appropriate questions also they are unwilling to answer, the respondent might not like, so the researchers should manipulate the context of the request for information's seems appropriate. See this is completely an art, now this is what this part this is now sometimes the researcher needs to address the same thing in a manner which looks more interesting easy and the respondents willingness to be a part of it increases, right.

And how you have to do it that is why I said in the beginning of the session that I sometimes takes 17, I took 17 times to make a questionnaire in one of the cases. So there must be a pretty reason is not that I do not understand the question but where my question is justified is right for that respondent that has to be seen, okay.

Explaining why the data are needed can make the request for information seem legitimate for example, so if you say that this information is will be used for let us say improvement of women's let us say some sensitive information to women's health for the reducing them child care modality, child modality, mothers modality and all this right. Then maybe people will be more interested to answer you they would show their willingness.

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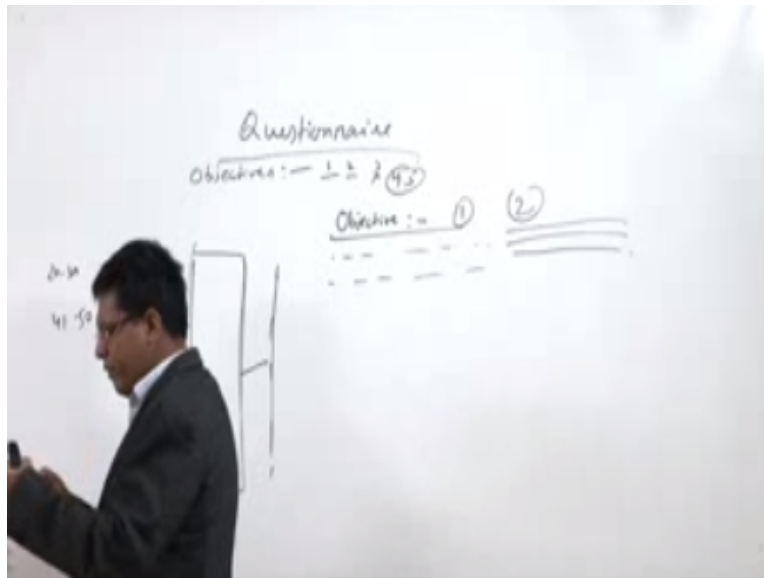


Now let us look at how to improve the willingness of the respondents, this is one thing which is very important right, ask the question in the third person technique so what happens if you remember the projective techniques which I have explained earlier. If you ask me the third person kind then what happens is the person it becomes easier for the person to explain and because he does not feel that it is for him right, so in such a condition when he gives a very correct reply to you right.

But that is actually nothing but his own motivation and believes. Hide the question in a group of other questions sometimes you have to disguise the question in other, in a group so that the respondents does not you know find it so starkly different or you can say you know he does not feel it difficult to answer, so he gets maybe you have to sometimes I will use a word it is a way of confusing the respondent that the answer that I want from a particular question that although I am deleting it I am mixing it with something else, where he does not understand he really there he is being asked what exactly is being asked, okay.

So is that technique is being used these are called disguised techniques right. Provide response categories rather than asking for specific figures, do not ask specific figures this will be very difficult for a respondent, rather give it a category for example a scale for example, class interval or something right, in a range where let us say 20 to 30 age group for example.

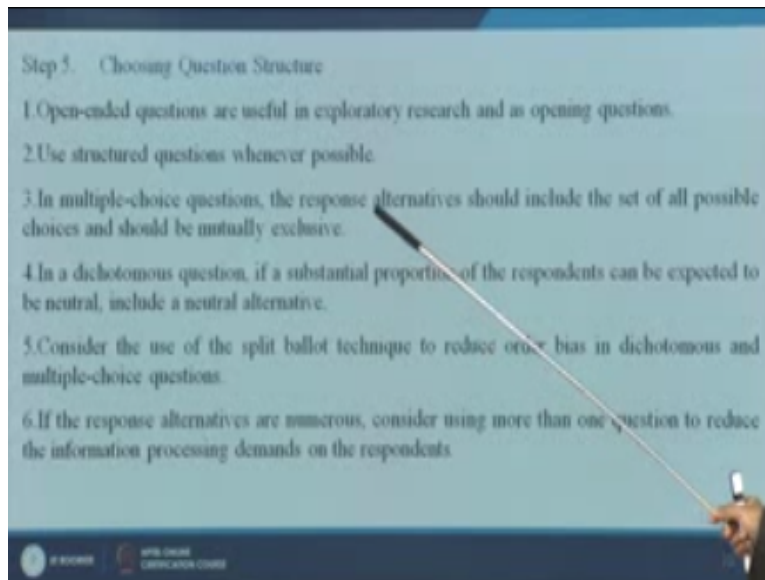
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30 to 40, 31 to 40, 41 to 50 so such whatever you give a interval it becomes simpler, okay.

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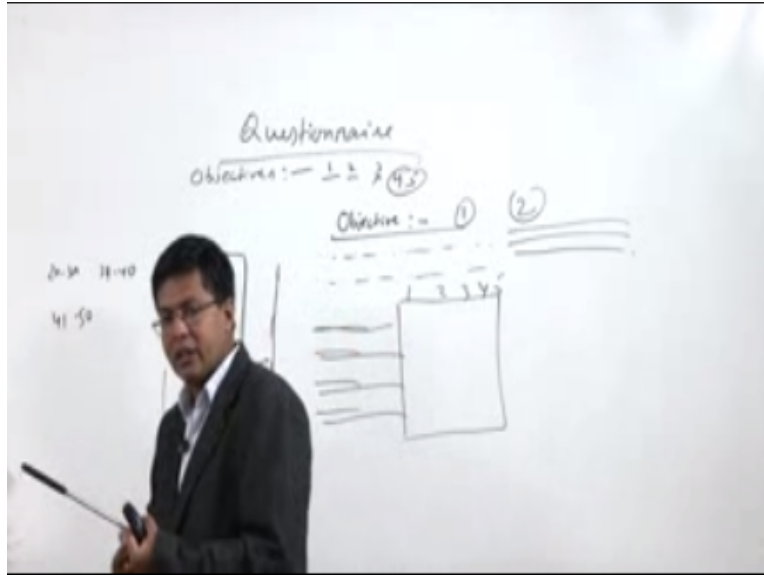




Structure of the questions as I was always saying multiple choice questions right, or if you are using dichotomous questions you have to see what is the structure of the question some many cases as I also said earlier categorical questions or dichotomous questions are very difficult have a very less interpretation power although they have it, it is not here it is there. But multiple choice questions the response are alternatives are included so the set of all possible choice and so that the person it becomes easier for him to choose one of those you know alternatives.

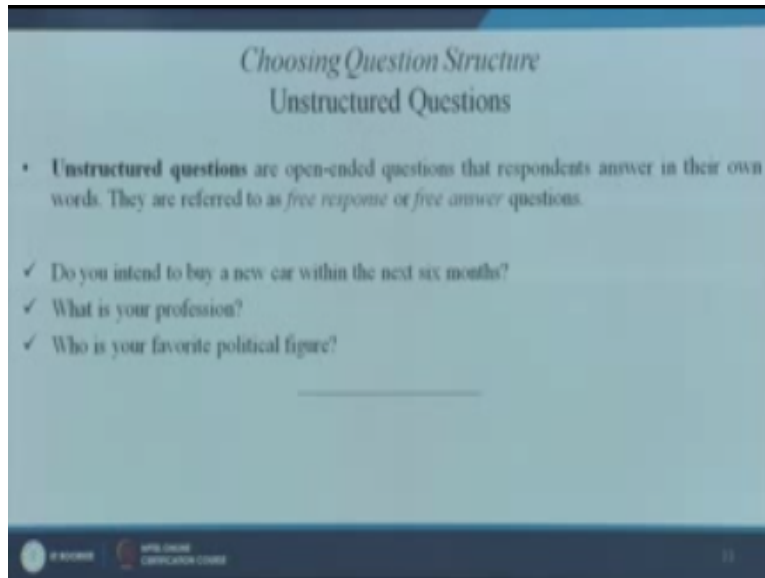
So these are some other techniques which are used in response alternatives are numerous considering using more than one question to reduce. Now for example, let us say if you have in large number of question which you can ask right, and they need only one kind of a scale.

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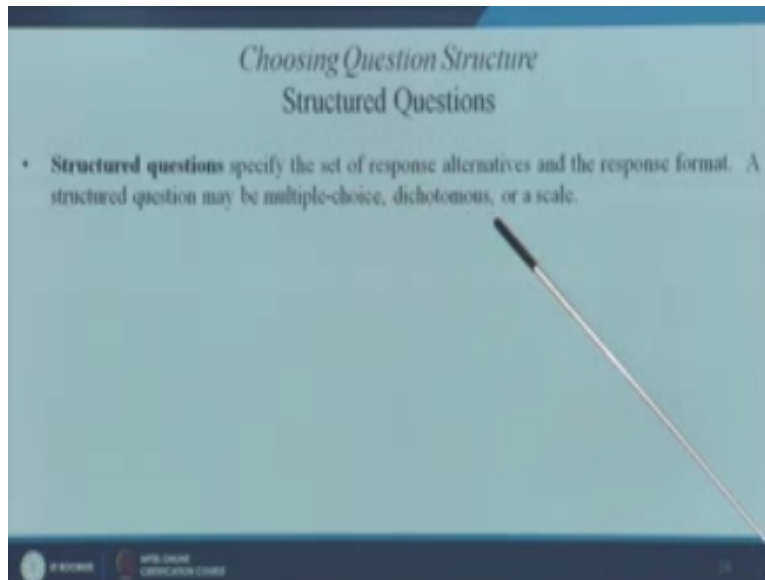
Let us say, so what you can do is you can club them together bring all of them together at one point and do not ask them independently as different questions so that also reduces the you know the unnecessarily the pain on the respondent right.

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Now this is the question which says do you intend to buy a new car within the next six months, what is the profession, what is your favorite political figure? Now when I am saying this is an open ended question right, open ended question have their own value the unstructured questions and they have their own value because many a times in researchers we are not able to exactly understand or get answer to some of the questions so in those conditions we can use an open you know ended question right, others are all close ended the multiple choice, dichotomous they are all multiple choice or you know close ended but these are all this is a open ended question, right. So the right hand is free to write his opinion.

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So these are structured question, this is the structured question what he says, it specify the set of response alternatives and the response format a structure may be multiple choice just I told you dichotomous or a scale, right.


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*Choosing Question Structure*  
**Multiple-Choice Questions**

- In multiple-choice questions, the researcher provides a choice of answers and respondents are asked to select one or more of the alternatives given.

Do you intend to buy a new car within the next six months?

- \_\_\_\_\_ Definitely will not buy
- \_\_\_\_\_ Probably will not buy
- \_\_\_\_\_ Undecided
- \_\_\_\_\_ Probably will buy
- \_\_\_\_\_ Definitely will buy
- \_\_\_\_\_ Other (please specify)

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Multiple choices this is an example, right definitely I will not buy, probably will not buy, undecided, probably will buy, definitely will buy for example right.

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*Choosing Question Structure*  
Dichotomous Questions

- A **dichotomous question** has only two response alternatives: yes or no, agree or disagree, and so on.
- Often, the two alternatives of interest are supplemented by a neutral alternative, such as "no opinion," "don't know," "both," or "none."

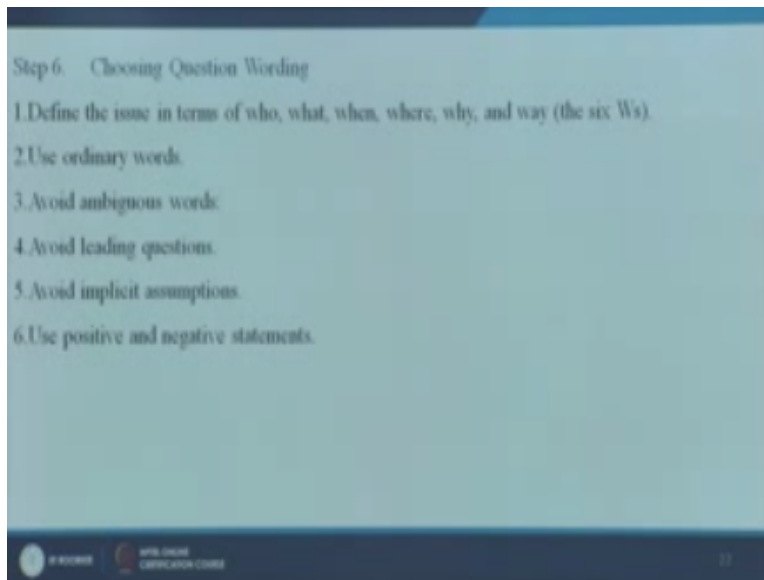
Do you intend to buy a new car within the next six months?

Yes  
 No  
 Don't know

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Dichotomous yes, no will you do intend to buy a new car within the next six months yes, no, do not know for example. So dichotomous is basically two yes or no it is not the third also it is like yes or no right, do not know is to not to be kept here we should remove it right, yes or no basically.

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Question wording is as I said these are some of the things you have remember ordinary words let us see some right.

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*Choosing Question Wording*  
Define the Issue

- Define the issue in terms of who, what, when, where, why, and way (the six Ws). Who, what, when, and where are particularly important.

Which brand of shampoo do you use? (Incorrect)

Which brand or brands of shampoo have you personally used at home during the last month?  
In case of more than one brand, please list all the brands that apply. (Correct)

Now define the issue in terms of who, what, where, when, why and the way right, so which brand of shampoo do you use, is more difficult whether the person can be asked which brands of shampoo have you personally used at home during the last month. Now this is more simpler because the person can exactly say what is been having at home, right. So these are some of things.

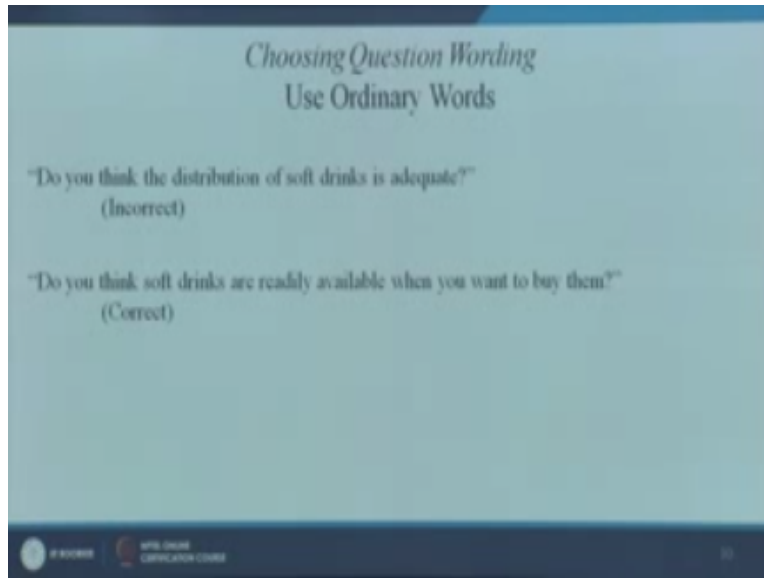
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Choosing Question Wording	
The W's	Defining the Question
Who	<b>The Respondent</b> It is not clear whether this question relates to the individual respondent or the respondent's total household.
What	<b>The Brand of Shampoo</b> It is unclear how the respondent is to answer this question if more than one brand is used.
When	<b>Unclear</b> The time frame is not specified in this question. The respondent could interpret it as meaning the shampoo used this morning, this week, or over the past year.
Where	At home, at the gym, on the road?

The respondent, the brand of shampoo what now brand of shampoo, when unclear so that was unclear right, so the time frame is not specified in that question so that was the mistake see this time frame does not explain right, so where at home, at the gym, on the road nobody they takes uses shampoo.

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But on the gym at least or on the in the home or somewhere similarly use this look at this do you think the distribution of soft drinks is adequate or now let us look at this question, do you think soft drinks ate readily available when you want to buy them. Now in some people might not understand this meaning because people who is this is not a wrong question as such, but sometimes it becomes difficult so use only simple words. Do you think soft drinks are readily available when you want to buy them simple right?

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*Choosing Question Wording*  
Use Unambiguous Words

In a typical month, how often do you shop in department stores?

- Never
- Occasionally
- Sometimes
- Often
- Regularly (Incorrect)

In a typical month, how often do you shop in department stores?

- Less than once
- 1 or 2 times
- 3 or 4 times
- More than 4 times (Correct)

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In a typical month how many, how often do you shop now never, occasionally, sometimes, now why it is incorrect it is incorrect because what is sometimes, what is occasion to you might be or regularity for me, it is a way of understanding, it is a relative thing right, so it is better to ask it through a number 1, 1 or 2 times, 3 or 4 times, more than 4 times okay.

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*Choosing Question Wording*  
Avoid Leading or Biasing Questions

- A **leading question** is one that clues the respondent to what the answer should be, as in the following:  
Do you think that patriotic Americans should buy imported automobiles when that would put American labor out of work?  
 Yes  
 No  
 Don't know  
(Incorrect)

Do you think that Americans should buy imported automobiles?  
 Yes  
 No  
 Don't know  
(Correct)

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Now this is the leading question please avoid leading questions, what is seeing patriotic American should buy imported automobiles do you think patriotic American should buy imported automobiles when then would put American labor already you have given bios, already you have given your bios here. So instead of that do you think that American should buy imported automobiles that is all, right.

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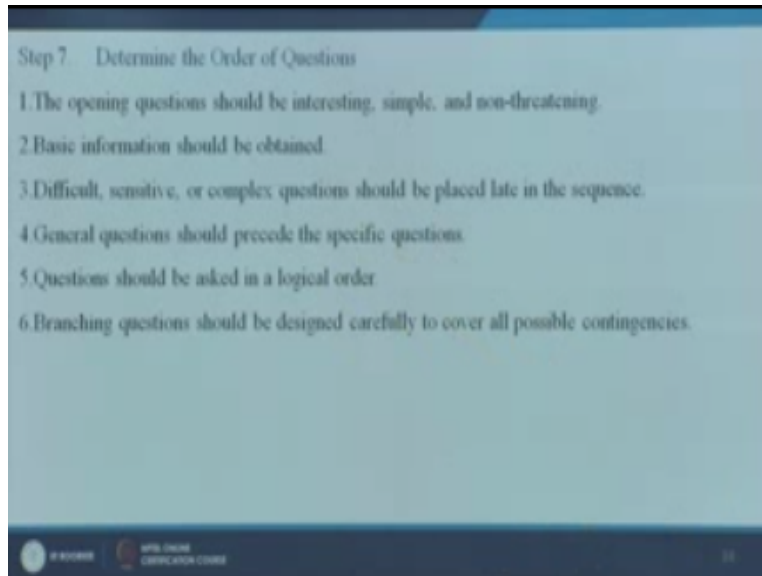
*Choosing Question Wording*  
Avoid Implicit Assumptions

- Questions should not be worded so that the answer is dependent upon implicit assumptions about what will happen as a consequence.
- ✓ Are you in favor of a balanced budget? **(Incorrect)**
- ✓ Are you in favor of a balanced budget if it would result in an increase in the personal income tax? **(Correct)**

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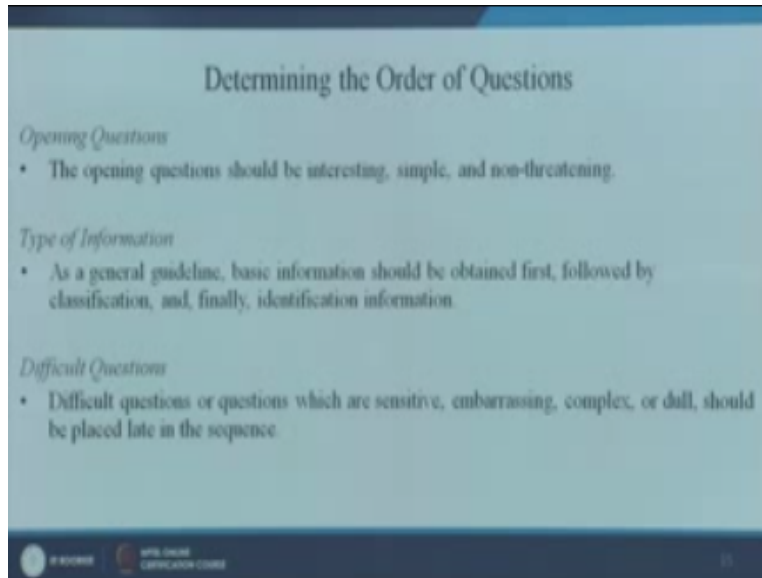
Implicit questions, are you in favor of a balanced budget, who does not like a balance budget so the question is are you in favor of a balance budget if it would still result in an increase in the personal income tax so the question is, if it still increases income tax would you still go for it. Order of the questions also important as I said.

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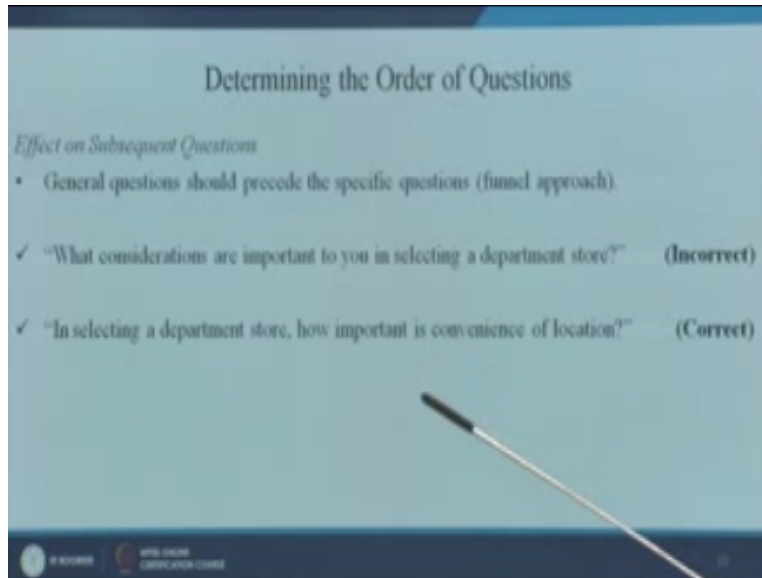
If some pose some are very difficult you can hide it hide them in between somewhere right, start with always easier questions basic questions and keep the complicated at the end right, and also please this is also important that you should know how to branch the questions, so sometimes some questions would have a sub part of it, so you need to be very careful in addressing that also. so interesting simple and non threatening to order, right.

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Type of information the basic information should be obtained first followed by the classification and finally identification information, so that means what, what does it saying is the basic information that you require about the study or the objective research should be asked first okay, and finally you can go to this to the till the end. Difficult questions which are sensitive, embarrassing, complex should be always placed in the last in the sequence, okay.

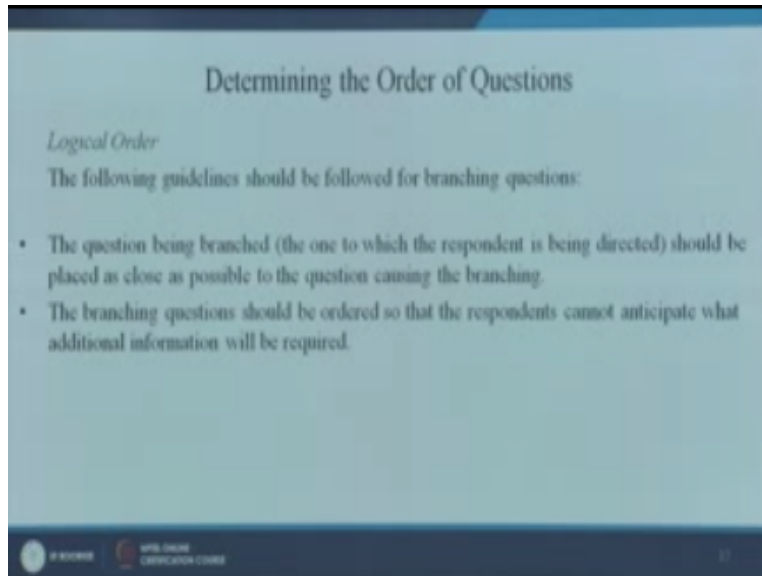
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This is like a funnel approach right, general question should proceed the specific questions so funnel approach is like the basic questions that I just said before ion also, right. What considerations are important to you in selecting a department store, what will you answer. In a selecting a department store how important is one of the thing let us sat convince of location, okay.

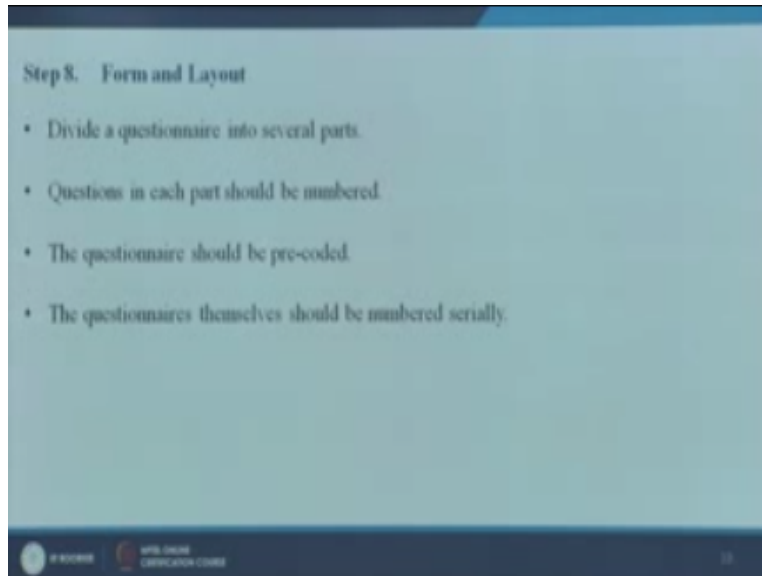
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Logical order, as I gave you the example of our own human body right, the question being branched sometimes should be placed as close as to the as possible to the question causing the branch suppose there is a sub part so main it should be close to the main question right. The branching question should be order so that the respondents cannot anticipate what additional information will be required.

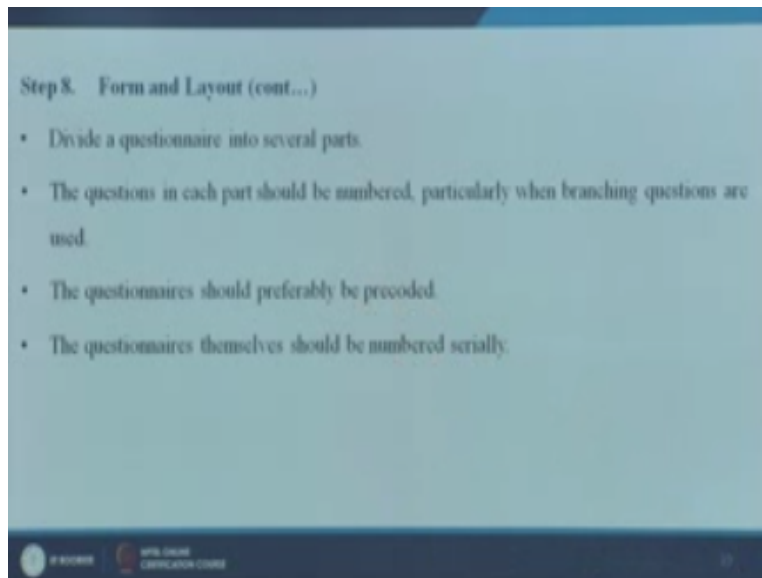
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So the question for form layout is also important because many a times I have seen especially in very large questionnaires respondents are not willing to answer and that is not exactly respondents mistake but the researchers mistake, because the researchers should be able to divide the topic in such a manner that let us say in parts for example part A, part B, part C so that and it should be exclusive in nature right, there should be as exclusive as possible.

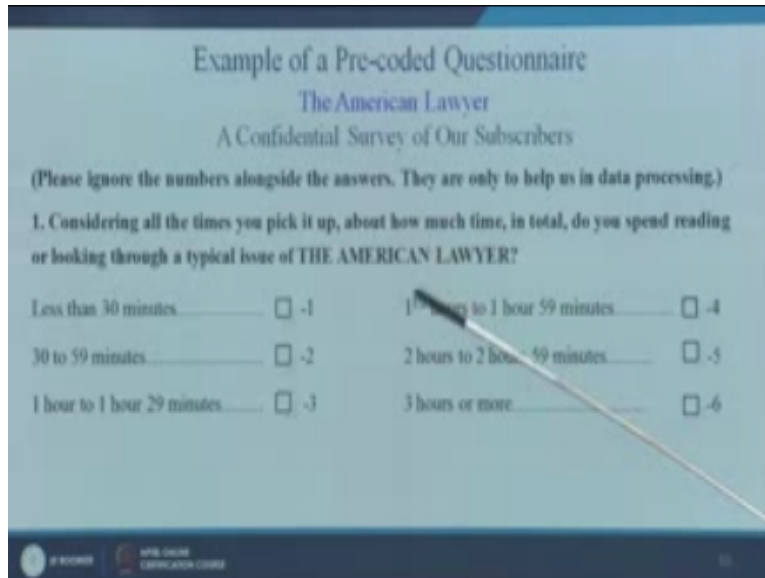
So what happens is the respondent can maybe fill in part A and then later on come back to part B and part C right. Well, let us see this is the last.

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So the divide the question and several parts which I just said right, so each part should be numbered when particularly when the branching questions are used. This question it should be pre-coded now what do I mean by pre-coded means suppose you have given mail as 1 or female as 2 or something so these things should be pre-coded because at the end when you are putting in this data to the you know some excel sheet or somewhere it should be easy, right and to understand and put it somewhere. The questions themselves should be number serially right.

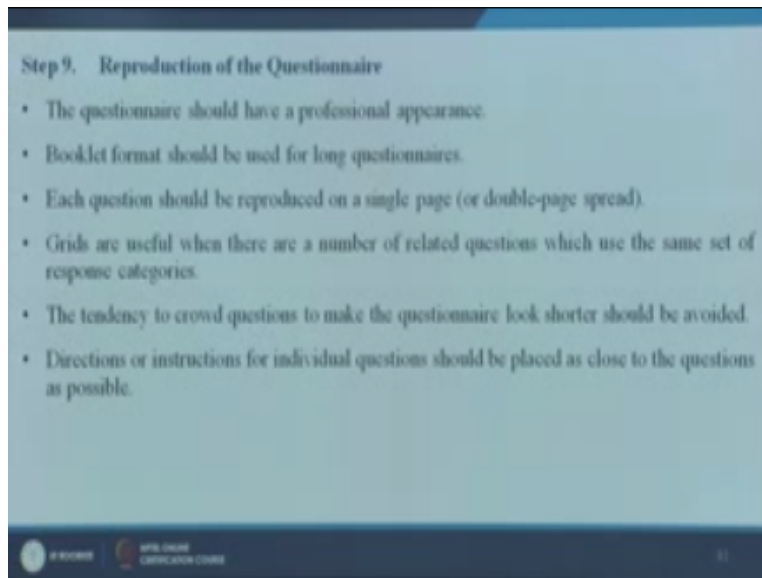
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Now this is the last we will take as a case what is happening here is for example this are something is giving to you please ignore the numbers alongside the answers there are only to help us in data processing a confidential survey of a subscribers of an the American lawyer right, now do you spend reading or looking through a typical issue of the American lawyer this is a like a you know journal right, so how much time are they taking.

So everything has been coded 1,2,3,4,5,6, so this is how one goes is an example it says right, less than 30 minutes is 1, 30 to 59 minutes is 2, 1 hour to I hour 29 minutes is 3 it goes on okay.

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Reproduction the questionnaire means finally how do you place now that is also important because you see many a times students at the end of the day are or researcher at the end of the day they get confused by the own questionnaires so for example you should have a professional appearance booklet format should be used for long questionnaires is a booklet format should be there it is not key you place it in anywhere you like and there should be proper spacing right.

Whenever as I said here right, whenever you have large number of questions these are similar respondents have space so you should be grid form should be there right, and do not the tendency to crowd questions should be avoided, right. So these are some other things that one does and finally this is the last I hope this is the last slide maybe maximum one slide is there pre-testing in pre-testing what we do is basically we try to test the study before we go for a final measure you know study that means we are trying to make a pilot test so that the pilot test gives us an idea about what are the mistakes we are committing or there is a potential mistake that we can commit.

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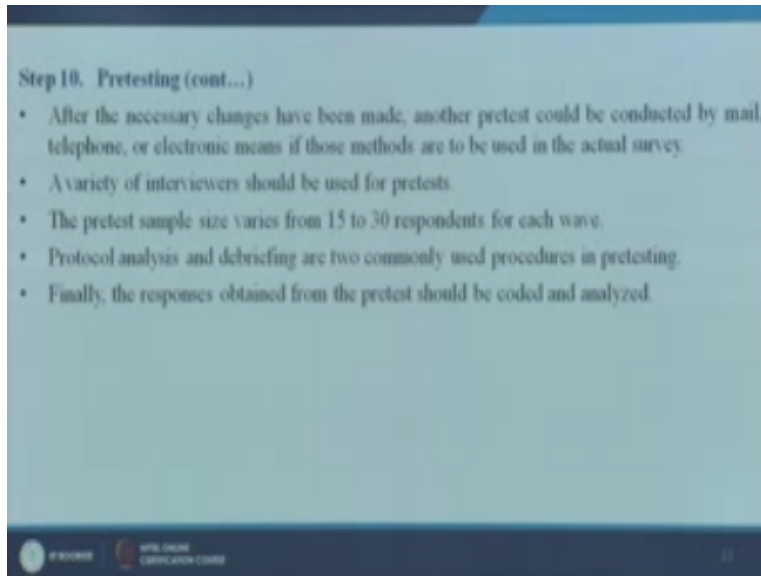
**Step 10. Pretesting**

- ✓ **Pretesting** refers to the testing of the questionnaire on a small sample of respondents to identify and eliminate potential problems.
- A questionnaire should not be used in the field survey without adequate pretesting.
- All aspects of the questionnaire should be tested, including question content, wording, sequence, form and layout, question difficulty, and instructions.
- The respondents for the pretest and for the actual survey should be drawn from the same population.
- Pretests are best done by personal interviews, even if the actual survey is to be conducted by mail, telephone, or electronic means, because interviewers can observe respondents' reactions and attitudes.

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So in the pre-testing it helps to test the questionnaires small sample group right, and it basically it takes care of everything it does everything that we do in a like a prototype it is a prototype right. So and you when you find a mistakes you try to avoid this mistakes for the final one.

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So all are necessary changes are made variety of interviews, interviewers are used for the pre-test right. It is various small samples I just taken right, so these are some of the things that you do but never avoid a pre-testing or a pilot testing because if you avoid a pilot testing then it will be like you know something like you are going unprepared and finally at the end of the moment when the final stage is on there you see the mistakes and that looks high horrible and very bad, thank you so much.

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