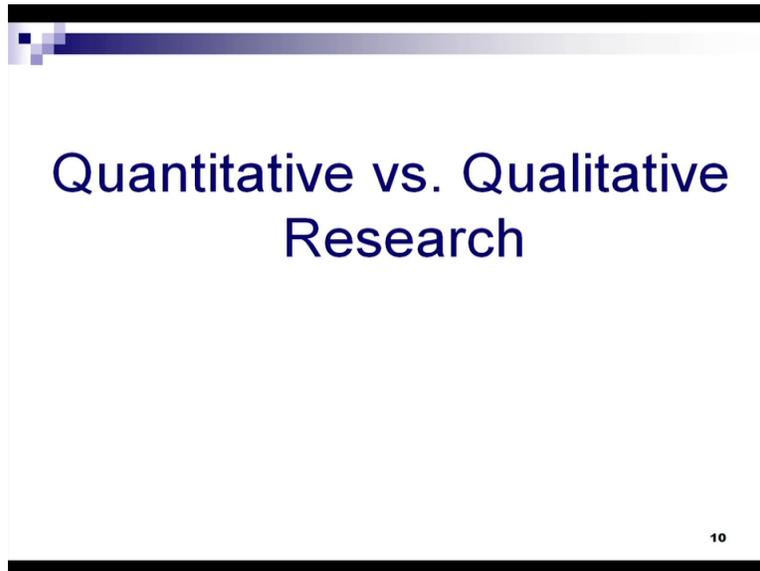


Qualitative Research Methods
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Lecture – 3
Quantitative Vs Qualitative Research

Welcome back to the NOC course title qualitative research methods, offered through the national program on technology enhanced learning, Ministry of Human Resource Development Government of India. My name is Aradhana Malik, I am an assistant professor with Vinod Gupta School of Management at IIT, Kharagpur, West Bengal, India and I will be helping you with these courses and we have talked about the qualitative researcher in the previous lecture and in this lecture we are going to discuss some differences between qualitative and quantitative research. So we will talk a little bit about how qualitative research differs from quantitative research.

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So let's get on with it, quantitative vs. qualitative research.

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Uses of positivism (Denzin & Lincoln, 1994)

"In the positivist version, it is contended that there is a reality out there to be studied, captured, and understood, whereas postpositivists argue that reality can never be fully apprehended, only approximated (Guba, 1990, p.22)."

Qualitative researchers, initially relied on positivist interpretations of the data they collected, but increasingly they use positivist interpretations to situate their findings and then move on to the more abstract, more abstract, 'not-knowing-everything' kind of context, i.e. post-positivist understanding which indicates that by knowing 'x', I realize how much more there is that I do not know and need to find out.

Quantitative researchers want to be sure of everything. They want to know where one thing ends and the other begins. They want to *quantify* everything. Qualitative researchers realize that they may never know all there is to know.

Similar to continuous and discrete series.

11

The first aspect of difference or the first point of difference here is the uses of positivism. In the positivist version, it is contended that there is a reality out there to be studied, captured and understood, whereas postpositivists argue that reality can never be fully apprehended, only approximated. And positivism believes that whatever is out there can be understood, whatever is out there can be studied, whatever is out there can be fully understood, fully analyzed, fully studied, fully broken into pieces and conveyed and postpositivists say that, that is not the case there will always be things that one will never understand, there will always be things that one can only approximate.

So Qualitative researchers, initially relied on positivists interpretations of the data they collected, but increasingly they used positivist interpretations to situate their findings and then move on to the more abstract, not-knowing everything kind of context, i.e. is the post-positivist understanding which indicates that by knowing 'X', I realize how much more there is that I do not know and need to find out and I have put all of this on the slide, so you don't need to remember this, this is pretty complicated and that is why I have put whatever I am saying on the slide.

So qualitative researchers are okay with not knowing everything, qualitative researchers understand that not knowing everything is going to be alright and they understand, they realize that the more abstract not knowing everything kind of context is what they are dealing with; they

realize how much more as they find out things they realize, how much more there is that needs to know and that is what they do.

Quantitative researchers, on the other hand, want to be sure if everything. They want to know where one thing ends and where the other thing begins, when we talk about quantification we are talking about the numbers, how much of what is there, so those of you, who understand mathematics will know the difference between continuous series and discrete series and this is similar to discrete and continuous series of numbers.

Continuous series are, you know they say that you can two points can never meet, two people on a continuum can never meet, because there's always some distance between them; so they can keep coming closer and closer and closer and closer, but they will still never be able to meet. Why? Because there is something between the two. And discrete numbers are there one number and something else begins, so it could be you know say 7.99999 to the power of infinity, but it's not infinity, there is something finite.

Quantitative researchers believe in the finiteness of understanding; they say there is a point that comes at which one can say that one has completely understood the object of enquiry and qualitative researchers say that is not the case, whenever we talk about human behavior, we talk about the social setting, we talk about the natural events as they are going on, there is always something that is outside the purview of our understanding; so use of positivism is a big point of difference in the way qualitative researchers and quantitative researchers understand research, or this enquiry into the unknown.

(Refer Slide Time: 05:17)

Acceptance of postmodern sensibilities

(Denzin & Lincoln, 1994)

"These researchers seek alternative methods of evaluating their work, including verisimilitude, caring, political praxis, multivoiced texts, and dialogues with subjects. In response, positivists and postpositivists argue that what they do is good science, free of individual bias and subjectivity; as noted above, they see postmodernism as an attack on reason and truth."

Quantitative researchers believe that there is a way in which all human beings can collect the same kind of data in the exact same manner irrespective of their intra and interpersonal environments.

Qualitative researchers accept that the collection and interpretation of data is confined within the limitations of human behaviour, that human behaviour, personal attitudes, human emotions, personal preferences, etc. limit the amount of attention we place on the data we collect and what we human beings filter out as sense-making information from the information that does not make any sense to us.

12

The other thing is Acceptance of Postmodern sensibilities; these researchers seek alternative methods of evaluating their work, including verisimilitude, caring, political praxis, multivoiced texts, and dialogues with subjects. In response, positivists and postpositivists argue that what they do is good science, free of individual bias and subjectivity; as noted above, they see postmodernism as an attack on reason and truth.

Quantitative researchers believe that there is a way in which all human beings can collect the same kind of data in the exact same manner irrespective of their intra- and interpersonal environments and I'm reading from the slide, so you understand what I am saying maybe you can just pause the slide and just read whatever I am saying.

Quantitative researchers believe that all human beings are capable of collecting the same kind of data, in the exact same manner from the same situation and their intra- and interpersonal environments have absolutely no bearing on the way they collect data, and quantitative researchers label this ability to collect data, collect the same kind of data, in the exact same manner from the same situation as objectivity and qualitative researchers say no that is just not possible.

Qualitative researchers on the other hand accept that the collection and interpretation of data is confined within the limitations of human behavior, how we collect data is a function of human

behavior and it is confined within the limitations of human behavior, it is confined within the deep personal attitudes, the human emotions, personal preferences, etc, a lot of things are going on at the same time.

As an observer, there are limits to how much I can observe, I may take whole bunch of, a whole collection of equipment that can capture everything that is going on in a situation, maybe I want to observe village life, out within or outside Kharagpur or outside our campus you know within the Kharagpur area and I go to a village and I set up a camera and I set up all these equipments and everything is captured.

But I am not able to capture are the emotions that are being generated in the people, sitting in that crowd, that I am trying to observe, what are they feeling about being observed, so as you see I came to study village life and I want to study how people feel, so I am going to ask them questions, but will there really come up with the kind of answers that we need, they may answer our questions, but they may say one thing and they may be feeling something totally different. And I will say no, no I will attach all these medical devices to them and you know everything their blood pressure will be monitored, their heart rate will be monitored.

But can I know, at least as far as I know there is no equipment at this point that can transcribe the thoughts that are going through a person's head, when the person is being observed, and in one of the next lectures I will show you something very, very interesting. So I can never fully capture what a human being is feeling, I may be able to capture some physical reactions or some physical aspects of an emotion being experienced by a human being, but I can never fully understand what meaning the human being is driving from those physical reactions.

I am sitting in a room right now that is cold, I enjoy cold weather, but today I have a bad throat, when this recording is going on and I love these lectures and I love this portal and so you know it is fantastic and the team here is great and even though I am trying my best to deliver this lecture, as best as possible, the irritation in my throat is bothering me, so I am excited about teaching something that I absolutely love teaching, qualitative research I feel it you know very strongly about this subject.

And but I am not able to, nobody can fully understand what meaning I am driving from the lecture today, even I can't comprehend it with you, because on the one hand I am enjoying what I am talking about and on the other hand this little irritation in my throat is bothering me and the cold environment that is there in this room is, on the one hand, it is enjoyable, but it's also negatively affecting this is hitch in my throat.

So how do you capture this and that is what qualitative researchers say, that there is just no way that one can fully capture the same kind of data and the way I would explain it as a person observing this, would be very different, from the way a doctor sitting in this place, sitting in this room would capture this would be very different, from the way a person who knows me and who understands how much my throat bothers me, would explain this and that would be very different from a person who has never had any throat problems would explain this.

So interpersonal environment also define it, a person who has absolutely no experience with severe throat infections would probably not be able to understand what I am going through, at the same time a person who has had experience with severe throat infections, but does not have an experience with teaching something that one enjoys so much, would probably interpret this whole experience in a very different way. So different people sitting in this room would interpret this situation very differently: my level of satisfaction with the delivery of this lecture today.

And you can use all kinds of equipments, but the tension going on, in my head, cannot be captured and that's what qualitative researchers say. Even I as a participant observer, as an ethnographer, cannot describe this, in a way that another person would be able to verify this fact and that is precisely what qualitative researchers except they say that there is a limit to how much, to how objective one can be.

Qualitative researchers accept that the collection and interpretation of data is confined within the limitations of human behavior that human behavior, personal attitudes, human emotions, personal preferences etc, limit the amount of attention we place on the data we collect and what

we human beings filter out as sense-making information from the information that does not make any sense to us.

So when we collect information, there is a certain amount of information that we draw, we may capture everything, now what we filter out as things that make sense to us are limited and qualitative researchers say that this process of filtration of what makes sense and what doesn't make sense or the process of filtration of what makes sense from, what is not going to be relevant for the study of a phenomenon, will vary from person to person.

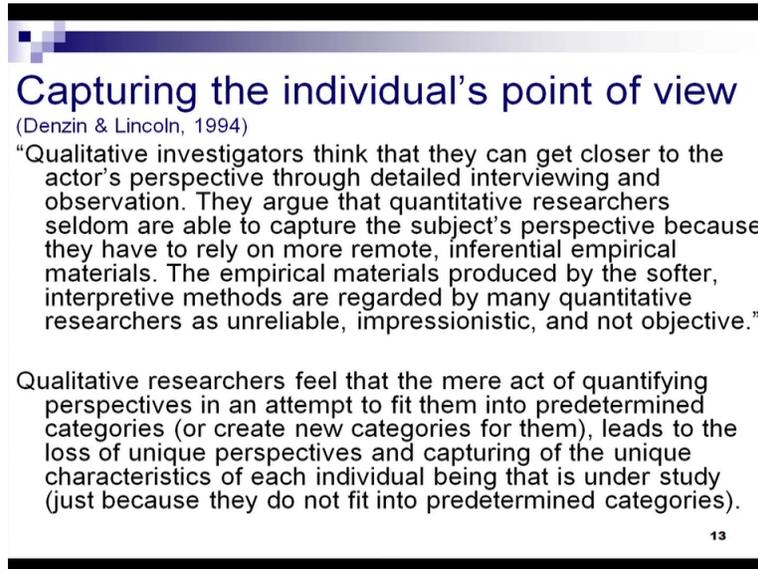
And like I told you, so if for example we are studying my satisfaction, with my class today, as an ethnographer, as a person who is describing her only lived experience, my description would also include the description of this cup please, focus on this I want to show this, I'm having some hot water and sipping some hot water, so I can deliver my lecture. Now the temperature of the water in this cup will determine my satisfaction, with how well I'm able to deliver the course.

That's what I meant when I said that the team here is great and a very helpful, so my level of satisfaction is enhanced because I have hot water in this cup, that I am slipping so that I am able to talk in a more comfortable manor, but another person sitting in the audience who does not have experience with wanting to teach something that man enjoys very much, despite this very bad throat, will not understand how much this temperature means to me, so they may just discount this, they may not want to take the temperature of the water in this cup as sense-making information, that's what I am saying.

Where is a doctor, may be an ENT specialist sitting in this room, who's trying to assess how satisfied I should be, about teaching something that I really enjoy in a cold room despite my bad throat, would probably realize the value of this, but they would still not be able to capture these satisfaction, the feeling of comfort I have with the people or about the people, who have bothered to bring me this hot water, so I am very happy about that, so I am very satisfied, but that is something that even at doctor will not be able to capture.

The happiness I have, the feeling of comfort I have, they need, the motivation that I have to teach this lecture, despite my bad throat sitting in a cold room that is what this is. What we draw as data is, you know or what we, sorry what we draw as sense-making information, information that may not have very much value will differ from person to person.

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Capturing the individual's point of view
(Denzin & Lincoln, 1994)

“Qualitative investigators think that they can get closer to the actor's perspective through detailed interviewing and observation. They argue that quantitative researchers seldom are able to capture the subject's perspective because they have to rely on more remote, inferential empirical materials. The empirical materials produced by the softer, interpretive methods are regarded by many quantitative researchers as unreliable, impressionistic, and not objective.”

Qualitative researchers feel that the mere act of quantifying perspectives in an attempt to fit them into predetermined categories (or create new categories for them), leads to the loss of unique perspectives and capturing of the unique characteristics of each individual being that is under study (just because they do not fit into predetermined categories).

13

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Qualitative researchers feel that the act of quantifying perspectives in an attempt to fit them into predetermined categories (or create new categories for them), leads to the loss of unique perspective and capturing of the unique characteristics of each individual being that is under study (just because they do not fit into predetermined categories).

Quantitative researchers want to categorize things, they want to draw boundaries and fair enough our world around us is so complicated, that we cannot study things, we cannot understand things still be fit them into predetermined categories. I will take the example of, we all understand the

language of computers right and we all know people who use computers on a regular basis for their work realize, that so people who use computers on a regular basis realize, that when we make files, when we save files we save them with names that we can remember, otherwise these files are random, you know you can't name one file, one thing on one day and just let it sit on your computer, put it in the My Documents folder in, just let it vegetate there.

Then create another file which has almost same characteristics and just let it randomly float there, we like to put them into folder, so we can retrieve them, right and that is what happens, that is how we categorize the world around us, I'm using this example because I think most us will understand. So we put whatever we want to remember, whatever we want to record into predetermined categories and these categories, then do not capture the total essence of whatever we have created but somehow create boundaries, for whatever we are trying to understand.

Qualitative researchers says yes, that this categorization is important, but also important is what is left out, what is not covered by this categorization, what doesn't fit into these predetermined categories. So it is a unique individual point of view that the qualitative researchers attempts to capture, quantitative research says categorization is enough, qualitative researchers maybe for the purpose of quantifying things, for the purpose of putting them into a discrete series mathematically, if I may draw that analogy, maybe that is fine.

But if we want to see the human experience as a continuous series, then we cannot, we know we need to consider individuals point of view, we need to consider what, how different people are from each other, we need to put them into standard categories, but we also need to see the uniqueness of human experience, every human being will experience the same situation differently with a different interpretation and that is what qualitative researchers do.

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Examining the constraints of everyday life

(Denzin & Lincoln, 1994)

Quantitative researchers "... see this world in action and embed their findings in it.[...] Quantitative researchers abstract from this world and seldom study it directly. They seek a nomothetic or etic science based on probabilities derived from the study of large numbers of randomly selected cases. [...] Qualitative researchers are committed to an emic, idiographic, case-based position, which directs their attention to the specifics of particular cases."

Quantitative and qualitative researchers study different things at different levels. Quantitative researchers study things from an outsider's perspective, they study classes or categories of subjects (nomothetic) as outsiders. Quantitative researchers study as insiders the uniqueness of individual characteristics (idiographic) that lie outside the boundaries of categorization.

14

Examining the constraints of everyday life, Quantitative researchers see this world in action and embed their findings in it. Quantitative researchers abstract from this world and seldom study directly. They seek nomothetic or etic science based on probability derived from the study of large numbers of randomly selected cases. Qualitative researchers are committed to an emic, idiographic, case based position, which directs their attention to the specifics of particular cases.

So quantitative and qualitative researchers study different things at different levels. Quantitative researchers like to study things from an outsider's perspective, they say okay, situation is there, I am going to completely disconnect from the situation, I'm going to go out of the situation and I am going to study classes or categories of subject, so as an outsider.

Quantitative researchers study as insiders the uniqueness of individual characteristics that lie outside the boundaries of categorization. So we say that, everyday life means different things to different people to different individuals and qualitative researchers want to study what is on the French that is one way in which qualitative researchers differ from quantitative researchers.

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Securing rich descriptions (Denzin & Lincoln, 1994)

"Qualitative researchers believe that rich descriptions of the social world are valuable, whereas quantitative researchers, with their etic, nomothetic commitments, are less concerned with such detail."

Qualitative researchers look for explanatory information in the descriptions surrounding individual entities, events and phenomena. They seek to supplement the information generated as a result of categorization and generalization with unique descriptions of entities, phenomena and individuals that have been categorized. They seek to highlight those aspects of individual entities, phenomena and individuals that have been pruned as a result of fitting them into categories. e.g. the question 'Who are you?' or 'Where are you from?' was relatively easier to answer some decades ago when people were not so mobile. But now, it has become so difficult. 'What is my identity?' 'Who am I to myself and to others?' – Himachali, Punjabi, non resident Himachali or Punjabi, Bengalized Himachali, or just plain Indian, or better still, confused Indian?

16

Securing rich descriptions this is another point of difference, qualitative researchers believe that rich descriptions of the social world are valuable, whereas quantitative researchers, with their etic nomothetic commitments, are less concerned with this detail.

Quantitative, qualitative researchers look for explanatory information, they look for the explanations in the descriptions surrounding individual entities, events and phenomena. They seek to supplementary information generated as a result of categorization and generalization with unique descriptions of entities, phenomena and individuals that have been categorized.

So qualitative researchers understand that categorization is important, but they say okay, once categorized things what happens to the material that is left outside of these categories, how do we connect different categories and it is this connection is, unique individual interpretations of these connections that give meaning to life that are studied by the qualitative researchers.

They seek to highlight those aspects of individual entities phenomena and individuals that have been pruned as a result of fitting them into categories. For example the question of who are you? or Where are you from? now this question is very difficult, somebody asks who are you, or where are you from, at a time when people were not so mobile, this question was relatively easier to answer.

Now I will just state my personal example, I belong to Himachal but I come from a Punjabi family that has lived in Himachal for a long time, so who am I? and now I have been in West Bengal for eight years and I was abroad for several years and I was in Gujarat for several years

and have been all over the place, so where are you, who are you, it has become so difficult where does one row the boundary, so what is my identity? Who am I am?

Am I a Himachali because I grew up in Himachal or am I have Punjabi, because I belong to my family follows Punjabi traditions or am I a Himachali Punjabi on nonresident Himachali or Punjabi, Bengalized Himachali because I am living in Bengal for so many years now or just plain Indian or better still am I just confused Indian.

Who am I? And all have our own interpretations, when we study identity this is what comes into play. Rich descriptions of your identity is that affect what we do as Indian, some of the ways in which people like me who have been traveling, who have lived in different parts of the country or a broad have gathered ways of knowing, ways of doing things, have understood different ways of behavior, have incorporated different ways of behavior into the way we do things.

Now somebody ask me all Indians are like this, I don't know, all IIT professor like, this I don't know, all Himachali professor teaching in IIT are like this, I don't know, why because all of us have different experiences and it is in through these description and it is in through these experiences that we understand the world around us and it is this individual descriptions, it is these individuals understandings of meaning as insiders that qualitative researchers try to capture. Okay, so we secure rich descriptions.

And that is all we have time for today, please think about this, this sounds very difficult, but the bottom line here is that qualitative researchers understand, what quantitative research brings to enquiry, to study of different phenomenon, or different phenomena in the world, but they then capture the information that is left out, because of or result of quantifying different aspects of different phenomena that are being studied.

And it is this, I firmly believe as a researcher, I firmly believe that it is very important that both qualitative and quantitative research go hand in hand, as a lot of emphasis on quantitative research and it has its own very important place in the field of research, in the field of knowing, and there's a lot of emphasis, because we say that we can you know these factors verifiable, but

qualitative research adds the flash to the Skeleton, that is built by quantitative research, that's where like to see so that is all we have time to discuss in this lecture will continue with some more information, interesting facts about qualitative research in the next lecture, thank you very much for listening.