## **Advance Course in Social Psychology**

## Lecture 06: Methods Adopted in Social Psychology: Part-IV

Hello friends, welcome back to our another lecture on methods adopted in social psychology. As we all know that we are discussing about the qualitative research method. We are focusing on grounded theory. Today I will continue with the methodology of ground theory based on the nomenclature that in what parameters we can establish any theory based on qualitative analysis that is grounded theory. So the most important aspect of grounded theory is the core variable which explains most of the participants pain concern with as much variation as possible. This entails this means that whenever a group is being studied is the subject of study then definitely there is one common problem that is that exist in any group and that becomes the core variable or the subject matter of the researcher and how every participant is concerned with that problem and how they are respond to that problem in varied forms.

So any the participants major concern becomes a core variable of any grounded theory. It has a most powerful properties to picture what is going on what with as few properties as possible needed to do so. So when the researcher has identified the core variable in the theory by establishing the theory then it also becomes a most powerful picture that what exactly is going inside the group that is among the group members what kind of interaction is going on among the members how people responding to this to that particular problem how every member is concerned with that particular issue or problem in that group how it is concerning an individual at individual or personal level with that problem. So there can be a number of ways that becomes that makes the study so powerful based on the properties of the problem and responses of the participants.

So a popular type of core variable can be theoretically modeled as a basic social process that accounts for most of the variation in change over time context and behavior in the studied area that is so obvious that one particular issue is an issue that can be labeled as a social process or any social problem and how that problem has become the core variable or subject matter for any researcher. Because there are number of varied responses in the particular situation they every person has its different relation with that particular situation or problem and there can be different kind of behavioral patterns that are being exhibited by every participant in that group. So their core variable is multifaceted in its own way. So grounded theory is multivariate it happens sequentially, subsequently, simultaneously, serendipitously and scheduled. This is the most important factor that we have to discuss about grounded theory is that whenever any social problem in terms of core variable is being perceived by the participants and the researcher then it has various forms.

It can be a series of responses that one problem is there, problem is at this level, it is moving to the another level, third level, fourth level and how at every level a problem when is aggravating or reducing how people are relating to every stage. So there is a sequence of response among members and at the same time some different kind of parallel developments are also taking within the group functioning itself. So there is subsequent sequential responses at the same time there are some or simultaneously some more developments are also taking place within the group and how members are responding at the simultaneous level. And most important thing is that how members are responding or researchers are responding to the all of a sudden responses which are out of the way and people are responding to those problems. This is multivariate in nature because there are sequential, subsequent, simultaneous and

serendipity and scheduled in the responses that at every stage people are responding in a typical fashion out of the way there are some behaviors that pops up which can be fortunate or unfortunate to have those kind of responses or there can be a sequence that how the problem is aggravating and how people are also responding accordingly.

So grounded theory is multivariate in nature and all the data is a fundamental property of group grounded theory or GT which means that everything that gets in the researchers way when studying a certain area is data. So there is no streamlining of collecting the data because any response can come from any direction know how and how that data is considered as a raw data unstructured data which is useful for the researcher. So these are the nomenclatures that all these parameters will definitely exist whenever grounded theory is being used to understand any group behavior or social group behavior or community behavior in a very at very qualitative level. So the idea is that grouped in any group grounded theory there is a core variable people respond in very sequential, subsequent, simultaneous and in serendipitous manner and most importantly that whatever data is there in terms of researchers perception that how people are behaving every point that that data is a data and a very relevant data for the researcher. Apart from it not only interviews or observations but anything is data that helps the researcher generate concepts of the emerging theory.

So any data that is emerging during that process apart from any interview or any observation or narrative whatever information is being gathered by the researcher that forms the base of the emerging theory because every time we are updating we are comparing the current and the previous information and we are using that information to evolve a new theory. So field notes can come from the informal interviews, lectures, seminars, expert group meetings, newspaper articles, internet mail, list even television shows conversations with friends all these are the sources to collect the data and form a new theory. So once the data are collected then it involves basic steps it is not only about collecting the data and analyzing there has to be a systematic process that how every data is been structured in a way that it comes out with a new theory. So there are three basic steps when we are talking about grounded theory the first is coding, text and theorizing, memoing and theorizing and integrating, defining and writing up theories. So in all the three stages theorizing is very important because whenever we are dealing with the new information, available information or the updated information this is leading the researcher to form a new type of understanding and theory.

So theorizing is involved in all the steps the researcher is required to build and test theory all the way through till the end of the project. So let us discuss about coding what exactly coding deals with? So coding places incidents into categories and then creates one or more hierarchies out of these categories in terms of categories, subcategories, properties and it is a continuous process from high to low or to any dimension. So whenever a number of information is coming to the researcher the researcher tries to code or classify that information in different categories it is not all together. As I mentioned earlier that when a group is being studied so if there are 20 participants in the group and one particular problem is there so we can have 20 responses. Now those 20 responses have very different nature of response how those responses are being categorized.

So this is the process that entails coding. Continuous information is coming and we are classifying or categorizing that information in different categories or groups. So this is the

process of coding. So there is constant comparison when categories are continuously compared to one another and is used to create both categories, subcategories and properties. So different responses are being classified, new responses are also coming so we are comparing those responses with the current and the previous one and trying to update and accommodate all the responses while forming new categories or dimensions.

So any behavior can have different kind of dimensions to classify. This is the process of coding. At the same hand there is open coding or substantial coding which is actually understanding the abstraction as we discussed earlier that whenever we are talking about grounding theory people have abstract understanding of the situation. That abstract understanding needs to be recorded or collected that requires focus on each and every word, sentence or text or any transcript that is being used in that particular situation and how that every information is being categorized. So this is open coding or substantial coding as the term implies maximum absorption of the information.

So when we are talking about open coding it is about written data from field notes, transcripts are conceptualized line by line which is a tedious task and how everything is coded in order to find out about the problem and how it is being resolved. If 20 participants are there in the group, 20 people are dealing with the problem, how 20 people are having a different perspective to resolve that problem. So how those problems perspectives can be recorded, it can be coded, it can be compared with the previous and current information that is the process of open coding. So these are compared as more data is coded, merged into new concepts and eventually renamed and modified. So every category is being updated, modified and renamed because new information is coming in continuously, new information is coming with different perspectives and how we are shifting or juggling all the created concepts into new one.

So this is coding because whenever new information is coming the understanding is also being changed or altered. So we are the researcher is trying to alter his own understanding with that of alterations in the participants understanding. So this is the function of coding. So we can say that the grounding theory researcher goes back and forth while comparing data and constantly modifying and sharpening the growing theory at the same time they follow the build up schedule of grounded theory of different steps. So new information is coming, current information becomes old information, how they are comparing, what information to be retained, older information how much to be retained and then coming up with a new idea or thought in form of theoretical foundations that is the function of coding.

So according to Strauss and Corbin they have also talked about axial coding as well which we have discussed just now here itself in terms of substantial coding it is about a set of procedures whereby data are put together in a new way after open coding by making connections between categories. So it is not that only A, B and C of responses has been created a relation is also been created between all the categories because there is a sequence of responses and how those responses are being connected to each other. And individual participants response with has been categorized in three category or dimensions and how those dimensions are related to each other. So this is the idea of axial coding by Strauss and Corbin that every time new information is coming and new interrelationship is been created among all the categories. So this is axial coding by making connections between categories and there is a coding paradigm that involved conditions, context, action or interactional strategies and consequences.

So it is a minute understanding of human behavior that what one behavior is leading to the another to the another and what is the consequence of that behavior. So if any participant is perceive any problem in a different way then how those different responses of that particular participant is creating a chain of reaction and what is the consequence. So this is axial coding and coding paradigm. So this is the major function of grounded theory that is coding. Next comes selective coding it is also found in core variable that explains the behavior of the participants in resolving the main concern.

Now different kind of behaviors have been categorized but the researcher can also be selective in coding that what particular behavior is able to resolve the problem. That particular behavior that has been selected by the researcher is actually a process of selective coding. It is done after having found the core variable or what is the thought to be the core. So once the major problem has been identified how it has been resolved based on understanding or collection of different responses that will be a process of selective coding. The core explains the behavior of the participants in resolving their main concern and the tentative core is never wrong that means the major problem can never be the wrong concern of the participants or the researcher but that core becomes the major core.

It is just more or less that fits the data after choosing the core variable the researcher selectively codes data with the core guiding. So based on the related responses of the people how that core variable is related to the core guiding that forms selective coding and that selective sampling or new data is termed as theoretical sampling a deductive part of grounded theory. So whenever the core problem has been identified or any core variable has been identified how people have resolved by focusing on their concern and picking only those behaviors that is a process of selective coding and that helps in creating a theoretical grounding which is actually a theoretical sampling of the responses and that brings a deductive part of grounded theory. How we are deducing a particular concept, concept in terms of solution to the problem that has been brought up by the participants. So this leads to deductive thinking or highlights the deductive thinking style of grounded theory.

So selective coding could be done by doing old field notes or memos which are already coded once at an earlier stage or by coding newly gathered data. So the major focus of researcher during coding is to create a relationship between the old and new coded data and how that coding data will help in deduce a specific theory to the problem. Later on that hypothesis can be created that based on this information this problem was resolved in a particular manner. So this is the function of coding in terms of constant comparison in terms of open coding or substantive coding in terms of axial coding in terms of coding paradigm in terms of selective coding and finally establishing the deductive part of the grounded theory. Next comes the theoretical coding again which is a form of theoretical sampling.

The theoretical coding means that the researcher applies a theoretical model to the data. The codes integrate the theory by weaving the fractured concepts into hypothesis. As I mentioned different categories and dimensions have been identified and how a relationship is being woven among all the dimensions that gives a theoretical sampling and identifies the participants main concern. The theoretical codes just as substantive codes should emerge on the process of

constantly comparing the data in field notes and memos. So this is how theoretical coding also takes place when there is coding in terms of axial and substantive coding.

How the major concern is identified as a core variable and all those responses are being updated and forming a base for a theory. So this is the one aspect that we have discussed about that is coding. The other stage is memoing. It is the core stage of grounded theory. Memos are the theorizing write up of ideas about substantive codes and the theoretically coded relationships as they emerge during coding, collecting and analyzing data and during memoing.

Now whatever relationship has been identified among all the core variables and sub variables that requires a descriptive analysis. How we will theorize? How we will analyze? How we will bring that analysis or offer that analysis a descriptive pattern of understanding? Just observing by observation by the researcher does not suffice to formulate any hypothesis that requires to understand the relationship among all the variables and it requires a description. That how you will refine all the relationships we compare all the incidents of the past present and then a concept is being evolved. This requires theorization or description of the events and responses in a very theoretical manner. So this is the stage which requires memoing or theorizing about a particular relationship based on theory.

So when we talk about memoing they are the theorizing write ups of ideas about substantive codes and they theoretically coded relationships as they emerge during coding, collecting and analyzing data and during memoing. This is basically a tool that a researcher can use it to describe the relationship in a very theoretical manner because at this stage the theory is being established because the hypothesis has been established and how that hypothesis has to be explained that is memos. So memos are important tools to both refine and keep track of ideas that develop when we compare incidents to incidents and then concepts to concepts in the evolving theory. So this is about filtration. Now every information is there how to cut down on the extra information which can hamper the evolution of the theory and then coming up with the refined responses that is memoing.

We are describing things in a very streamlined fashion. It is a tool basically that we are using this step as a tool to refine all the information because at this point the theory will evolve the hypothesis has to be formulated. So in memos the researcher develops ideas about naming concepts and relating them to each other. It is not about relationship among the categories. Once the relationship is also being understood then those relationship also have a very different nature.

So that nature has to be renamed during the process of memoing. So the in memos the researcher tries to establish the relationship between the concepts in 2 by 2 tables in diagrams or figures or whatever makes the ideas flow and generate comparative power. So in memoing the idea the theoretical idea is being described in form of diagram or flow diagrams that what led to which kind of situation or behavior and how it has led to a particular evolution of the theory. And the most important part is that this tool or this stage is leads to accumulation of written ideas into a bank of ideas about concepts and how they relate to each other. Because here the theory is being identified in a very pictorial form because it is expressing the process that how the how theory has been evolved it has gone through a process and has evolved into a theory.

Because hypothesis has been developed later on but this theory can be used to understand this hypothesis. So without memoing the theory is superficial and the concepts generated are not very original. So the idea is that if all the coding has been done what exact meaning has to be given to every category and dimension for that process memoing plays a very important role because it is being the concepts are being reflected in tables in figures in diagrams in flow diagrams that can generate a comparative power that what exactly has happened and how the situation has evolved later. And the bank contains rich parts of what will later be a written theory. Now when we are theorizing everything in written form then those relationships actually helps us to evolve or establish a new theory.

Because the process has been explained in a diagrammatic form and that diagrammatic form will gives us a clear picture that how the theory has been established right from the core variable coming to the comparative analysis. So in grounded theory preconscious processing also occurs when coding and comparing are recognized. That means that whenever we are comparing the responses of the participants then there are some other ideas which are very much preconscious in our mind and that helps us to understand the behavior in a more explicit manner. So the researcher is encouraged to register ideas about going outgoing study that eventually pop up in everyday situation and awareness of the serendipity patterns are also included to achieve good results. That means any idea that pops up in the researchers mind can help to understand the theory in a more detailed manner or in depth manner.

Because whenever we are collecting all the information we are theorizing we were memoing then preconscious process is also active at the same time. So maybe some idea will pop up in the researchers mind and that will make or generate more awareness about those patterns of behavior in a very fortunate manner. So serendipity patterns include unanticipated and anomalous events and these patterns can become the impetus for developing or extending a new theory. That means all the information has been gathered and when memoing is we reach the memoing stage then the researcher can also add his own ideas to those theories. It is not only about the available information or the old or new information or modifying any information it is also about the what information or what thought or idea that has evolved in the researchers mind will also add more to the existing theory.

And the last is sorting, integrating, defining and writing of theories. After coding memoing next comes sorting the fracture data and putting everything together. So sorting puts fracture data back together during sorting many new ideas emerge which are recorded in a new memo giving the memo on memo phenomenon. More information is added in the already existing theory which has been established by the researcher and when writing then again more information is being added to the theory. So sorting memo generates a theory that explains the main action in the studied area.

The theory written from unsorted memos may be rich in ideas but the connection between concept is weak. So whenever we are writing we are integrating or sorting the theories then all the redundant information is being excluded from the collected or available information and when all the information is being compiled that requires sorting of memos in a way that the written theory takes shape. That means all the collected information is been given a proper shape in form of theory. So the different categories are now related to each other and the core

variable. The theory should encompass the important emergent concerns and the careful description.

The core variable is related to the every new dimension that has evolved and that relationship is being memoed in form of memo has been compiled in form of theory which is very much readable in its own way and in the later stage comes rewriting. That means again adding more information and creating better relationship between core variable and other responses and the relevant literature and the concepts emerge with careful description. So in to put the theory in a scholarly context finally the rounded theory is edited for style and language and eventually submitted for publication. So this stage that is sorting, integrating, refining and writing up theories involves again a process of memoing, sorting out the relevant information, creating a connection, giving a complete description of the information based on comparative analysis and finally publishing the theory in a very readable language.

Next comes use in various disciplines. So grounded theory is used in different areas. In psychology it is used to understand the role of therapeutic distance for adult clients with attachment anxiety. It is about relationships, it is about emotions, how people unleash their emotions, their motivations and beliefs in a very descriptive manner and how those speeches and narratives and text are being used to formulate a new theory. It is also used to discover the meaning of speechuality in cancer patients and how their beliefs influence their attitude towards cancer treatments. It is again about the physiological aspect of grounded theory that people suffering from terminal diseases, how they change their own behavior while with the perspective of losing life and how it has changed them to a larger extent.

So that captures the spiritual aspect of individual behavior and what perception they have for the cancer treatments. As we all know that cancer treatments is very painful in its own way. So what a person goes through? So what a person goes through is actually something which is which requires text and narratives which we cannot measure it but we can capture those narratives and understand what meaning does it carries. It is about the semiotic or semantic interpretation of individual behavior. In business, grounded theory is used by managers to explain the ways in which organizational characteristics explain co-worker support.

Sometimes we cannot measure such feelings and emotions at workplaces what a person as an employee feels when interacting with the co-workers. An employee who does not get any support from the higher authorities, how does it feel? We cannot measure it but yes whenever that feeling is being captured in a very qualitative manner in form of text, narratives, language or speech that becomes a subject matter of grounded theory. In software engineering, grounded theory has been used to study detailed stand-up meetings and help researchers in the field of information technology to study the use of computer technology and older adults about the anxiety about the threat people experience with the intrusion of IT in in their day-to-day life and how people are anxious what they feel. Measuring anxiety is a different thing having a different feeling of anxiety and what you feel while being insecure that becomes the subject matter or core variable of any grounded theory. And in nursing area, grounded theory has been used to explain how change or shift reports can be used to keep patients safe.

So, all these aspects are very much relevant to analyze behavior based on grounded theory because there are certain aspects of human behavior which we cannot measure, which we can only feel and that feeling has to be derived based on grounded theory while identifying those feelings by identifying those problems, categorizing or giving more streamlining to those

emotions and then compiling that feeling or information in a form of theory. Now, in all these examples also, we cannot have any hypothesis for sure because we cannot measure. But yes, when we have some unstructured data, later on we can create those hypothesis that how people have tried to cope up with those aspects of their life and that forms the hypothetical grounding for any theoretical understanding. So, this is all about grounded theory which is supposed to be one of the most recent and highly recommended qualitative research methodology in social sciences. Next, we will continue the another research methodology that is focus group. That is all for today. Thank you so much. Thank you.