Advance Course in Social Psychology

Lecture 03: Methods Adopted in Social Psychology- Part I

Hello friends, welcome back. Today I am going to start the next module, module 2 titled methods adopted in social psychology. So, in this module in this unit, I am going to discuss about the different types of research methods that are being used to study human behavior from different perspectives, different social situations in this field of psychology. So starting with the discussion, I will talk about that how based on the different research methodologies, how social psychology has become a central core of modern psychology, although initially it was a very remote area, but based on use of different kind of research methods to understand human behavior individual functioning, it has also gradually enriched not only understanding the behavior of an individual, but the soul of societies as well. So, through rigorous laboratory and field researches, social psychologists have also demonstrated that to understand behavior completely, it is necessary to recognize how the context, content and culture matters. The significance of the discussion is that how different kinds of research methodologies can help to understand human behavior from different perspectives, not only social situations or group situations, but also from cultural perspective as well.

So, social psychologists have attempted to study behavior on the basis of rational and demonstrable cause-effect relationships, and this relationship can only be exhibited, can only be demonstrated when scientific research methods are being executed to understand human behavior. So, social psychology as a science and practice is an organized body of knowledge gained through the application of scientific methods. Next comes methods used in social psychology. If we talk about research methods or we talk about the scientific manner in which we can study human behavior, then there can be a discussion to a length where we can talk about different type of methods such as observation, experimental method, case studies, interviews, survey, and even more so some more qualitative analysis.

So, initially right now I will talk about the quantitative methods of research without being used in social psychology, and the most popular form of research method that is being used in social psychology is the observation method. So, as we all know that science as a stream of discipline human behavior begins with observation, and before we can explain that how an individual behave in what manner, what are the reasons that a person has exhibited a different or specific aspect of behavior, it requires strong observation which is carried out in different circumstances and conditions. So, one of the most basic technique for studying social behavior involves observation. This is the most basic and most significant and important method of research that is observation. It is one of the classical method of studying human behavior.

It is a process of systematically recording the verbal and non-verbal cues of behavior and not or avoiding using non-experimental methods and using non-experimental research techniques to assist in making accurate observations of events. That means the intrusion of experimentation is completely avoided in this type of classical method of research method,

where only strong observations are being used to understand human behavior. So, when we are talking about observation method in social psychology, observation is accompanied by careful measurements. For example, a social psychologist wanted to find out how frequently people touch each other in different settings. It is a very common observation that anybody can make that when we are in any social situation or group situation or in any specific culture, people have habit of while interacting and talking to each other, they would touch each other, their hands, their face or even their own faces.

So, what is the reason and in what circumstances, how these touches can be understood or identified in a particular context. So, when you are talking about observation method, this kind of research can be carried out based on strong observations and these observations can be made in specific areas. For example, on streets, in shopping malls, in colleges or campuses or in schools. So, based on these areas, the researcher can identify the frequency that what frequency an individual is touching the other person while interacting in a particular situation. So, these are the areas where these kinds of behaviors can be easily observed.

So, we can say that observation is a purposive or intentional examination of something particularly for the purpose of gathering facts. But yes, the most important thing to understand in this method is that no experimentation is executed and only it is about non experimental method in terms of observing the behavior and collecting the data in terms of factual information. Next comes types of observation method. There are two types of observation methods. The naturalistic observation, which is also known as the uncontrolled observation and involves carefully and systematically observing behaviors as they occur naturally.

No manipulation is being made in the environment or in the people or in the situation and the researcher tend to observe the behavior in a very natural manner that how the behavior is being emanated or exhibited in a very natural course of time. So, with minimum involvement by the observer, the observer capitalizes on variations that occur naturally and postulates certain theories regarding the behavior of people. While observing, people tend to accustom or they tend to attribute certain reasons to the behavior of the particular person in a very natural situation. So, this method is also known as the uncontrolled observation where the researcher resorts to the careful phenomenon observed and no manipulation is being done to understand the behavior. So, there is no attempt to use instruments to check the accuracy of the phenomenon observed.

So, the behavior is observed in public areas, streets, homes and schools and moreover, people from different cultures respond to a particular situation and how culture aspect has its significance in understanding human behavior is also being highlighted and becomes a major part of cross cultural research. So, when we are talking about naturalistic observation, it has its specific scope in understanding cross culture behavioral patterns of people. It is also important that observed organisms do not realize that they are being that they are being observed which entails that that the researcher is part of the research, but the individuals who

are being observed, they have no idea that they are being subjected to certain kind of observations, although in natural situation. So, we can say that naturalistic observation often takes great patience, it requires lot of time and may sometimes it what observation has to be made may not occur in that particular situation and that requires lot of patience and is very much useful in understanding or studying social problems. So, this kind of observation method is very much useful has its great applicability in understanding or conducting cross cultural researches and understanding social problems.

So, these observations are often conducted on micro scales and may lack representative sample that is there can be some biased irrespective of age, gender, class or ethnicity and this may result in defining lacking the ability to generalize to wider society. Now when we are observing people in natural situation, it becomes very difficult to expand those observations to a larger sample. So, small sample is more applicable when we are using naturalistic observation method and which makes the study less generalizable because we cannot replicate the observations on to a larger sample of individuals. If the researcher becomes too involved then also it reduces the objectivity because the observer becomes more emotionally attached to the selected sample or population and their the responses or observations become very much biased and the researcher finds difficulty in collecting the factual information. So, this leads to a problem as they could selectively report information instead of noting everything that they observe thus reducing the validity of their data.

This is obvious that when we do not have a larger sample then we cannot claim that whatever study has been performed to observe some patterns of behavior then it actually measuring the same in that case larger sample is required, but when we are talking about naturalistic observation this kind of problem will definitely exist. The next is systematic observation or the controlled observation method. This is a method of research in which behavior is systematically observed and recorded and the observation is accompanied by careful and accurate measurement. In this kind of observation method the situation is being manipulated individuals are selected purposefully so that this observation can be made in a very controlled situation. So, this method allows collection of primary data by participating in or living the daily activities of the participants and recorded observations and interactions.

In naturalistic observation the researcher would not become part of the study group, but when we are talking about systematic observations the researcher would become the part of that study group. The researcher would participate in the daily activities he would observe all the behavior of the members of the group whom he is the part of the that study group and tries to collect all the information in form of primary data in first hand. So, this collected data is free from subjective assessments. Definitely when we are in proximity with the subjects whom we are studying then we get a better scope and better scale to understand human behavior in a very objective manner. So, controlled observation can be easily replicated by other researchers by using the same observations observation schedule.

This means it is easy to test for reliability. That means when we have the primary data in hands the first hand information then it is it becomes easy for the researcher to replicate the same study on to the other sample in order to understand or test the reliability of the study that whatever the purpose was to conduct the study and has been resolved and has been achieved then it can be replicated on the other sample as well. So, controlled observations are fairly quick to conduct which mean that the observations can take place within a short amount of time and a larger sample can be obtained resulting in findings being representative having the ability to be generalized to a larger population. This is only possible when the researcher is actually directly interacting with the group members or with the study group. So, that the real data can be observed when we are in unnatural and when we are performing any naturalistic observation there is a sort of gap between the study group and the researcher and there can be some gap in understanding behavior of the study group.

But when we are talking about controlled observation method or systematic observation method it is becomes easy for the researcher to observe the behavior more closely in a more intricate fashion and the data can be more replicated to other samples as well. So, this helps in generalizing the results. For example, if we want if we are studying the discriminationary racial discriminationary attitudes in one study group and the data we have we can actually replicate the same study on to the other study group. So, as to make a comparative analysis or understand that what can be the reasons or difference of opinion among people which leads to racial discrimination. So, this is how the systematic observation is considered to be more methodological more systematic in nature.

So, in systematic observation the researcher generally lives or otherwise shares in the life of the group which he is studying. So, this is the most important feature of systematic observation. The next method is experimental method. This method involves manipulation of variables to establish the cause effect relationship. For instance, impact of stress on the academic performance of the students.

Now how this relationship can be established this requires some inclusion of the variables where the degree of the variables or inclusion of the variables can be manipulated as per the researchers to establish a strong relationship between stress and academic performance. So, this is the base of experimental method where manipulation of variables is done in a very scientific manner to establish and demonstrate the cause effect relationship of behavior. So, when we are talking about this method it becomes important to discuss about that what is an experiment. We will not directly skip to this method that what is this method, but actually it becomes mandatory to talk about that what is an experiment. So basically experiment is an investigation in which a hypothesis which is termed as a tentative solution to a problem is scientifically tested.

For example, a hypothesis can be that stress has negative impact on academic performance. Now if this is a hypothesis in terms of a tentative solution to the problem or tentative answer

to the problem then definitely how it has to be tested by just saying as a narrative will not suffice the requirement of an experiment or experimental method. For that the stress situation has to be experienced and academic performance has to be measured. So it becomes scientific in nature while manipulating the degree of stress levels of the candidates or the subjects and how it is impacting the performance of the subjects. So when one variable is being manipulated it definitely it has different impact on the academic performance of the students.

So whenever we are talking about experiment it requires it is a process of an investigation where a hypothesis is been tested in a scientific manner and hypothesis is a tentative solution or answer to a problem. Now to test this hypothesis certain variables have to be identified for example, stress and the other variable is academic performance. Now stress levels can be manipulated and this manipulation is termed as independent variable because stress is independent variable is considered as a presumed cause of the stress and how it impacts academic performance. So stress becomes the cause as an independent variable to impact academic performance. So when we are talking about experiment there is a hypothesis there is also an independent variable which is a presumed cause and is manipulated in an experiment and there is also a dependent variable which is the presumed consequence of the behavior.

When stress is being manipulated then definitely academic performance is also varying accordingly. So dependent variable is a presumed consequence of the behavior based on independent variable which is measured while controlling the extraneous variables that is any variable apart from stress in a kind of a performance which can affect the study to understand the relationship between stress and academic performance. So in order to establish a very robust and scientific relationship between stress and academic relationship academic performance that is cause and effect relationship then certain variables in the environment has to be controlled. These variables which are affecting the study are termed as extraneous variables and needs to be controlled or eliminated. For example in any lab experiment or in any classroom experiment when we are testing the impact of stress on academic performance then external factors can be in terms of noise, in terms of selecting the sample where every student belongs to the similar age bracket and there is equal classification of demography in terms of age, gender and class may be a sample of 100 students, 50 are male, 50 are female and all the students are falling in the age bracket of 10 to 15 years of age.

Now in all these factor arrangements every factor is being similar and if certain factors are not being normalized then they tend to impact the study and needs to be eliminated. So to eliminate such kind of factors in the study then selection of sample has to be done in a way that every subject has an equal chance of being selected and all the demographic variables are being equalized. So that all the factors are in parallel and all the extraneous variables are being eliminated or controlled to avoid the negative impact on the study. So when we are talking about an experiment there is hypothesis, there is independent variable, there is dependent variable, there is extraneous variable and to eliminate extraneous variable there has to be random assignment of the subjects based on sampling. That is every second child has equal chance of being included in the study based on demographics.

So this is how an experiment is being conducted. Then to conduct these experiments when these forms the basic features then that method becomes experimental in nature. Apart from that the other key features of an experiment are the control methods and the random allocation of participants into controlled and experimental groups. For example, I will continue with a different example that suppose we want to test the impact of new teaching methodology in a particular classroom then that class is divided into two groups, the control group and the experimental group. Control group is the one where students are being taught with the traditional teaching methodology and the experimental group is the one where students are being taught as the subjects are being taught with the new method of teaching.

Now based on this the performance of the student is being measured while finding that whether the traditional method of teaching is more effective or a new teaching method is more effective based on the understanding and performance of the students. So under such circumstances when such experiment is being performed then there is random assignment of the groups in terms of experimental and control groups. So this is how an experiment is being conducted and a scientific investigation forms an experimental method because the aim of experimental method is to establish and demonstrate the cause effect relationship. Moving to the next that is designing of an experiment. The most important and common way to design an experiment in psychology is to divide the participants into two groups.

Just now I mentioned experimental group and the control group. Experimental group is the one where the subjects are assigned the experimental treatment by the researcher and control group is the one where the group of subjects who are not exposed to any experimental treatment. That means experimental group is the one who is exposed to a new teaching method based on the example and control group is the one where the subjects are being exposed to a traditional teaching method. So this is how an experiment is designed and performing an experiment to establish the cause effect relationship makes the method as experimental. Further there are three types of experiments that we need to know.

It is not only about experimental method. Experimental method has its own different forms. The first is laboratory experiment. The other is field experiment and the third is field studies. Coming to the laboratory experiment as the term implies a laboratory experiment is an experiment conducted under highly controlled conditions where accurate measurements are possible using standardized procedures.

Standardized procedures means not only about talking about the subjects belonging to the same age bracket, gender or at any geographical location, but it also talks about some other standardized procedures in terms of instruments, in terms of questionnaires, in terms of scales, in terms of collecting data, analyzing the data and interpreting the data and coming to the discussion and conclusion in a very scientific manner. So the participants are randomly allocated to each independent variable group. So the laboratory experiments are obtained based

on lab experiments and the results are precise. They can be replicated and there is less error variance. Since the variables are being controlled by the researcher, this leads to reduced error variance.

Error variance here means that in sampling, in collection of data there is no variance which can hamper the collection of data and interpretation of data. On the other hand, the lab experiments also have some disadvantages in terms of artificiality of the settings and it can hamper to evoke or emanate natural behavior and that does not reflect the real life. That is low validity is achieved because it is not necessary that when we are controlling so many variables at one point, then it becomes very difficult to collect the data in a very natural fashion and it can hamper the purpose of the study while bringing the validity of the study very low. Here validity means that whatever the researcher purports to measure, it is not measuring the same. This means it would not be possible to generalize the findings to a real life setting.

So, this becomes a restricted applicability of lab experiments that we cannot conduct any experiment in real life situation. Under such circumstances, different kind of research methodology is being followed in terms of observation method. Also the results may be biased due to confounding variables. When we are controlling so many variables, especially extraneous variables, then definitely the results also become biased and unnatural at the same time. So, this was laboratory experience experiments with its advantages and disadvantages.

Next comes field experiment. In this kind of experiment, the research study is performed in a realistic situation in which one or more independent variables are manipulated by the experimenter under as carefully controlled situations as the situation permits. No doubt that certain kind of situation can be controlled in terms of independent variable, especially in real life situation. For example, in a particular social group or community that study can be conducted, where only one or two variable can be manipulated and then only real life situation can be studied. The virtue of field experiment is its appropriateness for studying complex social influences and processes and changes in life like settings. For example, preferences and choices in any group to understand the relationship.

Any researcher would just take up any particular social group or community, divide the group or community based on certain demographics and then that study is being conducted. So, this study becomes field experiment in terms of that real life situation can be studied and the other is that certain variables can be controlled and manipulated only to a certain extent. So, this is a difference between lab experiment and field experiment. And the dynamics and interactions of small groups have been fruitfully studied in field experiments. Just now I mentioned that suppose studying any group situation, relationships, preferences and choices, then this study is very much applicable to understand the real life like situations.

And the main weakness of this field experiment is the manipulation of the independent variable and randomization is not feasible. So, randomization means that whether in any group every member will be selected based on randomization that every member has equal chance of being selected to participate in the study. Because a group is very small, may be every member will not be selected as a subject, but definitely this reduces the chances of generalizability of the results. So, these are the advantages and disadvantages of field experiments.

And the other is field studies. These are basically the ex post facto inquiries. Now this is a type of research method where the researcher only takes into consideration the study on scientific manner when the research or any behavior has already occurred in any situation. And later on the researcher will intervene to understand those behaviors. There is no provocation, there is no stimulation in the environment and among the subjects, but the behavior has occurred in a very natural fashion and then the researcher intervenes to study those behavior patterns. So, field studies are the ex post facto scientific inquiries aimed at discovering the relations and interactions among sociological, psychological and educational variables in real social structures.

So, in any group activity, any behavior that has already been occurred and the researcher later on intrudes or intervenes into that situation based on the already exhibited behavioral patterns. So, the researcher looks at a social and institutional situation and then studies the relations among aiming at the attitudes, values, perceptions and behaviors of individuals and groups in the situation. So, field studies are strong in realism that means the responses are realistic, the situation is realistic. For example, the social class, prejudice, conservationism, cohesiveness, discrimination, group think and social climate can have a massive effect on these studies because discrimination is never provoked, it is only being exhibited in a natural course of fashion of the behavior. So, these type of behaviors in terms of attitudes and beliefs that actually occur and the researcher just gets a data based on the available responses that are existing in that group behavior.

So, that becomes the study of any field study. So, field studies have applications to human problems such as delinquency, morale, prejudice, social and educational attitudes, value conflicts, child wearing practices, educational deprivation, inequality and authoritarianism. So, these are the different kinds of behavioral aspects which actually occur naturally and the researcher can pick any of these research subjects to examine further. So, these kind of research subjects or topics becomes the area of field study or applicability of the effectiveness of field studies when we talk about experimental method. There are some weaknesses of this method as well that such as control of variables is not possible. Since it is ex post facto inquiry, then there is no way to control any extraneous variable.

All the variables are very much active in a particular situation and the researcher can only study those behavioral responses and this actually leads to a number of variances. Variances here means misleading the data or misleading the study. The method methodical weakness is

the lack of precision in the measurement of field variables. If I go back, we cannot measure prejudice based on observation, discrimination, inequalities. These are something that has already been occurring in the environment and how it can be studied directly.

Also some other weaknesses of field studies are the practical problems as feasibility, cost, sampling and time. There can be a problem in sampling the data based on demographic variables, based on the cost and time that incurs when we are conducting any field study. So, this is how experimental method can be executed in different form in terms of lab experiments, in terms of field studies and in terms of field experiment where the manipulation of variables can be done accordingly. So, it is only lab experiment where all the situations can be controlled in a very appropriate manner so as to study behavior or establish the cause-effect relationship in a very streamlined manner.

Next comes case study. This is one of the major focus of scientific methods where it involves careful compilation of information which includes the available data on the background such as family, medical history, occupation, relationships, interviews, test and diagnosis and concerning an individual subject of the study. It can be a group of study, it can group of members to be studied as a case, it can be a one individual as a case and all the information is being compiled so as to infer maximum patterns of behavior as performed by an individual. So, when we are talking about case study, it is a comprehensive study of a social unit it which can be a unit, a person, a group, a social institution, a district or a community which is called a case study. Studying a group, only a specific group with specific features and available information that becomes a case. Studying the behavior of a person in a particular situation that becomes a case based on available information and to what extent correct inferences can be made out of that information.

So when we are talking about case study, it allows a comprehensive study of a social unit, it can be a family, it can be a group, it can be a community, it can be a political group or religious group, it can be useful for anthropological researches in terms of society, culture, linguistics and human development. Human development in particular tribal area, human development in a particular culture or social group that how the group has evolved or the language of a tribal group has evolved for so long and what is the impact that how they communicate, how that communication impact each other in their day to day life behavior. So this becomes a case where we are picking up a particular aspect of human element or development or personality or behavior and how we are analyzing those cases in a very deep rooted manner. So this also includes studying educational research such as problematic or delinquents. Delinquency means that adolescents who commit crime and how they are being sent to rehabilitation centers to cure or improve their behavior and in a way where they take good education enhance their behavior and how it becomes a case in themselves.

So one particular delinquent can be a case that what can be the reason that a person has committed a crime as an adolescent based on the available information. It can be useful in

terms of psychological researches where mental retardation, post traumatic stress disorders and burnout can be the subject area of the study and it can be useful for studying criminal behavior. People commit highness crime and what can be the mental state of a any person can become a case in itself to study accordingly. So this is the scope of case study. So case study is an in-depth detailed examination of a particular case within the real world context as I mentioned that any adolescents who commits crime it can be a subject of a real life situation where all the factual information is gathered and based on that available information the deep analysis can be performed.

For example case studies in medicine can be a focus of an individual patient or his or her ailment. It can be a case study of a particular firm strategy in terms of marketing strategy that how the particular organization adopted a specific marketing strategy to capture the market. So how it has a larger impact on the global market this can be a case in itself or how a particular market strategy don't the organization and how the organization could not recoup from those losses. It can be a case study in politics that can range from a narrow happening over time to an enormous undertaking. So all the transitions that take place in any particular political group from how they have established to how they have captured the maximum constituencies in the country that becomes a case that what kind of strategy they adopted to convince the public.

So these are the factors or real life situations which make any particular group person or community in itself a case and how it can be dealt in a very in-depth manner. So there are number of different sources and methods that researchers can use to gather information about an individual group. Some of the sources that have been identified by researchers are the archival records that is the available information in terms of surveys and records, direct observation when people tend to interact with people of a particular community which is a case in itself and how people tend to collect natural responses in a natural setting. It can be documents that is the letters, newspapers, diaries, articles, administrative records which often have in-depth information available and how those information can be used to understand a particular case, interviews, how people tend to unleash or open or unfurl their opinions and ideas and their logic behind their understanding to understand a case or it can be a participant observation although it is observation but people tend to affiliate with the case in a particular situation. They tend to share the life of that case as an individual and tend to understand the different patterns of their behavior.

So archival records, direct observation, documents, interviews and participant observation all these factors contribute to give factual information or collect factual information and understand the case. So this methodology in itself forms a case study method. So case studies have commonly been seen as a fruitful way to come up with hypothesis and generate theories. Because as I have mentioned earlier that it is a tentative answer or solution to the problem and how we tend to based on the available information we tend to connect the dots and relate every reason of behavior and finally come up or conclude based on a generalized theory. Case studies add descriptive richness and can have greater internal validity than quantitative studies.

In case studies when we are in deep analysis of human behavior we tend to touch upon those aspects of human behavior which becomes very difficult to measure or quantify those aspects of behavior because sometimes a person do not want to unfurl the deep emotions which generally can be understood when we are following any case study. Case studies are suited to explain outcomes in individual cases which is something that quantitative methods are less equipped to do. A commonly described limit of case study is that they do not lend themselves to generalizability which becomes the disadvantage of using a case method in studying human behavior because one case in itself is different and the findings we generate or narrate out of that study we cannot replicate to the other person because every person is in itself a different case. So that becomes the constraint or restriction of case study method and due to the small number of cases it may be harder to ensure that the chosen cases are representative of the larger population. That means since generalizability is a problem then definitely representation of a larger sample also becomes difficult when we are using case study to understand human behavior.

So I will stop here and I will continue the same discussion in the next class. Thank you so much.