

for its solution, e.g., survey on rural poverty, increase in crime, political corruption, effect of high and low investments in the industry, violence against women female crime, functioning of prisons, bonded labour, child labour, party-wise stand on women's reservation in parliament, performance of government in one year, assessing opinion on handling of Kargil issue by the government in power, introducing ex-gratia scheme for war widows and so on.

Case study method

It is studying the phenomenon, event, situation or development through a thorough and detailed analysis or intensive study. The case may be an individual a group, a community, a society, an organisation, a process or any unit of social life.

Statistical method

This method involves drawing statistical inferences and generalisations about population through mathematical values. Statistical inference is based on probability theory. A wide variety of statistical techniques is available to test sample data and determine probable degree of accuracy of generalisations about the population from which the sample was drawn. Generalisations based on this method are never statements of absolute certainty.

Historical method

This method collects facts by going in the past in different periods. Sources of information include written records, newspapers, diaries, letters, travellers' accounts, documents, etc., e.g., study of change in the caste system.

Evolutionary method

This method studies development from simpler forms through a long series of a small changes. Each change by itself results in minor modification in the phenomenon but the cumulative effect of many changes over a long period of time is the emergence of new, usually more complex, forms. It studies cumulative effect by analysing how each change brings modification.

VALUE OF SCIENTIFIC RESEARCH

The important uses of scientific research are: (1) it improves decision-making; (2) it reduces uncertainty; (3) it enables adopting new strategies; (4) it helps in planning for the future; and (5) it helps in ascertaining trends.

It is because of this value of scientific research that today many sociologists are engaged in research—some on full-time basis and some on part-time basis. Many university teachers divide their time between teaching and research. The funds for research are provided by the UGC, ICSSR, UNICEF, Ministry of Welfare and Justice, Government of India, World Bank, etc. Though these funding agencies do not interfere with the scientific method used in research but they are choosy about the topics of research and sometimes do not permit publicity to the findings of research, particularly when the research findings reflect inefficiency and callousness in the functioning of government agencies and the bureaucrats engaged in their management.

The scientific inquiry should not be conducted when availability of adequate data is doubtful, there is time constraint, cost (of inquiry) is higher than value, and no tactical decisions need to be made.

VALUE-FREE SCIENTIFIC RESEARCH

The term 'value' here does not have an economic connotation. Value is an abstract generalised principle of behaviour expressed in concrete form in social norms to which the members of a group feel a strong commitment.

'Science' refers to disinterestedness; scientific inquiry/investigation presents facts as they are; while a scientist has a moral responsibility of giving findings without any biases and prejudices. Motivation for a scientist in conducting research is curiosity, developing theory and interest in change.

There are two views about the neutrality and objectivity in scientific investigation: one that science and scientists can be value-free (value neutrality) and other that science and researchers cannot be value-free (normativism). Weber accepts the former position. He thinks that if a researcher separates his daily life from his professional role, he can be free of biases. On the other hand, Gouldner (1962: 1970) believes that value-free science is a myth, though it is desirable. Manheim (1977:93) says: "Value-free research is a desirable goal to-

wards which social scientist can strive without any necessary expectation of actually attaining it. This becomes possible when the social scientist remains careful in choosing the problem of research and states what he finds, i.e., follows data wherever they lead, regardless of how much the conclusions may please or displease him or the research consumer.”

Mills (1959) and Wadsworth (1984) hold that (i) objectivity is unattainable, (ii) some standpoint or value judgement is necessary for solving social problems, (iii) our socialisation is based on values which direct our thinking and action, (iv) disclosing bias or personal belief is less dangerous than pretending to be value free, and (v) social sciences are normative. Apart from studying what it is, they should also be concerned with what ought to be (Sarantakos, op. cit.:18-19).

Radical critics claim that behind a facade of objectivity and neutrality, some scientists prostitute their research talents to the support of the interests of the funding agencies. Frederichs (*Insurgent Sociologist*, 1970:82-85) has even gone to the extent of saying that these unethnical scientists have even supported racism, militarism and other forms of oppression. But some scholars (like Horton and Bouma, 1971) referring particularly to sociological research are of the opinion that the issue whether sociological research has been widely corrupted in this manner (of supporting even oppression) may be debated. Becker (1967) has said that it is indisputable that problems of bias and partisanship are present in all research and that research findings are often helpful to the interests of some people and damaging to other people.

My contention is that a researcher in social sciences, specially in sociology, has a responsibility to society and he cannot escape that responsibility. He has not only to explain and clear away the misinformation in people's social thinking through scientific research but has also to provide 'right' information about many aspects of human behaviour. Our professional ethics demand the following standards in research: (1) accuracy in collecting and processing data, (2) using relevant methods and techniques in research, (3) interpreting data according to appropriate methodological standards and avoiding falsification of data, and (4) reporting findings accurately and honestly.

Indian sociologists have greatly succeeded in establishing that poor people in villages do not contribute to rural poverty and that the

sustainable development of rural areas can be made possible by providing required infrastructure and making people less dependent on government and being more self-reliant; or that the exploitation of women can be reduced/prevented by making them realise that they are not helpless but possess resources to contain all types of victimisation and they also have the required capabilities to participate in decision-making processes in man's patriarchal world. They (Indian researchers) have thus helped greatly in giving accurate knowledge about social life and human behaviour.

Indian sociologists may not be able to make any specific predictions through the scientific researches but their analysis of society, social life and social behaviour has surely made people realise the type of society that will emerge in near future, i.e., society where empowerment of women will be a functional necessity, functional jointness will be the important characteristic of the family system, caste superiority will be rejected and communal harmony will be emphasised, corrupt and inefficient power elite will not be tolerated, police will be compelled to protect the interests of victims and act as a catalyst agent of social change, employees in all organisations will be compelled to accept the concept of accountability, and so forth.

This is not predicting specific developments through research or pointing out the expectations of the people for the future but only describing the pattern of trends and changes which seem most probable. This may be described in simple words as 'social forecasting'. The basic thing is that science, specifically sociology, has to be value-free and research has to be objective and unbiased, and scientists, including sociologists, refrain from becoming public advocates of programmes and policies which power elite consider socially desirable.

Further Readings

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2 Concepts, Constructs and Variables

THE CONCEPT

How does a researcher start with an idea about what he wants to study? Sometimes he takes a clue from the existing abstract theory while sometimes he makes observations in the concrete world just to understand what people think about an issue. It may be said that all social scientists, including sociologists, operate at two levels: (a) the level of hypothesis construct, and (b) the level of data collection and testing the hypothesis or its analysis. Suppose a sociologist makes a statement: "disorganised families produce more crime". This statement is a hypothesis consisting of two concepts: 'disorganised' and 'crime'. This is operating on theory-hypothesis construct level. Operating on this level is using concepts and constructs and giving relational statements. But gathering data for testing the hypothesis is operating on different level. On this level, one operates not on *construct* level but on *observation* level.

A concept is a word which is so constructed and defined that observations become possible. It is an idea that is expressed in words. It consists of both a word and a definition. Concepts name possible or imagined properties of things, people or events. Sometimes, concepts seem obvious, concrete and tangible but sometimes they are not obvious. For example, we all grasp the idea that some objects are light enough to lift and others too heavy to move. When we talk about how tall, fast, pretty or fearless a person appears, we are gauging that person on abstract dimensions of length, speed, beauty and courage. These are obvious. But some images do not appear obvious to everyone, e.g., *empathy* (understanding other person by taking his/her point of view). Empathy is difficult to measure. Take other example of "disorganised families produce more crime". Here *crime* is defined as "violation of law", and *disorganised family* refers to "a condition of family characterised by disruption or breakdown or non-harmony in

various sets of relationships, say, between husband and wife or parents and children or daughter-in-law and parents-in-law, and so forth”.

The concept ‘socialisation’ points researcher what he should look for: “the values, attitudes, skills and roles which an individual has internalised that shape his personality and result in his integration into society”. The concept ‘group’ refers to “plurality of persons having direct or indirect communication, standardised patterns of interaction, common goals, shared norms and some degree of interdependence”. The term ‘social integration’ refers “to the attachment of a person to groups”. But, the attachment also points to *variation* in strength and intensity, i.e., it takes on different values or it varies, or it takes on different scores. We should, therefore, know what are ‘concepts’ and how sociologists move from the ‘construct level’ to the ‘observation level’.

The terms ‘concept’ and ‘construct’ though have similar meanings, yet there is some difference between the two. A ‘concept’ is “a word or set of words that express a general idea concerning the nature of something or the relations between things, often providing a category for the classification of phenomena” (Sanders and Pinhey, 1974:57). Concepts provide a means of ordering the vast diversity of empirical phenomena. They are essential in the process of generalising and from the basis of language. However, concepts are not inherent in the nature itself but are man-made. They are mental constructs reflecting a certain point of view and focusing upon certain aspects of phenomena while ignoring others (Theodorson and Theodorson, 1969:68). For example, ‘social change’, ‘social evolution’, ‘growth’, ‘social progress’, ‘modernisation’ and ‘development’ are all concepts (mental constructs) having different meanings. *Social change* is modification in established patterns of social relationships, social institutions, social roles or social systems. *Evolution* is slow but continuous change from simple to complex in a series of stages. *Growth* is quantitative change, i.e., change or increase in numbers (saying that agricultural production in the village increased from 100 quintals to 200 quintals after the use of chemical fertilisers and providing irrigation source of canal water means that there is agricultural growth). *Social progress* is change of desirable nature or achievement of ideals. *Modernisation* is change based on imbibing the elements of science and technology or change based on rationality. *Development* is qualitative change, e.g., increase in literacy, reduction in poverty, increase in em-

ployment, income and so forth. Similarly, personality, family, marriage, group, crowd, juvenile delinquency, familism, social action, mass society, adjustment, commitment, movement, pressure group, primary group, slum, violence, caste, class, untouchability, polygyny, polyandry, socialisation, status, role, norm, stratification, interaction, etc., are all concepts, which express varieties of phenomena to behavioural scientists for certain analytical purposes.

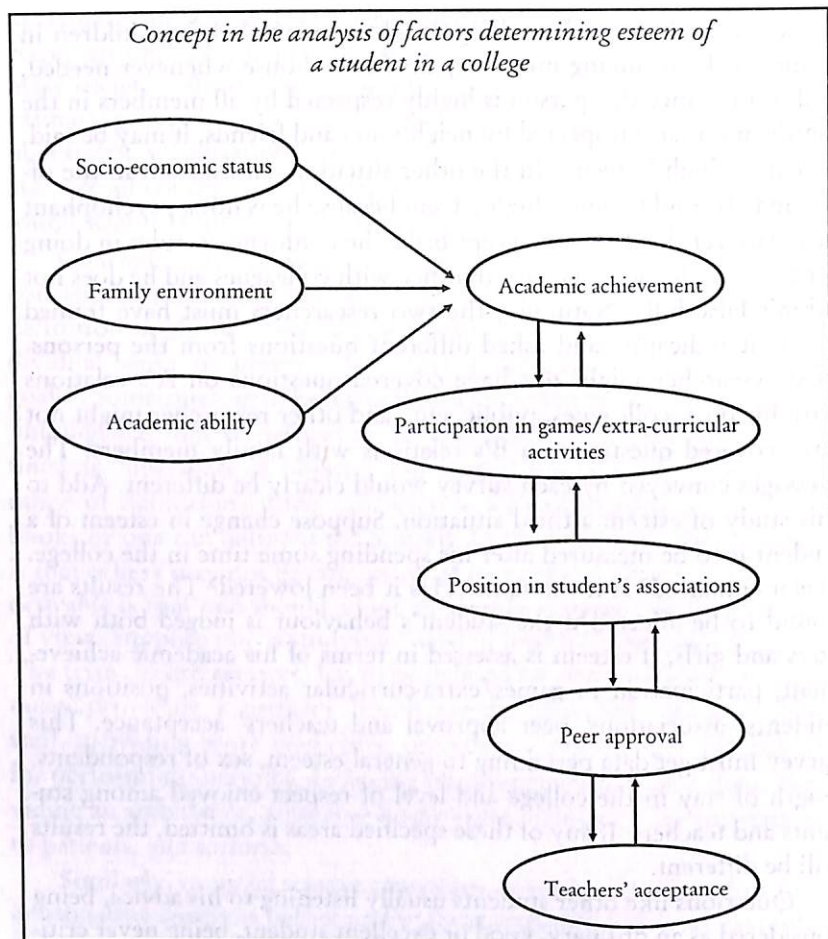
Concepts are explained through definitions. For example, the concept 'conflict' only has meaning when it is defined. One possible definition might be: "interaction among individuals in which one individual seeks to prevent the other individual from realising the goals". Sometimes, in defining one concept, other words are used, e.g., 'intelligence' may be defined as "mental activity"; 'weight' may be defined as "heaviness of object", and so on. A concept is subject to a range of definitions. One can refer to meanings given in different books or one can define it for himself. In the latter case, the problem is that others may not be convinced of its validity. What is, therefore, desirable is that one should adopt an already existing and tested point of view. Suppose one is studying "need of health services in a village". The term 'health services' has to be defined by the researcher. It could mean providing a primary health centre, providing more medical staff, providing more medicines, providing more modern equipment for performing surgeries, arranging occasional visits of specialists, providing an ambulance, arranging home visits, changing time convenient to patients, and so forth.

Similarly, in social science researches, it is necessary to define (operationalise) concepts before undertaking research. Take, for example, the concept 'esteem'. It means "having a high opinion or great respect in evaluating a person's performance". But then, what does 'high opinion' mean? It means, in the judgement of others, a person carries out his role(s) well, whatever the role(s) may be. Suppose two researchers decide to study esteem of two persons A and B in two different groups: one, the esteem of an old person (in family) after his retirement and other the esteem of an assistant in his office. In the former case, the researcher defines esteem as high respect in terms of being consulted in decision-making, being not dependent for economic support, being loved and respected by daughter-in-law for doing market purchases for the family, looking after small children in

the absence of son and working daughter-in-law, helping children in home work, arranging minor repairs in the house whenever needed, and so on. Since this person is highly respected by all members in the family and is also respected by neighbours and friends, it may be said, he enjoys high 'esteem'. In the other situation, an assistant in the office may be said to enjoy high esteem because he is not a psychophant or a flatterer, he does not accept bribe, he conforms to rules in doing office work, he never gossips in office with colleagues and he does not submit false bills. Naturally, the two researchers must have framed different indicators and asked different questions from the persons. First researcher might not have covered questions on A's relations with his boss, colleagues, public, etc., and other researcher might not have covered questions on B's relations with family members. The messages conveyed by each survey would clearly be different. Add to this study of esteem a third situation. Suppose change in esteem of a student is to be measured after his spending some time in the college. Has it enhanced? Is it the same? Has it been lowered? The results are bound to be affected if the student's behaviour is judged both with boys and girls, if esteem is assessed in terms of his academic achievement, participation in games/extra-curricular activities, positions in students' associations, peer approval and teachers' acceptance. This survey must get data pertaining to general esteem, sex of respondents, length of stay in the college and level of respect enjoyed among students and teachers. If any of these specified areas is omitted, the results will be different.

Questions like other students usually listening to his advice, being considered as an ordinary, good or excellent student, being never criticised or punished by teachers, being not the victim of sarcastic remarks of other students, being given important assignments in the students' associations, and so on will enable the researcher to assign marks on each question and determine the low, medium and high esteem on the basis of total marks secured.

The role of concept is to establish some kind of link with the social world. Concepts are regarded very important in the theoretical framework that sets a context for the research, as being involved in the statement of a research problem, as determining the data that will be collected and how they will be categorised, and as being essential in describing the findings.



According to Norman Blaikie (2000:130) concepts come from four sources:

- a theoretical perspective that is dominant within a discipline or social scientific community (e.g., conflict theory);
- a specific research problem (e.g., political corruption);
- commonly used theoretical concepts that are given a new definition (e.g., social class); and
- everyday concepts that are given precise meanings (e.g., crowd).

For explaining these sources, we can take some key concepts in the study of culture. These are: culture conflict, culture convergence,