Research Language

- Theory
- Conceptualization
- Operationalization
- Variables
- Hypotheses
- Assumptions
- Population
- Sample
- Validity
- Reliability
- Data
- The research process
- Summary
- Methodological queries
- References

Concepts And Constructs

The terms "concept" and "construct" have similar meanings. Yet there is an important distinction. A concept expresses an abstraction formed by generalization from particulars. "Weight" is a concept: it expresses numerous observations of things that are more or less "heavy" or "light." "Mass," "energy," and "force" are concepts used by physical scientists. They are, of course, much more abstract than concepts such as "weight," "height," and "length."

A concept of more interest is "achievement." It is an abstraction formed from the observation of certain behaviors of children. These behaviors are associated with the mastery or "learning" of school tasks—reading words, doing arithmetic problems, drawing pictures, and so on. The various observed behaviors are put together and expressed in a word— "achievement." "Intelligence", "aggressiveness", "conformity," and "honesty" are all concepts used to express varieties of human behavior.

A construct is a concept. It has the added meaning, however, of having been deliberately and consciously invented or adopted for a special scientific purpose. "Intelligence" is a concept, an abstraction from the observation of presumably intelligent and non-intelligent behaviors. But as a scientific construct, "intelligence" means both more and less than it may mean as a concept. It means that scientists consciously and systematically use it in two ways. One, it enters into theoretical schemes and is related in various ways to other constructs. We may

say, for example, that school achievement is in part a function of intelligence and motivation. Two, "intelligence" is so defined and specified that it can be observed and measured. We can make observations of the intelligence of children by administering X intelligence test to them, or we can ask teachers to tell us the relative degrees of intelligence of their pupils. Constructs can be conceptually defined in that they have meaning in theoretical terms. They can be abstract and do not necessarily need to be directly observable. Examples of constructs include intelligence or life satisfaction.

Unit 2: Research Problem Identification and Formulation

Identification of Research Problem

Formulation of problem is the first and foremost step in a research work. The research problem can be formulated and selected rationally and then the whole research work can be conducted only if the identification of the problem is done precisely. To identify the problem a researcher should have some basic knowledge, which is then developed through discussion with experts or through the literature or by continuation of activities in the related field.

The research problem undertaken for the study must be carefully selected. This task is a difficult one, although it may not appear to be so. A problem must coin from the researcher's mind like a plant springing from its own seed. Help may be taken from a supervisor in this connection. A research supervisor can at the most only help a researcher to choose a subject. Identifying the exact nature and dimensions of a problem is of major importance in research work. It is very essential that an investigator should learn how to recognize and define a problem. He should proceed step by step in locating the research problem.

The following steps are to be followed in identifying a research problem:

1. Determining the field of research in which a researcher is keen to do the research work.
2. Develop the mastery on the area or in field of specialization.
3. Review the recent research conducted in the selected area.
4. On the basis of review, select the priority field of the study.
5. Draw an analogy and insight in identifying a problem or employ the personal experience of the field in locating the problem. In this process researcher can take help of supervisor or expertise of the field.
6. Pin-point specific aspect of the problem which is to be investigated.

Ways of Understanding Research Problem

The selection of a suitable problem is not an easy task. It is a serious responsibility to commit oneself to a problem that will inevitably require much time and energy and which is so academically significant. Specifically, the concept for separating out the research problem from the diversified field can be made by the

i.   Discussion among the colleagues
ii.   Discussion with the research guide
iii.   Discussion with some experts and
iv.   Intensive reading all the available literature.

The following are the general ways for understanding problem to which one may proceed for a suitable research:

1. Personal experience of the investigator in any field is the main means for understanding a suitable problem. Many of the problems confronted in our daily life lend ourselves to investigation and they are perhaps more appropriate for the beginning researcher than are problems more remote from our experiences.
2. The other ways of understanding of problem, most frequently used by the investigator as suggested by the supervisors, is the extensive study of available literature-research abstracts, journals, hand-books of research international abstracts etc. He can draw an analogy for selecting a research problem or can think parallel problem in the field studied.
3. In the choice of a suitable problem, the researcher has to decide his field of investigation. He should study the field intensively in the specific area; this may enable him to identify a problem from the specific field.
4. The new innovations, technological changes and curricular developments are constantly bringing new problems and new-opportunities for social research.
5. The most practical ways of understanding problem is to consult supervisor, experts of the field and most experienced person of the field. They may suggest most significant problem of the area. He can discuss certain issues of the area to emerge a problem.
6. It is a general practice that researchers suggest some problems in their research reports. The researcher can understand a suitable problem for his own study.