

Introduction

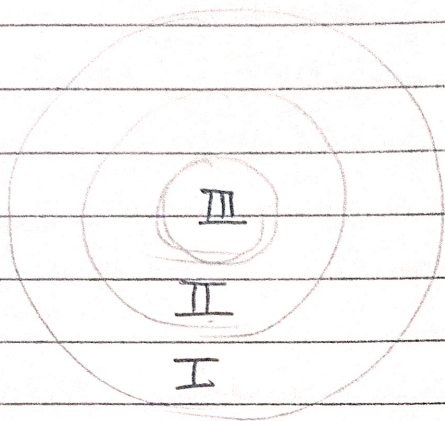
Man is endowed with curiosity, and it is his insatiable curiosity that kept man motivated generations after generation to know more and more about universe and himself.

As a result today the entire human race is standing with published, unpublished, primitive as well as modern information regarding 'what', 'how' and 'why' of the nature in general and of the human being and his/her behaviours in particular, such compiled knowledge over centuries together is known as human knowledge.

From the evolutionary pov is human knowledge is arranged in order, sharing the view of Townsend (1953) it can conventionally be arranged into 3 levels viz.

- 1) Mystical
- 2) Pseudoscientific
- 3) Scientific.

Levels of Human Knowledge.



- I - Mystical Knowledge
- II - Pseudoscientific Knowledge
- III - Scientific Knowledge

At the beginning, the entire human knowledge was mystical because numerous supernatural powers (gods & goddesses) were held responsible by the man for explaining different phenomena of the world as well as of the human behaviour. For eg. raining was considered as the God Varuna's blessing ~~and~~ low pos as the Goddess Shilala Mata's cursing, and an invisible man in a man was invented to explain sleep, somnambulism and death etc observed in human beings.

Such knowledge is named as the mystical knowledge. for it cannot be verified under experimental conditions.

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In the process of evolution human beings started applying their reasonings and tried to offer scientifically tested explanations to understand the nature and the human behaviours.

For instance H_2O is water, and learning is a function of our intelligence.

This is known as scientific knowledge.

The stage of proscientific knowledge is typical in that it is neither totally scientific nor totally mystical.

Rather it is one that is on the way to scientific knowledge in that the scientific ways and means are resorted to yield it but the ~~myster~~ mystery is still existing as a challenge to the scientists.

For eg., the phenomena like 'cancer' in ~~modern~~ medicine

The aim of research methodology, therefore is to offer training in the methods of scientific research so as to minimise the area of mystical knowledge and maximise the ~~area~~ area of scientific and proscientific.

The word research consist of 2 syllables 're' and 'search'. The dictionary meaning of the prefix 're' means again or over again and the dictionary meaning of search means is to examine carefully or to probe.

"Careful, systematic investigation in some field of knowledge for establishing facts and or principles".
Ginnell.

"Scientific research is systematic, controlled empirical and critical and investigation of hypothetical propositions about the presumed relations among natural phenomena."

This definition requires little explanation since it is mostly a condensed and formalised statement of much that was said earlier or that will be said soon. Two points need emphasis, however.

— First, when we say that scientific research is systematic and controlled we mean, in effect, that scientific investigation is so ordered that investigators can have critical confidence in research outcomes.

- Second, scientific investigation is empirical. If the scientist believes something is so, he must somehow or other put his belief to a test outside himself. Subjective belief in other words, must be checked against objective reality.

Nature

The nature of psychological research is scientific in nature as it follows core values of sciences. Core values are as follows:-

- Objectivity (free from bias)
- Realism
- Rationality
- Regularity
- Verifiability
- Discreetability
- Determinism
- Reliability
- Validity
- Universality
- Predictability
- Generalisation.