## INDUCTION-DEDUCTION METHOD

This is a technique used through the scientific method, and is made up of two procedures: induction and deduction let's see what it consists of.

The inductive-deductive method is an inferential method which is based on logic and studies made or particular events, on the one hand it is deductive (that is, part of the general to the particular) and on the other hand it is inductive (it is say that part of the particular to the general.)

This method is made up of two procedures: induction and deduction, induction consists of a method by which reasoning is carried out from a particular point of view aimed at obtaining a more general knowledge, which shows the relationship that phenomena have in common individual, this method is based on the repetition of real events or phenomena, looking for common characteristics within a given group, with the aim of obtaining conclusions from the aspects that characterize it.

In the inductive method it is necessary to observe the particular facts or phenomena, collect data and make generalizations with them, the use of this method has been the mainstay of scientific knowledge.

The steps of the inductive method are:

- 1. Observation
- 2. Formulation of hypotheses
- 3. Verification
- 4. Thesis
- 5. Law
- 6. Theory

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The deductive method is a process of thought by means of which, through general affirmations, particular conclusions are reached by applying the rules of logic. In this method, the known phenomena are ordered and conclusions are obtained through statements that are known as syllogisms, which are formed by: the major premise, the minor premise and the conclusion, as an example, all living beings die (major premise), elephants are living beings (minor premise), therefore, elephants die (conclusion). Through deduction, one goes from a general knowledge that is the starting point for making inferences, to a less general one where particular logical conclusions are obtained.

Both methods: induction and deduction complement each other, first through induction generalizations of common phenomena are obtained, then from these generalizations various logical conclusions are obtained, which in turn become enriched generalizations achieving a dialectical unity, therefore this inductive-deductive method is very useful in research.

## Referencia

Bernal, C. (2010) *Metodología de la Investigación*.[Investigation methodology] Recuperado de <u>https://www.pdfdrive.com/metodolog%C3%ADa-de-la-investigaci%C3%B3n-3era-edici%C3%B3n-bernal-d39289351.html</u>

Rodriguez, A, Perez, J, Alipio, O. (2017) *Métodos científicos de indagación y de construcción del conocimiento*. [Scientific methods of inquiry and knowledge construction] Recuperado de <u>https://www.redalyc.org/pdf/206/20652069006.pdf</u>