DEDUCTION AND INDUCTION

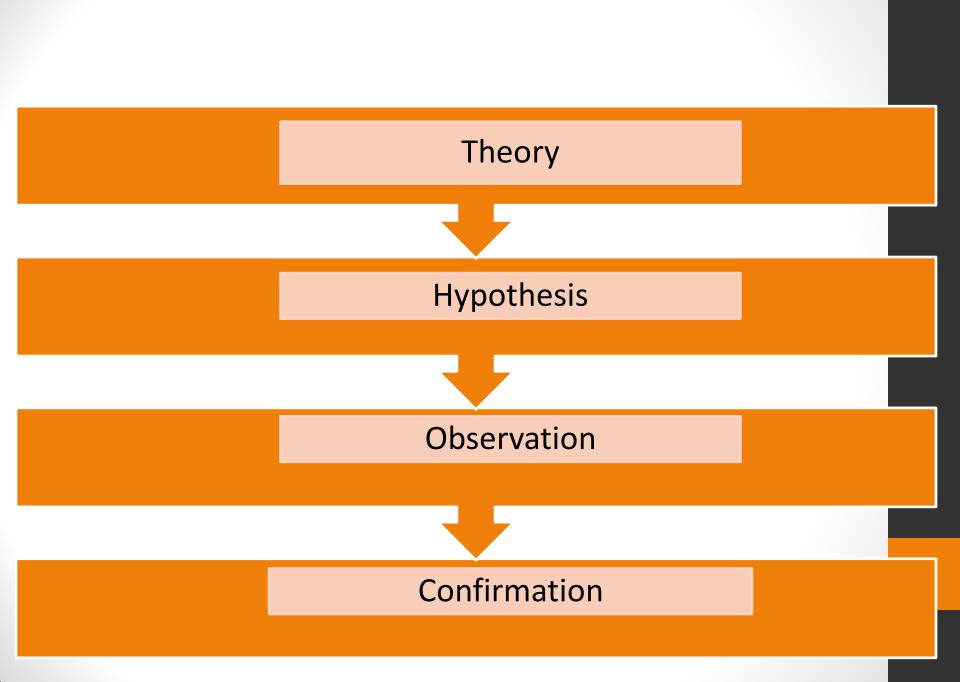
Ву

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- Research involves inductive and deductive methods."
- Inductive research methods are used to analyze the observed phenomenon whereas, deductive methods are used to verify the observed phenomenon.
- Inductive approaches are associated with qualitative research and deductive methods are more commonly associated with quantitative research.

Deduction

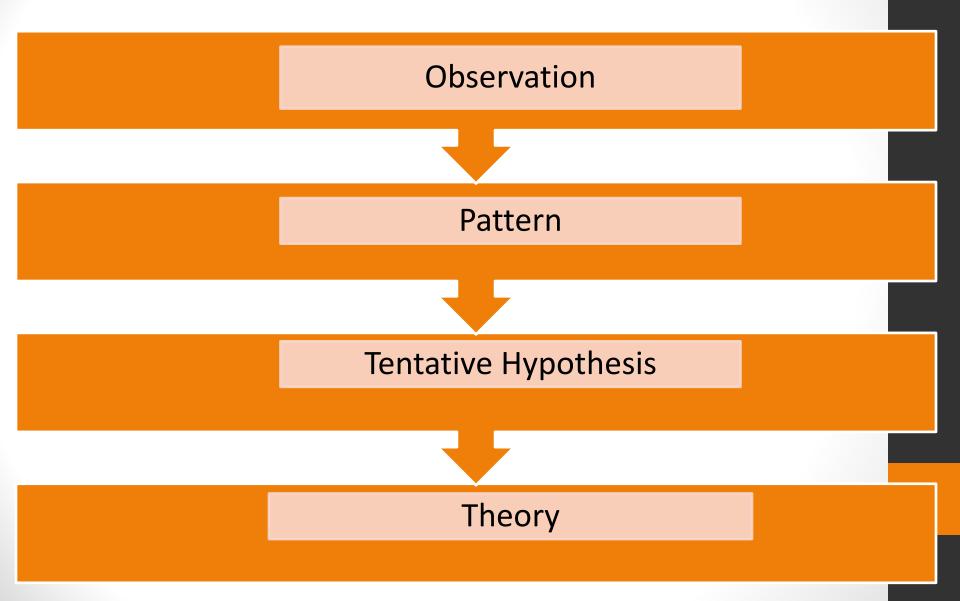
- In logic we often refer to the two broad methods of reasoning as deductive approaches.
- Deductive reasoning works from the more general to the specific.
- Sometimes it informally called a top down approach. We might begin with thinking up a theory about our topic interest.
- We then narrow down even further when we collect observations to address the hypothesis.
- This ultimately leads us to be able to test the hypothesis with specific data- a confirmation (or not) of our original theories.



Induction

- Inductive reasoning works the other way ,moving from specific observations to broader generalization and theories. Informally, we sometimes call this a bottom up approach.
- In inductive reasoning, we begin with specific observations and measures, begin to detect patterns and regularities, formulate some tentative hypothesis thus we can explore and finally end up developing some general conclusions or theories.

Induction



- These two methods of reasoning have a different feel when you are conducting research.
- Thus inductivism is a scientific method of knowledge focusing that scientific knowledge is generated by arriving at generalizations on the basis of particular observations using the principle of induction.