Subject: LAW

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Paper: RESEARCH METHODOLOGY
Module: LEGAL REASONING
# DESCRIPTION OF MODULE

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## Learning Outcomes

This module provides for legal reasoning. This aims at following learning outcomes:

- To introduce the concept of legal reasoning and its importance.
- To understand the basic components in legal reasoning.
- To understand the role of logical reasoning in law
- To know about the various types of legal reasoning methods in terms of kinds of arguments.

## The Roadmap

1. Introduction.
2. Basic components in legal reasoning
3. Logical reasoning: types and principles
   3.1. Types of arguments
      3.1.1 Deductive method
         3.1.1.a Stages in the deductive method
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      3.1.2 Inductive method
         3.1.2.a Merits and demerits of inductive method

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1. Introduction

Legal reasoning as a concept is a process of thinking which helps a researcher to come to decision relating to law. Law is a tool of social control that attempts to resolve conflicts in the society, to direct current activity while maintaining continuity with the past, and to control the future by laying down procedures, approaches and theories. Every decision must be guided and followed by a logical reasoning which takes into account the past decisions and statutes, the present position of the parties to the cases, and its own impact on future activity.

2. Basic components in legal reasoning

There are four basic components in legal reasoning which applies to legal process—logic, Justice, experience and policy.

a. **Logic** refers to the internal consistency and equal application of the law. It refers to more than formal logic. Formal logic is the science of deriving a conclusion from stated premises; it is not directly concerned with either true or false. A person can obtain a false but logically correct conclusion from a false premise. Therefore, logic prefers to life correct application of precedents and equal application of law.

b. **Justice** is to do right between the parties. Philosophical thought is an ingredient of justice though it is based on evidence.

c. **Experience** is an important component in legal reasoning. The life of the law has not been logic; it has been experience. Experience gives power to give good legal judgments.

d. The last component is the **policy**. The term ‘policy’ may be used to describe the process of approaching a problem. Policy is used to mean a scientific attempt to peer into the future and foresee the consequences of a decision. The use of this approach requires the individual to put aside die current interests of
the parties and to keep in mind how this decision would affect other persons in future.

3. Logical reasoning: Types and principles

Among the four components, logical thinking is the core concept of legal reasoning as scientific generalizations are based on logical explanations. Every science is based on the principles of logic or reason. Science involves the rules of reasoning or use of arguments. Arguments are made on the basis of connection, relationship, association, property, common variable or attribute between things and activities mentioned in the argument.

3.1 Types of Arguments:

Arguments can be:
(i) Deductive;
(ii) Inductive;
(iii) Inverse deductive;
(iv) Analogy; and
(v) fortiori.

3.1.1 Deductive Method

The method of studying a phenomenon by taking some assumptions and deducting conclusions from these assumptions is known as the deductive method. Deduction is a process of reasoning from the general to particular or from the universe to individual, from given premises to necessary conclusions. Deduction is also known as analytical, abstract and *a priori* method. It has an abstract approach to the study of science.

Deductive method is a part of the scientific method. It is basically a rational approach in accordance with the tenets of deductive logic. Deductive logic uses a general statement as the basis of argument. Core of the common forms of deductive logic is syllogism, runs like this,
(1) Plants grow in day time
(2) A cactus is a plant
(3) Therefore cactus plant grow in day time

The third statement follows from the first and second statements taken together.

A syllogism consists of a major premise, a minor premise, and a conclusion. A major premise usually states a general rule. In legal arguments, this is generally a statement of law. A minor premise makes a factual assertion about a particular person or thing or a group of persons or things. In legal arguments, this is usually a statement of fact. A conclusion connects the particular statement in the minor premise with the general one in the major premise, and tells us how the general rule applies to the facts at hand. In legal arguments, this process is called applying the law to the facts.

Example: to qualify as a victim of rape under criminal law there must (1) be sexual intercourse with a women; (2) the intercourse must be without her will. (Major premise; states a rule of law.) Here, the woman had consensual sex. (Minor premise; makes a statement of fact.) Therefore, the plaintiff cannot be a “victim” of rap under criminal law. (Conclusion; correctly applies the law to the facts.)

In order for a syllogism to be valid, it must be logically impossible for its premises to be true and its conclusion to be false. In other words, a syllogism is valid if, given the truth of its premises, the conclusion “follows” logically such that it, too, must be true. An argument is not valid simply because its premises and conclusion are all true.

Example: “all teachers are human. Some human are excellent racers. Therefore, some teachers are excellent racers.”

Explanation: if read apart, each of these statements is true. Teachers are indeed human. Some human (e.g. athletes) are excellent racers. And as it happens, some teachers are also good racers. But this argument is not valid. The fact that teachers are humans and that some humans are excellent racers does not prove anything about the racing ability of teachers. Based on the information we’re given in the premises, it is logically possible that no teacher of the world has ever stepped foot in field for running. Because it is logically possible for the premises to be true and the conclusion to be false, this argument is not logically valid.

The example above is a fallacious argument.
When researchers propose a study of the causal factors of the delinquencies which are on the increase and which seems serious to them, they have some general anticipatory idea as to what to observe and what specific facts in the main would be relevant to their inquiry, even though they may not have realized these implications, Then, on the basis of their observation, they formulate certain single propositions as to the causal factors of delinquency. That is, they deduce from the complexities of observed behaviour certain single ideas. In other words, they use a process of reasoning about the whole observed situations in order to arrive at a particular idea. This process of reasoning is called deduction or deductive reasoning.

The following example can be cited for the deductive reasoning:

Lombroso, an Italian, observed peculiar physical features among the criminals and by using the logical deductive thinking formulated the following propositions by taking his observations into consideration:

1. Criminals are by birth a distinct type of persons;
2. They can be recognized by stigma or anomalies such as a symmetrical cranium, long lower jaw, flattened nose, scanty beard and low sensitivity to pains;
3. These physical anomalies identify the personality which is predisposed criminal behaviour; and
4. Such persons cannot refrain from committing crime unless the circumstances of life are generally favoured.

Deduction is logical reasoning and if we start with good premises, deduction can serve scientific research in three ways:

1. Deduction helps in detecting the questionable assumptions logically involved in what is believed to be the truth and it multiplies the number of available hypothesis by formulating the possible alternatives.
2. The logical deduction of its consequences makes clear the meaning of any hypothesis.
3. The process of rigorous deduction is an aid in the attempt to steer clear of irrelevancies and thus the right principle is found.

3.1.1.a Steps in the Deductive Method
Step 1. The exploration of the problem—An indispensable preliminary to any investigation is the existence of a definite problem in the mind of the researcher. The problem must be one of significance for the actual world.

Step 2. Setting up of the hypothesis from assumptions.—He has to select the assumptions from which the conclusion will be derived. The assumption must be derived from observation. They must be close to reality. On the basis of suitable assumptions, hypothesis may be formulated. A hypothesis is a conjuncture, a hunch, of the possible connection between two phenomena.

Step 3. Theoretical development of the hypothesis—The nature and implications of the hypotheses have to be carefully analyzed to formulate a theory. This is purely the deductive part of the process. By logical reasoning we have to deduce the consequences.

Deductive explanations consist of two parts, The explanandum and explanans. The explanandum is the event, problem or thing to be explained and is the conclusion of a deductive argument. It may be an individual event. The explanans (premise) explain the explanandum (conclusion). The explanandum is deduced from the explanans. The deductive explanation has a valid argument because it takes the form of conditional argument, affirming the antecedent which is a valid form of inference.

Step 4. Verification of theories

3.1.1.b Merits and demerits of deductive method

Merits

1. Powerful.—Deductive explanation is very powerful because it makes use of a valid form of deductive argument where the explanandum must be true if the explanans are true.

2. Simple method.—From a few basic facts of human nature, a number of inferences can be drawn by logical reasoning.

3. Substitute for experimentation.—It is not possible for the investigator to conduct controlled experiments with the legal phenomena in a laboratory. He can, therefore, fall back upon deductive reasoning.

4. Actual and exact.—The deductive method lends for the generalizations which are accurate and exact.
Demerits

1. Requires high degree of logic and reasoning.—Not everyone can use deductive method successfully and even many experienced researchers have been trapped by faulty reasoning.

2. Danger of building inapplicable models.—If the researcher confines only to abstraction, his model may have the elegance and be logically beautiful but it may be far away from real life.

3. Valid under assumed conditions.—The theories arrived at by deductive reasoning are valid only under assumed conditions. The assumptions must be valid, if the theories are to be hold good.

4. Not applicable to all types of studies.—Deductive method can be applicable to the limited studies only.

3.1.2 Inductive Method

Induction is the most often used method of scientific research. Induction is a process of reasoning from particular cases to whole group of cases, from specific instances to general rules. The inductive method is also known as historical, or empirical or a posterial method. It may be described as practical approach to the research problems. It tries to remove the gulf between theory and practice. This method examines various causes one after another and tries to establish causal relations between them. General principles are laid down after examining a large number of special instances or facts. The method is said to be ‘empirical’ because the formulation of principle is made only after an extensive compilation of the raw data of experience. The data may be historical or statistical data, The historical instances are qualitative while the statistical data are quantitative. Generalizations are made after the analysis of data. Inductive reasoning starts from observable facts from which a generalization is inferred. Let us take an example:

(1) Man A died
(2) Man B died and so on
(3) All men are mortal.
One comes across the death of so many individuals. On the basis of these observed facts, one may infer that all human beings are mortal basing on inductive reasoning. To give an example for inductive reasoning, we can cite the work of Dr. Goring. He conducted a research on Lombrosian concept that the criminals constitute a distinct physical type. His making comparison of several thousand criminals and non-criminals, finds in his investigation that there is no relation between the criminal behaviour and physical anomalies, which are proposed by Lombroso.

Induction operates on faith that in the basic course of things if for a long time regularity is evidenced, then it is a Surety enough for the inference that it will continue in the future.

If the premise and conclusion in the logical case are both known, some probability relations may be established between them and this may serve as a paradigm of an inductive inference.

Inductive explanations also have explanandum and explanans. The explanandum is generally probable, explanandum cannot be deducted from die explanans with certainty. The explanandum is implied by the explanans. The explanans support or provide evidence for the explanandum but does not make the latter certain. The explanans can be true and the explanandum can still be false in the inductive explanation. Inductive explanations explain either the probability of individual events or statistical generalizations.

Inductive process examines the particular phenomena and discovers from them the general law. There are two laws which bind the process of induction, i.e., the law of universal causation and the law of uniformity of nature; Perfect induction is a method of arriving at a universal proposition after taking into consideration all the individual instances of phenomena under Investigation.

Induction argument derives a generalized conclusion on the basis of particulars which are often empirically derived observations. The premise of an inductive argument makes die conclusion probable, not certain. The inductive approach relies on the scientific discovery of facts. One characteristic of inductive argument is that it establishes a conclusion with a content which goes beyond its premise. Prom the observation of a sample, an inference is made about a whole population. This la called the ‘inductive leap’, jumping from the premise, which relates to an observed
sample, to the conclusion which concerns with entire population. The greater the number or representative units in the premise or observed in the sample, the smaller is the inductive leap. The premise of an inductive argument does not establish the conclusion conclusively. The premise of a valid argument maybe true, but the conclusion may still be false. Its premise only Supports the conclusion but it does not make the latter certain.

3.1.2. Merits and demerits of Inductive Method

1. More realistic.—This method is more realistic because it studies the changes in conditions surrounding the social activities of man and their effect on social activities are analyzed and displayed.

2. Possibility of verification.—The method is more useful because its propositions can be tested and verified easily.

3. Proper attention to complexities.—This method takes full note of the complex relationship found in actual life and examines them carefully.

4. Dynamic approach.—This method takes into consideration the changeable nature of assumptions in its analysis. It does not consider facts to be stable. It is a dynamic method.

Demerits of Inductive Method

1. It is a difficult method.—This method cannot be used by a beginner or a common man because it is impossible for an ordinary person to collect facts, study them and derive some conclusions out of them. The cost is too much for him.

2. Danger of bias.—The propositions obtained through this method are based upon data collected by investigators. Therefore, there is a danger of investigator’s bias entering into propositions.

3. Limited scope of verification.—Since the propositions obtained through this method are based on a few facts, the universal applicability of these propositions is always in doubt.

4. Limited use in socio-legal studies.—This method is commonly used for lifeless objects of the physical science. In socio-legal studies, we study a man’s problems. As such, the method has limited use.
If anyone asks which method is preferred, the answer is both. Prof. Marshall says, “Induction and deduction are both needed for scientific study as right and left foot for walking.”

Larrabee remarks, “If extreme rationalist (Deductionist) is like a spider spinning out theories from within the extreme, empiricist (Inductionist) is to be compared......to an ant which piles useless heaps of facts. Better than either the spider or an ant is the bee, which selectively gathers pollen and transforms it into honey, to be a bee one has to mingle both induction and deduction in intricate way”.

3.1.3 The Inverse Deductive Method
J.S. Mill is the chief advocate of the Inverse Deductive Method. It is a combination of inductive generalisations obtained by means of the comparative method or by statistical method, - with deduction from more ultimate laws. It is a way to arrive at reality through experiment, observation and conclusion. This method starts with the use of deduction and then uses the method of induction to find out the reason of the phenomena, which is under study.

3.1.4 Analogy
Analogy is a process of reasoning between parallel cases. In this method, conclusions are arrived at by reasoning of resemblance where from partial resemblance or agreement of two things or issues to each other. J.S. Mill says that “Two things resemble each other in one or more respects; a certain proposition it true of the one; therefore it is true of the other.” Case law involves reasoning by analogy. In practice, die judiciary proceeds on the basis of a number of points of resemblance of relations or attributes between cases by applying the old rule to the new case.

3.1.5 Fortori
Fortori is another method of reasoning. Fortori provides that if something is prohibited then it is assumed that anything more obvious is prohibited.