



Study of Primary/ Basic Laws of Learning by Thorndike

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Abstract : Thorndike first presented his theory in his book ‘Animal Learning’ published in 1968. Connectionism Theory or simply S-R or Stimulus-Response Theory by Thorndike is actually one of the most applied theories of learning. It gave three laws of learning in which is, most widely used theory in education. This theory states that learning is the outcome of the relationships or bonds between stimuli and responses. These relationships become habits and may be strengthened or weakened depending on the nature and the frequency of stimuli and responses themselves. Learning or a behaviour is formed when a certain meaningful stimulus to us or have the strong “connection” that we respond to them. These connections become strong and can be further explained by Thorndike’s Three Laws of Learning.

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Introduction : Thorndike says, “Both theory and practice need emphatic and frequent reminders that man’s learning is frequently the action of the laws of readiness, exercise and effect.” Accordingly, in Thorndike’s opinion, man’s learning takes place according of these laws.

1. Law of Exercise.
2. Law of Readiness.
3. Law of Effect.

Law of Exercise.

Practice makes perfect. This is the cliché that could best describe this law. This means that the more the practice of a certain behaviour, more it will be strengthened. Those things most often repeated are the best learned. This is the basis for practice and drill. The mind rarely retains, evaluates, and applies new concepts or practices after only one exposure. A student learns by applying what he has been taught. Every time he practices, his learning continues. There are



many types of repetitions. These include student recall, review and summary and manual drill and physical applications. All of these serve to create learning habits.

Connections become strengthened with practice, and weaken when practice is discontinued. Laws of exercise are mainly those of respective habits, as in rote memorizing or the acquiring of muscular skills. Law of exercise has two sub-laws:

- Law of use and
- Law of disuse.

Law of use –“ When a modifiable connection is made between a situation and a response keeping other things equal, the strength of that connection is increased”.

Connections between a stimulus and a response are strengthened as they are used .

Law of disuse –“ When a modifiable connection is not made between a situation and a response over a period of time keeping other things equal, the strength of that connection is decreased” .

Connections between a stimulus and a response are weakened as they are not used .

Law of Readiness.

This law states that the more “ready” an individual is to respond to a stimulus, the stronger will be the bond between them. And, if an individual is ready to respond but is not made to respond, it becomes frustrating and annoying to that person. In Thorndike words “When a bond is ready to act ,to act gives satisfaction and not to act gives annoyance and when a bond is not ready to act and is made to act annoyance is caused”. In Thorndike’s view law of readiness is active in three following conditions:

- When a conducting unit is prepared to go into action, its work is quite satisfactory because nothing is done to alter its working.
- When a conduction unit is forced to act while it is not prepared to do so its behaviour is of a nature calculated to excite anger.
- The inactivity of a conduction unit which is ready to behave, may be unsatisfactory and any reaction may arise in connection with that deficiency.

Thus a series of responses can be chained together to satisfy some goal which will result in annoyance if blocked. Interference with goal directed behaviour causes frustration and causing someone to do something they do not want to do is also frustrating. It means that-

- When someone is ready to perform some act, to do so is satisfying.



- When someone is ready to perform some act, not to do so is annoying.
- When someone is not ready to perform some act and is forced to do so, it is annoying.

Law of Effect.

Law of effect means that the learning takes place properly when it results in satisfaction and the learner derives pleasure out of it . On the other hand, if the learner faces failure or get dissatisfaction, the progress on the path of learning is hampered. For example: When a child solves questions correctly he feels encouraged to do more. But if he fails repeatedly, he is unwilling to make subsequent attempts. This law is based on the feelings of the learner. Learning is stronger when joined with a pleasing or satisfying feeling. It is weakened when linked with an unpleasant feeling. An experience that produces feelings of defeat, anger, frustration, futility, or confusion in a student is unpleasant for him. This will decrease his learning capabilities. According to Thorndike “Those acts which gives us satisfaction are tends to be repeated and set and fixed in our nervous system and those acts which gives us annoyance are not repeated and so do not fixed.”

Connections are strengthened if the consequence or the effect is positive. In short, behaviour or learning will take place or be repeated if the result of such action is pleasant.. On the other hand, connection between the stimulus and response weakens when the effect is negative . However, Thorndike reiterated that negative consequences do not necessarily weaken the connections, same is true that positive consequences do not always guarantee the recurrence of behaviour.

In Thorndike words “—[to] a modifiable connection being made —between an S and an R and being accompanied or followed by a satisfying state of affairs man responds, other things being equal by an increase in the strength of that connection. To a connection similar, save that an annoying state of affairs goes with or follows it, man responds, other things being equal, by a decrease in the strength of the connection”. Thus the Law of Effect states that:

- Responses to a situation that are followed by satisfaction are strengthened
- Responses that are followed by discomfort are weakened.

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