



Education as an evolving concept- Behaviorist, Cognitivist and Constructivist Perspectives.

¹Dr. Kiran Pahwa, ²Anshika Bhalla

¹ Assistant professor, Desh Bhagat University, Mandi Gobindgarg, Punjab.

² Student, Desh Bhagat University, Mandi Gobindgarh, Punjab.

Email - anshika.bhalla1313@gmail.com

Abstract: Learning is continuous process which gives an overall development among individuals. Famous theorists given the concept of learning around the world. Through various experiments these theories which focuses the light on the learning processes. The three main perspectives (behaviourism, cognitivism and constructivism) spread the knowledge about the learning which has been discussed. The aim of the study to discuss about the perspectives linked with an education system.

Keywords: Behaviourism perspective, cognitivism perspective, constructivism perspective and education system.

1. INTRODUCTION :

From infancy to old age every person whether literate or illiterate start learning things through imitation or observation due to all the environmental factors. This directly effects on their behavior which can be seen easily known as behaviorism. Behavior is directly link with heredity and environmental factor. Many theorist work on this field to prove that heredity and environment go hand in hand but no doubt others also criticize this aspect. But behavior, cognitive and constructive perspectives are interdependent to each other. As what we see or store in our memory i.e known as mental processes called cognitive perspective. Later on this learning modify by an individual in its own way known as constructive perspective.

Attention, Retention, Perceive all the parts of cognition, which helps to store the stimulus and react accordingly. New ideas, creativity, divergent thinking which boosts our knowledge and construct them and apply in our daily life situation.

1.1 What is Behaviorism perspective?

Behavior is segmented in two parts –overt and covert behavior. Overt behavior which can be seen easily and covert behavior which is hidden. For instance, dance or any physical activity is overt behavior and internal thoughts, feelings are covert behavior. The main theorist work on behavior like JB Watson, BF Skinner, Pavlov, their theory gives us a clear picture about behavior, what children see act accordingly. Family, school, peers groups and environmental stimuli gives a great impact on behavior. There should always a positive attitude towards the behavior to influence their self esteem, self efficacy. Nobody is perfect is best quote to motivate someone. Everybody has flaws, do mistakes but by doing practice we can overcome our flaws. Trail and error is the best concept given by Tolman to modify our behaviour. Everybody has a willing to learn new things and by their own way they can solve their problems. Insight theory explained by Koffka. This all shows that how slowly and gradually behaviour took place by various environmental factors.



1.2 What is Cognitivist?

What we think, perceive in the environment it directly store in our memory whether it is short term memory and long term memory. These all memories are part of our cognition where hippocampus, part of brain stored our learned behavior. Piaget explain various stages of cognitive development. At every age, our mental development increases. How small children 1st learn and late their cognition part develops they ask questions about how,when occurs of a particular stimuli. This shows that his/her cognition part is developing.

1.3 What is Constructivist?

No doubt cognition play a vital role, but constructivist is another perspective which we all try to build new concepts by manipulating older things we perceive. Famous theorist Piaget who called children a little scientist because they always explore things and mold it to make a new thing which is called constructing of things. In his theory he has given four major stages where he discussed about the assimilation and accommodation at very early age children construct things in their memory due to which it shows in their behavior.

1.4 Theories based on these three Perspectives.

1) Bobo doll experiment

Bandura famous experimnet i.e bobo doll experiment . It is a continuous reciprocal interaction between cognitive, behavioral and environmental influences. In this experiment Bandura discuss about the child behavior what he see, he reacts which is called imitation. A doll is there and one of the family members who treat doll in an angry way like beating the same way child behaves with his doll which shows observation is directly influence on child behavior. The three factors which influences behavior is environment, individual and the behavior itself.

Unidirectional, partially directional and reciprocal these are the terms shown in the diagram:

$$B=f(P,E)$$

$$B=F(P-E)$$

Here is the video link.

<https://youtu.be/XHIhkM1cAv4?si=ziXTjFo0ZeeGGzNp>

2) Classical conditioning

Pavlov gives the learning theory by experiment on dogs which shows that how environment stimuli affects on animal. Here, he discussed about the unconditional stimuli, unconditioned response turns into conditioned stimuli and conditioned response.

Where Food is unconstititional stimulus and saliva is unconstititional response and slowly and gradually experimenter link food with a bell like when bell rings food appear this learned by a dog that when bell rings food will come. This way bell becomes conditioned stimulus and saliva is now conditioned response.

This whole experiment tells about the behavior, how dog reacts to the conditioned stimuli, how he learns environmental factors slowly how he adapts it and modify his behavior. The same way how individuals adapts the environmental factors and use to it and modify their behavior. Both cognitive and constructive part plays the role in the behaviour.

Here is the video of the experiment.

https://youtu.be/jd7Jdug5SRc?si=orsAQ_fo1kxVX24M

3) Operant conditioning

B.F. Skinner gave the concept of operant conditioning. Where we learn about the association between our own responses and what follows it consequences. In this conditioning our response emerges and follows it consequences. Trial and Error concept emerged given by Tolman. After lots of tries rat came to know about the lever to avoid unpleasant consequences. Rewards and punishment this two concepts used by BF Skinner to elaborate the behaviour consequences.



This same way our behaviour occurs when our cognitive and constructive part took place. By various practices we learn and overcome our flaws to do better in upcoming event. Through reinforcement everybody can move further they just need a push or moral support by someone. Rewards are used to push up the positive behaviour to continue, punishment is used to remove the negative behaviour of the students. Rewards can be like chocolates or something which makes the students happy.

Here is the video to explain the experiment.

<https://youtu.be/ne6o-uPJarA?si=MC4gyo9kTHoGxsed>

4) **Insight**

Wolfgang Kohler gave the concept of insight where a behavior is depend upon our internal motivation and insight to solve the problem. This experiment conducted on chimpanzee , bunch of bananaw hung on the ceiling and multiple shapes of boxes are there. How chimpanzee tries to get those bunch of bananas by arranging the boxes on top and stand on the box to get those bananas. This shows that animals have an insight learning power to solve the problem by its own without anyone's help. This concludes that every human being has a will and cognitive, constructive and behavior perspective to achieve a goal.

2. **Review of literature:**

Behaviourism Perspective

Imitation, observation, reinforcement all these terms are linked with learning behavior. At very beginning child learns things from their family then from school, peer groups etc which indicates that every stimuli of an environment directly effects behavior.

Education is the first stimuli which helps the students in growing up, acquiring knowledge around the world. This all depends upon the environment of the school, classroom and teacher teaching styles. According to B.F Skinner postive reinforcement gives the desirable behaviour. Traditional teaching (rewards and punishment) somewhere is beneficial in modifying the behaviour of the students while teaching, Faryadi.,(2007). It is very important for the teachers to analyse or observe the behaviour of the student in the classroom. Undesirable behaviour should not be continued for a longer period of time. Keen observer teacher should control the environment stimuli which is negatively impacting the students or becoming an obstacle while studying. (Brau,Fox,Robinson). B.F Skinner talked about the various techniques for continuous desirable behaviour like token economy, feedback which influences the students to continue the desirable behaviour.

Token economy use by teachers while teaching to give tokens like hand made stars or green colour slip for right answer which helps the students in motivation. Same like feedback used by the teachers like words excellent, good boy or good girl, on right answer.(GSI)

We all know the pandemic era changes our behaviour towards the technology and we are all dependent on it especially teachers and students. Technology is the only bridge which helps them to stay connected and not to break the link of teaching which shows that behaviour is flexible one which can easily adapt in any way if we want to. Behaviour and digital technology have a positive role in learning things. Technology changes our behavior, our cognitive aspect and our constructive view. According to Gunras,F.,(2021) that our learning is transfer to machine learning. No doubt in this robotic world we all adapt ourself which shows that very easily we modify our behavior from traditional to modern learning.

Cognitive perspective

21st century cognitive perspective hits more than the behaviour perspective because it includes all the mental processes like recalling, receiving, retrieving , recognition, retention. Various theoriest talked about cognition like Piaget, Bloom taxanomy, Tolman ,Vygotsky, Gestalt. What we perceive, we acquire, store and later on recall when required. These process helps the learners to grew up. According to Tolman, where he talked about the mental mapping which helps the rat to resolve the zig zag path the same way it helps the students to solve any problem when they faced any obstacle.

Schema is the building block of the stimulus which try modify the existing knowledge into the new ones.(Piaget). This way cognitive structures helps to modify the previous learning into the new learning Yilmas,K.,(2011).

Intelligence plays a vital role in learning, at very early years children life begins with learning new things and new concepts. Some children are God gifted , some belong to low or high intelligent and this can measured through an



intelligence test given by (Alfred Binet). This indicates about the range of intelligence an individual belongs. Intelligence comes under a cognitive perspective which has a directly linked with a memory Cornoldi,C.,(2006).

In student centric world, curriculum or vocational activities should be there in school which shows that it enhances the social responsibility(collaboration and cooperation) among students and development of the cognitive area.Kharrazi,S,K., Delgoshae,Y.,(2010). This enhances the academic acknowledgement at an adolescent age during school level shows the directly link with a working memory.Khan,Z,A.,Adnan,J.,& Raza,S.,A., (2023). Creative which is a keyterm of cognitive area which broaden the things to look in a different manner. High IQ students are more imagined and look around the world with more colourful way. This cognitive perspective helps the learner to know about how the mental processes work and influences the various approaches to learn things. According to Benedek,M.,Jauk,E.,et al., indicates that cognitive mechanism has positive correlation relation with creativity and intelligence.

Constructivism

Learning theories helps to know about the behaviour but constructive perspective plays a vital role in this theory. Piaget, Vygotsky theory actively participated in this modern world to know clear concept of constructivism. Robotic era constructivism aspect stepping forward in the educational field than the cognitive and behavioral aspect. How fresh ideas develop among students is based on their abilities. How previous knowledge modified into the new ones. In educational area traditional method is some how getting diminished and student centric approach took place. Focussed on students and their divergent thinking how they answer to the particular question in their own words.Wang,Y.,(2022), highlights that student centric approach increases the motivational level among students. Coming forward and speaking about their own perspective which boost the activeness and alertness. Piaget puts the light on accomodation process how children easily accommodate previous knowledge with new experiences and equilibrium is maintained. Motivation, openness, self esteem, self concept, learning new experiences can't be developed all alone some how in a social we all need some one support to upbuild ourself. Teacher help in all these. Learning is a continuous process everybody needs a push in their life to reach somewhere. Scaffolding is term where teacher provides hints or cues to the students to complete the answer or give more elaboration about that concept. Teachers guidance and their knowledge conscious students alot to understand the concept. Teachers professional role gives a huge impact on the students constructive thinking concept.Kumari,V.,(2014). Students easily adapt and intimate their role model it is very quite obvious that children go to school and learn alot from their teachers. It is very important that teachers should widen their thinking, knowledge and construct new ideas for the overall development of the students in the constructivism area. This all process is known as reflection approach what we present students reflect that in their life. Vygotsky emphasizes on how the learning took place with a social interaction. New learning, new experiences or ideas helps students to study the inter disciplinary subjects but the main focus is given to the clinical and the science field where new experiments and research took place. Learners try to modify the old knowledge into the new ones.Tabe,K,S.,(2019). Zone of proximal, cooperation and collorative learning helps to develop the novel ideas when they interact with one another to find the solution of the problem.Shah,R, K.,(2019). Constructive teaching foster the students to actively participate and energetically face the situation and resolve it in a new manner. Teachers guide them to show them the clear path with their knowledge to learn things in an effective manner. Kulsum,C.,(2015) highlights that fresh ideas and active participation among students through collaborative learning.

3. CONCLUSION :

Behaviourism, cognitive and constructivism these three domains differently plays a active role in their own area.This qualitative paper discuss about the domains interlink the learning.

Behaviourism aspects overlaps by the cognitive and constructivism approach. According to the new education policy 2024, our education minister given the light on the quality of teaching and an overall development of the students, How student centric approach upbuild the development and motivation among the students. Less burden on the theory concept and more on vocational activities .Dager and Yadav in 2016 stated that lecture method is used or rote learning or deep leaning concept is used but today this is overlap by creative thinking.Instead of boring lectures make the leaning more interactive because they are the futures of our country.

These three perspective has their own different aspect on education. These three outlool are equally important for the educational field to make students active, alert and creative wholly.



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