

Comparison of two learning theories education



Learning is “ a persisting alterations in public presentation or public presentation potency that consequence from experience and interaction with the universe ” (Driscoll, 2000, p. 3) . The manner we process information is every bit single as our familial make-up, but research has shown that there are many different types of larning theories used for schoolroom instruction. (Merriam, Caffarella, & A ; Baumgartner, 2007 ; Weimer, 2002 ; Steiner, Floyd, Hewett, Lewis, & A ; Walker, 2010) . The theories of behaviourist and cognitivist are of import to compare because they are a portion of the basic foundations in which other larning theories have been formed. In order to use larning theories to nursing pattern, the demand to understand the footing of different theories is of import. Theories have been researched and tested and have some importance as to how things work across different state of affairss and fortunes. Theories can give some consistent ways of looking at schoolroom pattern and some rational accounts for what happens within the category.

Doctrine

Behaviorism is chiefly concerned with discernible and mensurable facets of human behaviour. In specifying behaviour, behaviourist larning theories emphasize alterations in behaviour that consequence from stimulus-response associations made by the scholar. Behavior is directed by stimulation. An single selects one response alternatively of another because of anterior conditioning and psychological thrusts bing at the minute of the action (Parkay & A ; Hass, 2000) . In instruction, this type of larning falls into the reward/punishment class. The waggess must be of import to the scholar in order to give the inducement to react favourably.

Cognitive scientific discipline began a move from behaviouristic patterns which emphasized external behaviour, to a concern with the internal mental procedures of the head and how they could be utilized in advancing effectual acquisition. The theoretical accounts that had been developed in the behaviourist tradition were not disregarded, but alternatively the “undertaking analysis” and “learner analysis” parts of the theoretical accounts were elaborated on. Cognitivism is based on the idea procedure behind the observations. Changes in behaviour are detected and perceived to be an index of what was going on inside the head. The new theoretical accounts addressed component procedures of learning such as cognition, cryptography and representation, information storage and retrieval every bit good as the incorporation and integrating of new cognition with old information. (Saettler, 1990)

Beginnings and Writers

The foundation of Behaviorism, hint its roots to the early portion of the twentieth century. This was during a clip when many psychologists emphasized soul-searching of mental procedures (self-contemplation) or the psychoanalytic theory of Sigmund Freud. In contrast, research workers like Ivan Pavlov, began to develop a model which emphasized discernible procedures (environmental stimulations and behavioural responses) . (Kentridge, 2007) Originators and of import subscribers to behaviorism believed that learning is confined to experimental and mensurable behaviour. The two major schools of idea are based on thoughts from Pavlov who showed classical conditioning and Skinner who believed in operant conditioning.

One of the most celebrated experiments on classical conditioning is from Russian physiologist, Ivan Pavlov (1849-1936) . Pavlov originally was making an experiment on the function of salivation in digestion. From his observations, Pavlov noticed when his helper brought meat into the research lab ; the *Canis familiaris* being used for in this experiment would automatically get down to salivate. Further research into this phenomenon formed the celebrated Pavlov ' s stimulation and response experiment, known now as authoritative conditioning. Authoritative conditioning is a four-step learning process affecting physiological reactions. (Fig. 1)

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Fig. 1 Pavlov ' s Dog Experiment

During classical (or Pavlovian) conditioning, human and carnal topics change the magnitude and timing of their conditioned response (CR) , as a consequence of the eventuality between the conditioned stimulation (CS) and the innate stimulation (US) . Whereas in classical conditioning, the US and the CS find the signifier of the CR, in operant conditioning the strength and frequency, but non the signifier, of the response is independent of the US.

(Schmajuk, 2007)

B. F. Skinner (1974) coined the term operant conditioning ; it means approximately altering of behaviour by the usage of support which is given after the coveted response. Skinner identified three types of responses or operant that can follow behaviour. Skinner believed that we do hold such a

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thing as a head, but that it is merely more productive to analyze discernible behaviour instead than internal mental events. In kernel, Skinner believed “ we are what we have been reinforced for being ” (Olson & A ; Hergenhahn, 2009, p. 76) . Operant conditioning has been widely applied in clinical scenes (i. e. , behavior alteration) every bit good as instruction (i. e. , schoolroom direction) and instructional development (e. g. , programmed direction) . This theory states that when acquisition is rewarded, behavior is perpetuated or maintained, while punished behaviour is removed. In the authoritative experiment of “ Skinner Box ” , a rat may have a nutrient wages every clip he presses the saloon. He presses faster and faster. (Fig 2) .

hypertext transfer protocol: [//www. simplypsychology. org/operant-conditioning. html](http://www.simplypsychology.org/operant-conditioning.html)

Fig. 2 Skinner ' s Rat Box

The major techniques used in operant conditioning are:

Positive support - increasing a behaviour by administrating a wages.

Negative support - increasing a behaviour by taking an aversive stimulation when a behaviour occurs

Punishment - diminishing a behaviour by administrating an aversive stimulation

Extinction - diminishing a behaviour by non honoring it.

Albert Bandura thought Skinner ' s theories were excessively simplistic although he besides believed many of the psychological concepts of old psychological idea were far excessively laid back, and were neither problem-solving nor action-oriented (Bandura, 1997) . He believed in “ mutual determinism ” , that is, the universe and a individual ' s behaviour cause each other, while behaviourism basically states that one ' s environment causes one ' s behaviour, Bandura, who was analyzing adolescent aggression, found this excessively simplistic, and so in add-on he suggested that behavior causes environment every bit good. Later, Bandura shortly considered personality as an interaction between three constituents: the environment, behaviour, and one ' s psychological procedures (one ' s ability to entertain images in heads and linguistic communication) . (Bandura, 1997)

Cognitivism considers the scholar as an information processor, much like that of a computing machine. It believes that the “ black box ” of the head should be opened and understood. The information comes in, is processed and leads to certain results. The construct believed that people are non merely like rats that respond to stimuli but instead, they are rational believing human existences that require active engagement to larn. There are four major subscribers to the Cognitivists theory.

Howard Gardner believed that pupils learn in different ways. Harmonizing to Gardner, “ we are all able to cognize the universe through linguistic communication, logical-mathematical analysis, spacial representation, musical thought, and the usage of the organic structure to work out jobs or to do things, an apprehension of other persons, and an apprehension of

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ourselves. Where persons differ is in the strength of these intelligences - the alleged profile of intelligences -and in the ways in which such intelligences are invoked and combined to transport out different undertakings, solve diverse jobs, and advancement in assorted spheres. " (Gardner, 1991)

Fig. 3 -Multiple intelligences

Robert Gangne developed information processing theory identified eight degrees of rational accomplishments including: signal, stimulus-response, chaining, verbal association, multiple favoritism, construct formation, rule formation and job resolution. He besides explained that there are five countries of larning results: verbal information ; rational accomplishments ; cognitive schemes ; motor accomplishments and attitudes.

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Fig. 4-Levels of Intelligence

Allan Paivio discovered " Double cryptography theory " that states people process information in two different ways ; processing of images and the processing of linguistic communication.

Figure

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tw/LabNews/Minutes01S/20010412joseph.htm

Fig. 5- Double Coding Theory

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Benjamin Bloom described six degrees of learning in his theoretical account of critical thought. These degrees are besides known as “ Bloom ‘ s Taxonomy ”

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Fig. 6- Bloom ‘ s Taxonomy

Literature Review

The two motions differ peculiarly in their positions on behaviour.

Behaviorism, whose research topics were largely animate beings, positions behavior as an irreducible effect of environmental stimulations, whereas Cognitivism, whose research topics are frequently worlds, sees behavior as a point from which to abstract the mental processes behind the behaviour.

Skinner ‘ s surveies of operant behaviours have become really utile in the field of learning and knowledge (Corey, 2009) . Surveies have shown that behaviour can be conditioned by supports, positively, which increases the chance of the behaviour go oning once more, or negatively, which decreases the chance the behaviour will go on once more (Olson & A ; Hergenhahn, 2009) . Skinner ‘ s theories still remain in broad usage, assisting users understand and control behaviours in many subjects every bit good as in issues runing from advertisement to parenting (Olson & A ; Hergenhahn, 2009) . Harmonizing to Corey (2009) , the research of Kazdin (2001) and Spiegler & A ; Guevremont (2003) revealed that behavioural therapy is by

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and large every bit effectual as alternate therapies, and in some cases, more effectual.

The Cognitive Learning Theory supports the thought that learning includes different sorts of memories, motive and thought. One of the other of important factors is that of contemplation. Those that promote Cognitivism believe that the acquisition procedure is internal and depends on memorized information from pre-existing cognition. (Ausubel, 1974) The theory argues that the grade of which a individual learns is non affected by the ability and quality of mental processing. (Craik & A ; Tulving, 1975 ; Craik & A ; Tulving, 1975) Cognitivism maintains that memory is stored by utilizing a connective form of information that webs with other forms by agencies of some type of a relationship. (Stoyanova & A ; Kommers, 2002)

Use in Nursing Education

Writing behavioral-based instructional aims seems to stipulate clear, mensurable footings to help scholars. Harmonizing to Morrison (2001) , behavior based objectives become “ the terminal instead than the agencies for direction. ” Morrison continues to indicate out that cognitive focused instructional aims overcome this job by “ first saying a general aim to pass on the purpose. ” Additionally, they observe that “ cognitive aims are good suited for depicting higher degrees of acquisition. ” (Morrison et al. , 2001, p. 97)

In behaviourism, the scholar is actively involved in acquisition, practicing, and showing new behaviours and is highly dependent on having feedback from the pedagogue. The pedagogue is responsible for placing behavioural

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results, commanding the environment, and supplying feedback. Current usage of behaviourism in instruction is most frequently associated with instruction and preparation (Merriam et al. , 2007) . Behaviorism does good in instruction because it

promotes good behaviour and recognizes that unwanted behaviour has effects. Students learn by detecting and construing the behaviour, and associated effects, of others in a procedure termed vicarious support or mold (Bandura, 1977) . Learning by patterning involves a complex procedure of interpretation, cryptography, and retaining the information for future application, so prosecuting in the sculptural behaviour (Bandura, 1969) .

Cognitivists have influenced educational schemes by including anterior cognition in act uponing how new information is digested. Cognitive learning theoreticians believe that acquisition is an internal procedure in which information is integrated or internalized into one ' s cognitive or rational construction. Learning occurs through internal processing of information. From the cognitive point of view, how new information is presented is of import. In the first or cognitive stage of acquisition, the pupil learns the overall image of what the undertaking is and the sequences involved. In the 2nd, or arrested development acquisition stage, the scholar begins to derive accomplishment in executing the undertaking. In the last stage of acquisition, the automatic stage, the pupil additions increasing assurance and competency in executing the undertaking. (Elias et al. , 1984)

Personal Use

I believe that we all use a portion of the behaviourist 's manner of acquisition, to some extent. We all like to be awarded for the work or behaviour that we have accomplished. We know there are reverberations and effects for non adhering to the regulations. Our behaviours represent how we are perceived by others in society. The finding of how others behave is by the usage of cheques and balances of stimulations and response. The manner we act and/or behave, Teachs people how to react to us. I believe that I am motivated to larn and get more cognition. The ability to mentally form, rehearse and grok new larning stuffs is one I strive to obtain.

The motive that has driven me to win in both by personal and professional lives has been founded on realistic and ambitious ends.

Decision

There are many different ways of acquisition and instruction. Two of the earliest methods of acquisition can still utilized in today ' s schoolroom. The foundation of theories helps us as a model to establish our acquisition and learning upon. We can utilize positive and negative support every bit good as patterning to learn our pupils how to absorb and keep new stuffs.

Behaviorism is a instructor based concept full of construction and regulations. Examples are category talks, note pickings and function mold. Cognitivist used a pupil based construct in which pupils can happen out information by themselves by utilizing instance surveies, research and treatments. These two types of larning theories can assist to determine our hereafter coevalss.