

**APPLICATION OF CLASSICAL AND OPERANT CONDITIONING THEORIES OF LEARNING
IN COOPERATIVE MEMBER EDUCATION AND STAFF TRAINING**

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Abstract

Cooperative education and staff training are integral parts of cooperative business especially primary cooperative societies. To achieve the effectiveness of such education of members and staff training, infusion of psychological inputs has become necessary especially given the complex nature of cooperative members and the content of cooperative education. In recognition of the strength of theories of learning particularly classical and operant conditioning theories of learning, this paper discusses how the expositions of these theories could be integrated into cooperative education process so that maximum results could be achieved. Secondary data was used in form of relevant literature to gather the data. It was recommended amongst others that when a cooperative educator observes that a cooperative member or staff is nervous during the learning process or training programme, he should try to find out what caused it i.e. determining what stimuli is acting at the time and address it.

Keywords: Classical, conditioning, cooperative, learning, operant, theory.

Introduction

Cooperatives, of whatever type and in whatever region, need a continuous education of the members in order to produce enlightened and responsible members who will actively participate in their cooperative business. Cooperative education helps to produce cooperative leaders who will assume the responsibility to direct cooperative management with foresight and self determination, to help the cooperative movement develop the will and capacity for self direction, to give members a sense of attachment and identification with the movement through various activities, to equip the movement to contribute its quota towards solving the problems of men and their community, to engage the loyalty and imagination of youth to cooperative ideals and institutions (Amahalu, 2006).

It is perhaps in recognition of the relevance of cooperative member education that the International Cooperative Alliance (ICA) retained the principle of cooperative member education in its 1966 cooperative principles. Furthermore, in its centenary congress on September 20th-23rd 1995, in Manchester, England, the ICA in its identity statement still retained the principle of education of cooperative members. Even right from the onset, the Rochdale principles included continuous education of members. This trend underscores the fact that cooperative member education is

indispensable in the survival of any cooperative venture whether in developed or under developed countries. The members need to know and understand the principles, methods and operations of cooperatives, the cooperative law, rules and their society's byelaws so that they (the members) can develop favourable attitude towards their cooperatives. Without effective cooperative member education, it will be difficult for the members to understand and apply other principles or even exercise their rights and duties towards their cooperative society (Obodoechi, 2007). It will be difficult to inculcate the cooperative spirit in the members and earn their loyalty to their society without adequate cooperative education.

Cooperative education is essential in order to make the members functional and relevant to their cooperative business. Without continuous member education, a cooperative society is sure to land in all sorts of economic and management problems and may eventually meet sudden death (Amahalu, 2006). This calls for adequate measures to ensure that cooperative member education is effectively imparted to cooperative members through the application of classical conditioning and operant conditioning theories of learning so as to enhance cooperative development in Sub-sahara Africa.

Classical conditioning and Operant conditioning theories of learning are among the learning theories by behaviourists. Behaviourism, as the name suggests, applies to psychologists who believe that any analysis of learning should focus on observable behaviour of the learners. The theories are discussed:

Classical Conditioning Theory of Learning

Classical conditioning theory of learning owes its development to the experiment of conditioned reflex by Ivan Pavlov (1849 – 1936). In its essential form, a dog was tied up; a cut was made in the salivary gland of the dog. Pavlov wanted to know the mechanism involved in the production of saliva. Eventually, he led a tube into the gland of the dog and connected a rubber hose to a graduated glass to find out how much saliva was produced when food was presented to the dog. His experiment led to the discovery of conditioned reflex. For example the anticipation of food caused the flow of saliva in his experimental dog.

At a point in time, the dog's saliva flowed at the sound of the experimenter even before food was presented. At a point, Pavlov paired the food with metronome (bell). He will ring the bell before presenting the food. After several repetitions, saliva began to flow at the sound of the bell even before the food was presented. Thus, Pavlov established a conditioned reflex with the bell acting as the conditioned stimulus. Pavlov called the signal (sights and sounds) that produced saliva (the conditioned stimulus). The sequence in classical conditioning is as follows:

1. US (Unconditioned Stimulus) produces UR (Unconditioned Response).
Food —————>saliva
2. CS (Conditioned Stimulus) produces no response
Metronome (bell) alone —————>no response.
3. CS + US (Conditioned + Unconditioned Stimulus) produces UR (Unconditioned Response).
Metronome (bell) + food —————>saliva
4. CS (Conditioned Stimulus) produces CR (Conditioned Response).
Metronome (bell) alone —————>saliva

From the experiment, it was observed that

- i. Saliva was produced as soon as the footsteps of the person carrying the food were heard. Food was therefore said to be the unconditioned or natural stimulus for saliva production by the dog. The food is the stimulus and the saliva is the response.
- ii. An organism can be conditioned to a response if the stimulus is connected. This was tested and found true experimentally by sounding of a metronome (bell) before food was presented to the dog. Earlier, the dog did not salivate at the sound of the bell. But when food (Unconditioned Stimulus) was paired repeatedly with the bell (Conditioned Stimulus) it was discovered that the mere sound of the bell made the dog to salivate.

Classical conditioning theory of learning therefore emphasizes that the way people learn is connected with certain reflexes i.e. automatic process. The process of learning therefore is to connect a reflex with a response of very often an unconditioned stimulus is paired with neutral stimulus (Condition Stimulus) a bond is formed. In this case the neutral stimulus will bring about the desired behaviour which is an indication that learning has taken place. The organism is able to do what it could not do before.

By the discoveries made by Pavlov, classical conditioning theory therefore emphasizes that the way people (including cooperative members and staff) learn is connected with certain reflexes or automated process. The process of learning therefore is to connect a reflex with a response.

Operant Conditioning Theory of Learning

Operant conditioning is credited to the experiment of B.F Skinner (1904 – 1990) with animals mainly rats and pigeons in a specially designed box (Skinner box). In its simplest form, the box has a lever or bar which can be pressed by the rat and chance pressing of the bar would set the mechanism which would deliver food pellets through a food tube.

When the rat was initially introduced into the box, an accidental or chance pressing delivered several food pellets which the rat consumed and in a short time it was observed that the rat began to deliberately press the bar to get the food pellets because it now discovered that the lever or bar was the source of the food. Initially, the rat was confused, so there was random behaviour by trial and error. But by gradual elimination, it came to realize the connection between the pressing of the lever and the release of food. The rat therefore pressed the lever as often as it required food. Food here is the reinforcement. It reinforces the connection between the stimulus (hunger) and response (the pressing of the lever).

Skinner, in his experiment, demonstrated that the environment has a much greater influence on learning and behaviour. Skinner argues that the environment (parents, teachers, peers) reacts to our behaviour and either reinforces or eliminates that behaviour.

Laws/Principles Derived from Operant Conditioning

1. The law of motivation: The hungrier that rat, the more it presses the lever to get the food. This brings about the law of motivation or drive in the learning process. Without motivation, a learner finds it difficult to learn.
2. Interval reinforcement: This occurs when a response is reinforced at definite intervals. For instance praising a cooperative staff only on Mondays. Later the staff will expect to get praises only on Mondays.
3. Ratio reinforcement: If the rat's response is rewarded at definite intervals for example once in three trials, the rat will try to make faster pressing of the lever. In a learning process, this helps the learner to work harder.
4. Variable reinforcement: This is when the time for reward for the rat's response changes (varies). The rat does not really know when and at what interval it will be rewarded. The rat will thus be forced to make more trials. Variable reinforcement keeps the cooperative staff working as expectation of reward is high.

The Meaning of Cooperative Education

Education, as directed to cooperative members is the education aimed at helping them to imbibe cooperative principles, values and practices (Amahalu, 2006). The cooperative society needs to educate members on what cooperative society is, the benefits people can derive from its formation, how to form a cooperative society, how to run and administer it. Cooperative education is essential in order to make the members functional and relevant to their cooperative business. One of the cooperative principles emphasized by the International Cooperative Alliance (1995) is the principle of education, training and information.

Cooperatives provide education and training for their members, elected representatives like managers and employees respectively so that they can contribute effectively to the development of the cooperative society.

Cooperative education is absolutely essential for the success of the cooperative movement. A cooperative cannot rise far above the level of understanding of its members. It is broad-based, affecting particularly the science of management of the cooperative business enterprises. It includes the cooperative laws, rules and regulation as well as the fiscal and monetary policies and programmes of the cooperative business.

It simply means knowledge of the meaning, objectives and running of the cooperative society, the duties of the members and the management committee, the knowledge of the society bye-laws and the relevant sections of the cooperative law (Onuoha, 2000). The cooperative members must be taught what their rights and duties in the society are. The cooperative society teaches the members how to hold meetings, how to discuss effectively in meetings, how to take decision in meetings and the importance of cooperative meetings. They also teach them how to choose their officers and committee members. The principle of cooperative member education is very important because, unless member education continues, new cooperative members will not be able to understand fully the purpose and meaning of the organization which they have joined. Only a continuous programme of education and training can keep the spirit of cooperative organization alive (Cheesman, 1987).

The Meaning of Cooperative Training

Cooperative training is directed at or given to the employees of cooperative society or officers that run the affairs of the society on behalf of the members for the effectiveness of the society's activities (Amahalu, 2006). The officers of the society who are the president, vice president, secretary, members of the committee and treasurer should be well informed about their duties and responsibilities. This is necessary because since they run the society's business according to the mandate given to them by the members of the society, it is important for them to be well trained since any decision taken by them will be to the betterment and success of the society. The employees of the society are not members; nevertheless since they work for the society, they need to receive training in cooperative activities.

As noted by Enriquez (1986), the employees should know the characteristics that make cooperative societies different from other business organizations. They need to know among others, the principles of cooperation, the cooperative laws and the bye-laws of the society. They should know how cooperative organization operates and how they can perform their duties effectively in any given environment. Employees should be trained and retrained from time to time to be able to acquire the skills to manage the cooperative business effectively. They require general knowledge about the principles and practice of cooperative business in order to be effective cooperative staff.

Application of Classical Conditioning Theory of Learning to Cooperative Education and Training

1. The cooperative educator should, through survey method, gather adequate information about the cooperative staff in relation to the situations where they are most anxious in the performance of their assignments. Is it within the cooperative area? Is it in the immediate environment where the cooperative society is located or within the cooperative office complex?
2. If the cooperative educator wants the cooperative staff on training to transfer the skills and knowledge acquired, then he must provide ample opportunity for the staff to discover the relationship that the lesson has to other situations. This calls for practical examples. For example, if the lesson has to do with the application of the principle of member economic participation in cooperatives, the cooperative members should be helped to see how this principle underscores the need for family members – father, mother and working class children (if any) need to pull their financial resources together to solve a pressing family need. The cooperative members should be taught not to respond to similar stimuli in the same manner. They should learn to distinguish things that seem alike but mean something different.
3. The cooperative educator should provide continued practice for the cooperative staff so that they become accustomed to searching for differences in the performance of their duties.
4. The cooperative educator should ensure extinction (a process by which conditioned responses are cot). The cooperative staff should be helped to put off their anxious moments or thoughts perhaps

about failure in their job performance. Instances could be given by the cooperative educator about many cooperative staff who has done very well in the past despite pressures and challenges.

5. If the cooperative educator observes that a cooperative member or staff is nervous during the educational process or training programme, he should try to find out what caused it i.e. what stimuli is acting at the time.

Application of Operant Conditioning to Cooperative Education and Training

1. A good general principle for teaching, following the stipulations of Operant Conditioning theory of learning is that when students respond, the teacher should react to their behaviour as quickly as possible, immediately if possible. In this vein, the cooperative educator's reaction may be positive or negative but surely if he allows enough time to elapse between the members' or cooperative staff response and his reaction, what the cooperative educator says or does would have lost much of its impact.
2. The cooperative educator should not assume that he knows why the cooperative members receiving the education or cooperative staff members on training do or don't do something. The Cooperative educator should work with what the cooperative members or staff members say or do and reinforce or punish that behaviour in an attempt to shape their behaviour in the desired direction.
3. The cooperative educator should be sure that he knows exactly what he wants the cooperative members receiving the education or cooperative staff on training to do otherwise he may reinforce behaviours that may be detrimental to the development of cooperatives.
4. The cooperative educator should control reinforces, and control the cooperative members or cooperative staff behaviour. Once the cooperative educator gets to know the members or the staff, he will be able to identify those reinforcements that they particularly like.
5. The cooperative educator should be sure that the members should understand why they are being reinforced. Cooperative educators who stand in front of the members and say "that's very good" to the entire members are reinforcing unknown behaviours some of which may be objectionable.
6. During cooperative member education or cooperative staff training, there should be adequate reinforcement, preferably ratio reinforcement so that they (the members or the staff) can work harder to achieve effectively during the educational or training process. This could be in form of additional incentives, praises, promotion and awards.

Conclusion

Classical conditioning and Operant conditioning theories of learning are very relevant in any learning activity. The application of the theories by educationists or instructors will enhance learning, retention and recall. Any cooperative society desiring to give effective education to its member or effective training to its staff should carefully incorporate the expositions of the two theories in its scheme of teaching/learning activities.

Recommendations

The following recommendations are made for policy implementation;

1. When a cooperative educator observes that a cooperative member or staff is nervous during the learning process or training programme, he should try to find out what caused it i.e. determining what stimuli is acting at the time and address it.
2. Cooperative members should be motivated in order to be able to learn. This is because where there is no motivation on the need or essence of the learning, the learning process suffers setbacks.
3. There should be reward system which may be in form of praises, incentives, credit as to encourage members of cooperatives. This is to help remove boredom and discouragement.
4. Cooperatives should always create impression of expectation of reward as to get the staff working hard to get that. When such is not in place, there would possibly be lackadaisical attitude to work.

References

- Amahalu, A.C. (2006). *Understanding Some Aspects of Cooperation*. (3rd Edition). Enugu: Donel Publisher.
- Brookfield, S.D. (2010). *Understanding and facilitating learning*. San Francisco: Jossey-Bass Press.
- Cheesman, W. J. (1985). *Handbook for cooperative personnel in the Caribbean*. Macmillan publishing Company.
- Enriquez, C.G. (1986). *Structure and Functions of Cooperatives*. Canada: Holly Educational Publications.
- International Cooperative Alliance, (1995). *World Declaration on Cooperative Business Enterprises*. Germany: Marburg Consult for self Promotion.
- Kathleen, O. (2011). *Learning: An introduction*. London: Macmillan and Co. Ltd.
- Obodoechi, O. (2002). *The Cobwebs of Cooperation, An Introductory Analysis*. Enugu, Nigeria: Mary Dan Publishing Company.
- Onuoha, E. & Buden, J.J. (2002). *The Principle of Cooperation*. Enugu: Amazing Grace Printing and Publishing Co.
- Onuoha, E. (2001). *Cooperative organization and planning*. Enugu: J. T. C Production.