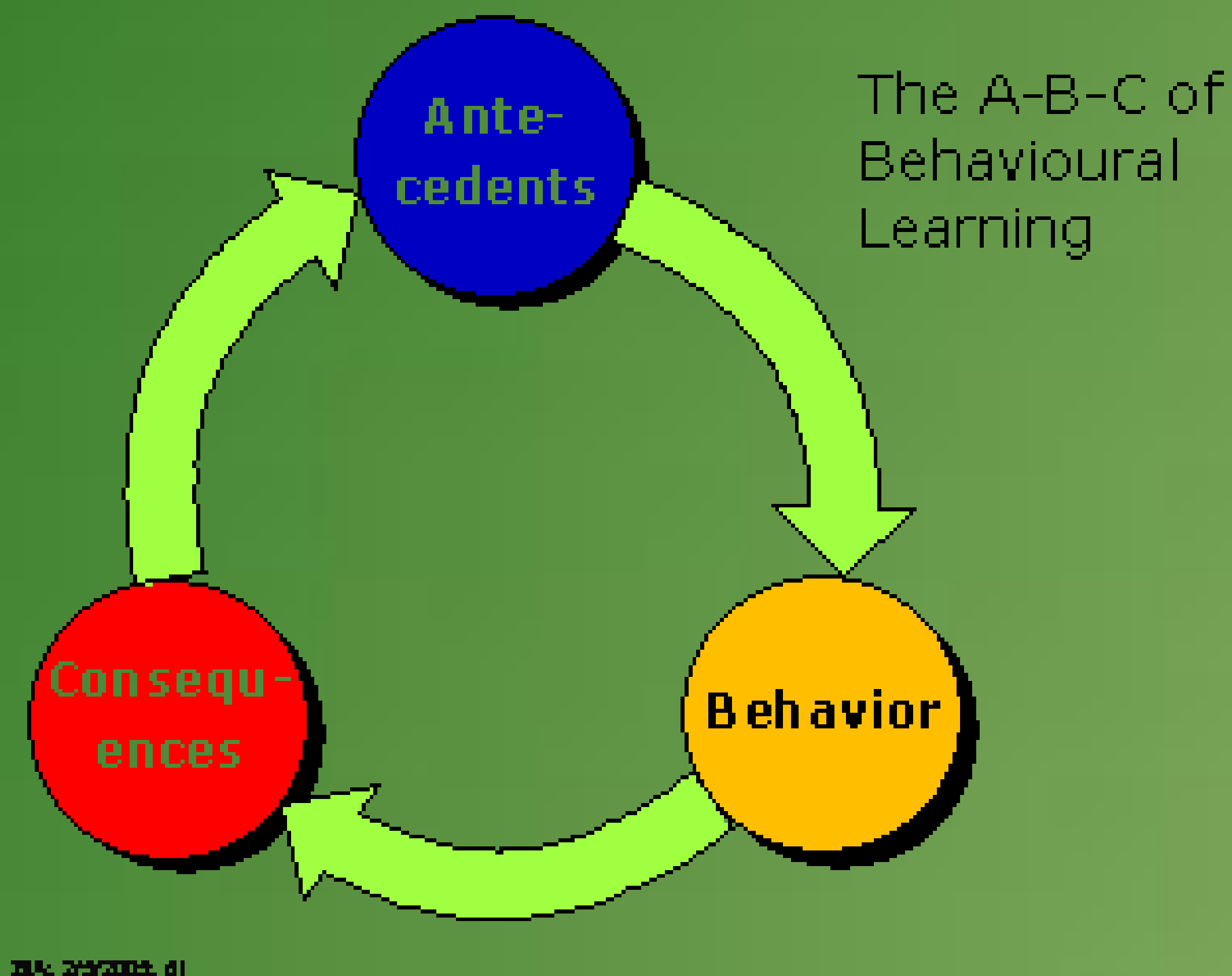


Classical Conditioning in Everyday Life

Lauren Aldridge, Department of Psychology, College of Arts and Sciences, Honors College
Susan Eve, Department of Sociology, College of Public Affairs and Community Service, and Honors College

Background

Classical conditioning is one of the best-known techniques based on behavioral learning theory. Discovered by Ivan Pavlov, classical conditioning is a learning process that occurs through associations between an environmental stimulus and a naturally occurring stimulus. It can be applied to everyday situations, both in positive and negative manners.



Research Topic and Question

Research Topic:

My research topic pertains to the positive and negative effects of classical conditioning on a person's psyche.

Research Question:

A question I will address throughout my research is how strongly classical conditioning affects us in our day-to-day lives, and whether it is potentially avoidable.

Literature Review

Vernoy (1987) discusses the classically conditioned response when a needle pierces, but does not pop a balloon in an introductory psychology class (Vernoy, 1987). This article demonstrates a successful way to present the notion of classical conditioning to students learning the concept and their responses to the learning environment. I learned how easily the concept of classical conditioning can be applied to everyday situations and influence others.

Yoshida and Hirano (2010) studied the cerebellum, which has been demonstrated to play a critical role in simple classical fear conditioning in both mammals and fish. In the study, scientists examined the effect of local administration of the anesthetic agent lidocaine into the cerebellum on fear-related, classical heart-rate conditioning in goldfish. They concluded that the cerebellum in mammals is critically involved in classical fear conditioning. I learned that the cerebellum plays a key part in the body's response and learning in the process of classical conditioning, which will give me insights in continued research.

Woodruff-Pak and Steinmetz (2002) discussed the fact that animals use their cerebellums to make a conditioned response in order to avoid an aversive stimulus. This is a key component in the process of classical conditioning, in which the unconditioned responses from most humans are a result of subconscious brain stimulus. This book was helpful in my research because it discussed a very important factor in the classical conditioning process.

Research Methodology

To collect research data on my particular thesis, I will conduct a study in which people are classically conditioned to do a certain action. I will divide my research study participants into two random sample-sized groups, and then condition each group to do either a positive action or a negative action. One group could be conditioned to smile every time they see another person. In order to condition this group, I would pair an unconditioned response (smiling) with an unconditioned stimulus, such as a picture of a cute puppy or something else pleasurable. Then I would introduce the conditioned stimulus; in this particular case, my conditioned stimulus would simply be to ring a bell. Therefore, every time I rang the bell, I would present the participants of this group with the picture of the puppy to make them smile. I would gradually remove the unconditioned stimulus (the puppy picture) until every time I rang the bell, it was a conditioned response for my participants to smile.

This same process could also work in a negative manner; that is, I could take the second half of my research study participants and condition them to do something negative. I could potentially condition them to wince every time they see the puppy picture, instead of smiling. To do this, I would give the participants a small electric shock every time the picture was presented. In this case, the conditioned stimulus would be the electric shock, the unconditioned stimulus would be the picture of the puppy, and the conditioned response would be the wincing. The point of conducting all this research would be to prove that anybody can be conditioned into reacting a certain way based upon the situation, in both negative and positive situations. Even a picture of a puppy can cause a negative reaction in a person, if they have been negatively conditioned. This would therefore support my thesis and give way to further, more in-depth research in the future.

References

- Vernoy, M. (1987). Demonstrating classical conditioning in introductory psychology: needles do not always make balloons pop! *Teaching of Psychology*, 14(3), pp. 176. Retrieved from EBSCOHost.
- Yoshida, M. & Hirano, R. (2010). Effects of local anesthesia of the cerebellum on classical fear conditioning in goldfish. *Behavioral and Brain Functions*, 6(pp. 20-28). Retrieved from EBSCOHost.
- Woodruff-Pak, D. & Steinmetz, J. Eye blink classical conditioning. (2002). *Applications in Humans*. Retrieved from EBSCOHost.

Acknowledgments

Warren Burggren, Ph.D., Provost & Vice President for Academic Affairs
Vish Prasaad, Ph.D., Vice President for Research and Economic Development
Michael Monticino, Ph.D., Dean, College of Arts and Sciences
Gloria Cox, Ph.D., Dean, Honors College

