

Operant and classical conditioning in advertising



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Classical Conditioning Theory

Operant learning theory can be compared to classical conditioning learning theory, as both are methods through which behaviour can be modified. The key difference is that operant learning is based on modifying the consequences of behaviour, whilst classical conditioning is based on the use of stimuli to modify behaviour. This can most clearly be seen by reference to Pavlov's (1927) and Skinner's (1957) experiments. Pavlov's (1927) experiments involved training dogs to associate the sound of a bell with being fed. As such, the dogs learnt to salivate when they heard a bell, in anticipation of food, in spite of not controlling when the food was delivered. This demonstrates classical conditioning learning. In contrast, Skinner's (1957) experiments involved placing rats in separate boxes each of which contained a bar. When the rat pressed the bar, a consequence would occur. Some rats were fed when they pressed their bar, whilst others suffered an electric shock. Other rats were given an electric shock until they pressed the bar, when the shock went away. Over time, the rats learnt to moderate their behaviour, either to obtain the benefits or to avoid the harmful effects. This is an example of operant learning (Domjan, 2003).

As a result of the interactive nature of operant learning, advertising has traditionally been based on classical conditioning, with campaigns generally intended to drive dynamic learning within consumers, thus moderating their behaviour to associate a product with a certain type of reward. Ackerberg (2003) claims that this reward can be either some form of tangible benefits; or it can be based on "image", "brand" or "prestige" benefits. However,

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Ackerberg's (2003) research indicated that traditional advertising does not always tend to affect consumer behaviour, instead simply acting to inform consumers and enable them to choose products which fit their self image. This is reinforced by Osselaer and Alba (2000) who argue that using the advertising process to attempt to enhance brand equity can often result in a decrease in customer perception of the attributes used to judge product quality. This is particularly the case when a company already has an existing reputation based on product quality, indicating that consumers are more likely to trust the operant conditioning they have developed from using products, rather than the perception of said products.

However, the recent rise of interactive media such as e-mail and the internet offer companies the chance to include more operant conditioning principles in the advertising and promotional campaigns, by allowing customers to interact with products through virtual multimedia environments. This effectively allows companies to achieve a balance between indirect advertising and direct, but expensive and narrowly focused, product trials, whilst maintaining a wide reach. Indeed, research by Daugherty et al (2008) has shown that when comparing the direct, indirect, and virtual marketing methods, the virtual methodology can have the greatest impact on brand attitudes, particularly when it is followed up by exposure to advertising or a direct trial. This indicates that virtual advertising allows companies to obtain the best of both worlds, aiding in the indirect, classical conditioning, approach and the direct, operant learning, approach (Daugherty et al, 2008). As such, the evidence tends to suggest that both operant and classical learning can be used in the creation of advertising campaigns.

However, evidence from Pawlowski et al (1998) shows that existing conditioning and learning will also play an important role in perceptions of advertising, and the ability of campaigns to affect consumer behaviour. This was demonstrated by Pawlowski et al's experiments with children in the American second, fourth, and sixth grades, who were shown four advertisements. The older children were better able to interpret the metaphors from the advertisements, as well as the brand names and specific advertising copy. However, in spite of the increased levels of understanding with age, there was little evidence that the advertising messages improved the perceptions of the advertised products. This not only indicates that people's experience and development will affect their interpretation of advertising, but also that it is important to ensure that advertising is correctly pitched in order to reinforce or 'punish' existing perceptions to boost the operant conditioning effect.

Some evidences as to how this can be achieved can be found in the work of Ottemann and Lethans (1975), who argued that operant learning theory and behavioural modification principles could be used to affect the organisational behaviour of major organisations. Their work was based on the use of organisational behaviour modification programs, and their effects on the performance of first line supervisors who had been trained to manage their behaviour on a contingent basis. The results of said study revealed that supervisors who had been trained to moderate their behaviour, according to the operant conditions, achieved consistently superior performance levels when compared to their peers who had experienced no such training (Ottemann and Luthans, 1975). This could be argued to indicate that operant

learning theory is always of use in moderating behaviour, and that this usefulness tends to be increased as the relevance of the stimulus is increased.

Within advertising, Till and Priluck (2000) refer to the relevance of a stimulus, and also to stimulus generalisation, which refers to “ the extent to which a response conditioned to one stimulus transfers to similar stimuli”. Indeed, in the context of using conditioning and learning for advertising campaigns, stimulus generalisation is vital for factors such as brand extension and brand imitation. This argument is supported by two studies carried out by Till and Priluck (2000), which show that once an advertising or promotion campaign has conditioned customer attitudes towards a particular brand, they can then transfer said attitudes to a product in a similar category, or with a similar name. However, the results of the studies also suggested that this may only be a temporary effect, and that customers will ultimately also need to be conditioned to the new product or category (Till and Priluck, 2000). In addition, Kim et al (1998) argue that existing attitudes and the nature of an operant learning approach can affect the extent to which these attitudes can be transferred, as well as the formation of new attitudes and product beliefs. This continues to indicate that both operant learning and classical conditioning will run into problems if they attempt to run against existing environmental conditioning which exists in consumers.

However, Grossman and Till (1998) carried out two experiments which tended to indicate that classical conditioning learning can be used to overcome existing environmental conditioning through advertising, although this was found to be a long term effect. This finding is based on the use of <https://assignbuster.com/operant-and-classical-conditioning-in-advertising/>

classical conditioning procedures which matched favourable images and representations to a brand of mouthwash. The first experiment was based on simple exposure, the impact of which was then measured immediately after the experiment; and again after one week and three weeks had elapsed. The second study used the same methods and procedures, but in a more controlled environment and over a longer period of time. This showed that not only do classical conditioning adverts tend to be enduring in the minds of consumers, but also that they can gradually alter existing perceptions over time (Grossman and Till, 1998). Similar results were shown by Herr and Fazio (1991), however their research also examined the use of both attributional and cognitive, verbal learning techniques in order to maximise the conditioning affects. Such repeated and varied positioning of the brand as being favourably evaluated was shown to be more effective than simply using a single technique (Herr and Fazio, 1991).

Another area in which both classical and operant learning and conditioning can be used in advertising is in the use of celebrities as conditioned stimuli to help with the associative learning process. Recent work by Till et al (2008) has established that the use of celebrities in advertising can actually have an active, operant conditioning, effect on conditioning, in spite of advertising being more of a classical conditioning medium. In addition to this, the operant learning effects will tend to be more effective when there is a fit between celebrity and product, and will also tend to be more enduring than peer products with no celebrity endorsement (Till et al, 2008). Similar observations have been made for the use of event or sports team sponsorship, although this has been shown to have more of a classical

conditioning than an operant learning effect (Speed and Thompson, 2000). Again, the effectiveness of this approach is driven by the fit between the sponsor and event or team; as well as perceptions of the sponsor and their motivations for the sponsorship (Speed and Thompson, 2000).

However, in spite of the now widespread use of classical conditioning as a method for interpreting the effects of advertising, and the less wide spread use of operant learning, there are still critics of these approaches. In particular, Allen and Madden (1985) argue that there is a need for a more precise 'affective-conditioning hypothesis' to be created in order to better describe the effects of advertising, and in the absence of unequivocal evidence to support classical conditioning effects. In addition, Stuart et al (1987) conducted experiments to determine exactly what classical conditioning effects could be observed within the context of advertising and consumer behaviour. These experiments demonstrated that whilst classical attitude conditioning could be observed at all four levels of stimulus pairing, environmental conditioning and latent inhibition acted to strongly retard these conditioning effects. This implies that the affect of classical conditioning approaches in advertising cannot be accurately predicted, due to the wide range of environmental and latent inhibitions which will be inherent in the majority of consumers who have already been exposed to advertising for any great length of time (Stuart et al, 1987).

One example of an advertising campaign which has used classical conditioning and operant learning is the move by the supermarket chain Sainsbury's to use celebrity chef Jamie Oliver to front a major advertising campaign, and effectively be "the TV face of Sainsbury's" (Wheeler, 2003).

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This advertising campaign can be seen to have a strong classical conditioning effect, as it helps customers to associate the products and branding that they see in Sainsbury's stores with a well recognised culinary expert. In addition, the use of a relevant celebrity will provide operant learning, something which has been supported by the inclusion of promotional materials such as Jamie Oliver recipe cards, which have been made available to customers. Wheeler (2003) provides evidence of the success of the operant conditioning impact of this campaign: after Oliver demonstrated how to use Sainsbury's truffle butter to cook an appetising Christmas turkey, Sainsbury's reported selling more than 50, 000 jars of the product. This shows that Oliver's recommendations, shown on TV, on recipe cards and in store, conditioned customers to associate the butter with cooking a high quality meal, thus increasing sales.

However, there is also evidence that Sainsbury's has suffered somewhat from existing environmental conditioning towards Oliver, with Walker (2005) reporting that Oliver is someone that " people either love or hate". As such, some people will already have negative conditioning around Oliver, and this conditioning will act to inhibit any conditioning around Sainsbury's brand and products. In addition, Oliver's actions, such as refusing to use Sainsbury's farmed salmon in his restaurants despite endorsing it for the company, will also impair conditioning; as people will perceive a conflict between the two stimuli (Walker, 2005). On addition, Oliver's personal views can also condition customers against the Sainsbury's brand, as reported by the Telegraph (2008) when Oliver " attacked Sainsbury's... for failing to turn up to a debate on factory farming". Whilst the company allowed a senior

director to be interviewed as part of the program, and none of the other major supermarkets sent representatives to the debate, the conditioned association between Oliver and Sainsbury's means that the consequences of non attendance will likely be higher for Sainsbury's, and may further impair conditioning.

In addition, Sainsbury's should look to boost its use of Oliver in more operant conditioning settings, in order to overcome these issues. For example, the supermarket could make use of the interactive nature of the internet to set up a 'cook with Jamie' part of the site, where customers could download recipes and watch how they are cooked. This would help them make associations between buying Sainsbury's products and cooking appetising meals, as well as making it easier for them to cook meals once they have bought the ingredients. The campaign could also be boosted by the use of more in store activities associated with Oliver, such as holding in store tastings of products he has endorsed, or demonstrating their use in store. For example, in the week before Xmas, by holding a demonstration of how to use the truffle butter mentioned above to cook a turkey, Sainsbury's could have benefitted from operant conditioning and learning, and further boosted its sales of the product.

In conclusion, in spite of the difficulties associated with using both operant conditioning and classical conditioning in advertising and promotions, it is clear that both techniques still have significant potential applications to real life advertising campaigns. In particular, the use of the internet and association with well known celebrities allows retailers, and other businesses, to benefit from the combined effects of classical conditioning

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and operant learning, to further boost associations. By doing so, and ensuring that the associations are relevant and pertinent to the customers, retailers can achieve both short term success, as seen in the truffle butter example above, and long term success, as described by Grossman and Till (1998), by making long term adjustments to the environmental conditioning of their customers.

References

1. Akerberg, D. A. (2003) *Advertising, learning, and consumer choice in experience good markets: an empirical examination*. International Economic Review; Vol. 44, Issue 3, p. 1007-1040.
2. Daugherty, T. Li, H. and Biocca, F. (2008) *Consumer learning and the effects of virtual experience relative to indirect and direct product experience*. Psychology & Marketing; Vol. 25, Issue 7, p. 568-586.
3. Domjan, M. E. (2003) *The Principles of Learning and Behaviour; Fifth Edition*. Belmont, CA: Thomson / Wadsworth.
4. Grossman, R. P. and Till, B. D. (1998) *The Persistence of Classically Conditioned Brand Attitudes*. Journal of Advertising; Vol. 27, Issue 1, p. 23-31.
5. Herr, P. M. and Fazio, R. H. (1991) *On the Effectiveness of Repeated Positive Expressions as an Advertising Strategy*. Advances in Consumer Research; Vol. 18, Issue 1, p. 30-32.
6. Kim, J. Jeen-Su L. and Bhargava, M. (1998) *The Role of Affect in Attitude Formation: A Classical Conditioning Approach*. Journal of the Academy of Marketing Science; Vol. 26, Issue 2, p. 143-152.

7. Osselaer, S. M. J. A. and Alba, J. W. (2000) *Consumer Learning and Brand Equity*. Journal of Consumer Research; Vol. 27, Issue 1, p. 1-16.
8. Ottemann, R. and Luthans, F. (1975) *An Experimental Analysis Of The Effectiveness Of An Organizational Behavior Modification Program In Industry*. Academy of Management Proceedings; p. 140-142.
9. Pavlov, I. P. (1927) *Conditioned Reflexes: An Investigation of the Physiological Activity of the Cerebral Cortex*. London: Oxford University Press.
10. Pawlowski, D. R. Badzinski, D. M. and Mitchell, N. (1998) *Effects of Metaphors on Children's Comprehension and Perception of Print Advertisements*. Journal of Advertising; Vol. 27, Issue 2, p. 83-98.
11. Skinner, B. F. (1957) *Verbal Learning*. New York: Appleton-Century-Crofts.
12. Speed, R. and Thompson, P. (2000) *Determinants of Sports Sponsorship Response*. Journal of the Academy of Marketing Science; Vol. 28, Issue 2, p. 227-238.
13. Stuart, E. W. Shimp, T. A. and Engle, R. W. (1987) *Classical Conditioning of Consumer Attitudes: Four Experiments in an Advertising Context*. Journal of Consumer Research; Vol. 14, Issue 3, p. 334-349.
14. Telegraph, The (2008) *Sainsbury's playing chicken, says Jamie Oliver*. The Daily Telegraph and Telegraph. co. uk. 8th January 2008. Accessed 20th July 2008: <http://www.telegraph.co.uk/news/uknews/1574897/Sainsbury's-playing-chicken,-says-Jamie-Oliver.html>

15. Till, B. D. and Priluck, R. L. (2000) *Stimulus Generalization in Classical Conditioning: An Initial Investigation and Extension*. Psychology & Marketing; Vol. 17, Issue 1, p. 55-72.
16. Till, B. D. Stanley, S. M. and Priluck, R. L. (2008) *Classical conditioning and celebrity endorsers: An examination of belongingness and resistance to extinction*. Psychology & Marketing; Vol. 25, Issue 2, p. 179-196.
17. Walker, A. (2005) *Profile: Jamie Oliver*. BBC News: Magazine. 30th March 2005. Accessed 20th July 2008: <http://news.bbc.co.uk/1/hi/magazine/4394025.stm>
18. Wheeler, B. (2003) *Sainsbury banks on fresh Oliver ads*. BBC News: Business. 11th June 2003. Accessed 20th July 2008: <http://news.bbc.co.uk/1/hi/business/2979646.stm>