

**Lesson
Fourteen**

Explanations of Aggression

Aims

The aims of this lesson are to enable you to

- assess ethological, biological, psychodynamic and social learning explanations of aggression
- look at the contributions of Lorenz, Freud, Dollard and Berkowitz

Context

Aggression is a topic with a number of links to other topics such as frustration, anger, modelling and reinforcement in the course.



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Aggression

We can recognise aggression but defining it often proves very difficult. Aggression is subjective so very hard to measure. Taking the definitions of aggression offered by **Moyer** (1976) and **Baron and Byrne** (1991), we may give a composite definition of **aggression** as being “behaviour intended to harm another person who does not wish to be harmed”.

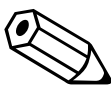
Research into aggression can easily be ethnocentric. What is regarded as aggressive in one culture might be seen as friendly in another. Some cultures such as South Asia are very restrained about showing aggressive behaviour so even a harsh word or hard stare can indicate anger.

Aggression is a form of **anti-social behaviour**. Research into aggression can have tremendous practical value. For example, psychological techniques can help athletes channel their aggression better so they can be more assertive and hopefully more successful.

There continues to be a heated debate about the causes of aggression. Is aggressive behaviour the result of inherited genetic predisposition or is it acquired as a result of learning and experience?

Activity 1

Discuss with your family and friends whether you think aggression is primarily a product of biology or learning. Write down the various views you hear in the box below. What conclusion can you draw?



Psychological Theories of Aggression

There are many explanations of why human beings are aggressive. There are ethological, biological, psychodynamic and social learning approaches. We will start at a more fundamental level.

Is aggression the result of nature or nurture? Psychological theories which look at the nature argument see aggression arising from within the individual. So the origins of aggression are biologically determined. Research which supports this viewpoint can be found in ethological and neurophysiological studies. Another area which partially supports the nature viewpoint is the psychoanalytic explanation relating to unconscious forces which control our behaviour.

The nurture argument sees the origins of aggression arising from external influences. We are aggressive because of what happens to us. This approach is supported by the learning theory and the social learning theory.

Nature Argument

1. Ethological Approach

The ethological approach is based on research into animal behaviour. The underlying assumption of the ethological approach is that aggression is instinctive in all species. This means that it is inherited, it motivates behaviour towards a certain goal and has action-specific energy. This means that the aggressive instinct has a certain form of energy attached to it. **Instinct** is an inherited behaviour pattern which is common to all members of a species. It is innate (rather than learnt) and tends to be stereotyped. Instinct may be said to motivate much routine behaviour.

Aggression is also held to have an *adaptive* function. This means that it allows the organism to adapt to a changing environment. This is necessary for survival and reproduction.

In animals, aggression has been observed as a result of competition for scarce resources, to enforce territorial boundaries and to facilitate basic survival (**Lorenz**, 1966).

Ardrey (1966) argued that humans show aggression in response to territoriality when we form strong attachments to possessions and get angry when these possessions are threatened.

Lorenz feels that it is legitimate to make direct comparisons between humans and animals because of evolutionary development. However, where the species do differ is in the context of ritualised fighting and appeasement behaviour. These types of behaviour patterns are described as having developed to ensure that animals do not destroy each other, yet still communicate the necessary messages to ensure territoriality and reproduction.

In humans, aggression is still described as having an adaptive function, but has lost the ritualistic aspect. This means that human aggression is still used for the same basic reasons as animal aggression (reproduction and territoriality), but we have lost the capacity for ritualistic fighting and are therefore in danger of destroying each other.

Lorenz sees aggression in humans and animals as spontaneous, rather than as a reaction to external stimuli (things that happen to an individual to provoke an aggressive response). He maintains that instinctive aggressive energy builds up in the individual, and reaches a level where discharge of this energy is necessary.

Summary

To summarise, the ethological approach argues that aggression is the same in animals and humans. It is instinctive, adaptive and is discharged spontaneously. The difference between human and animal aggression is that humans have lost the ability to use ritualistic fighting and appeasement behaviour as a way of preventing serious harm to the species.

2. Neuro-physiological (Biological) Approach

This theory argues that aggression is best understood in physiological terms, for example an imbalance in hormones or neurotransmitters in the brain; maladaptive brain structures and/or inherited faulty genes.

The basic idea behind this perspective is that humans and animals have certain areas of the brain which are responsible

for the emotion displayed as aggression. By stimulating these areas in the brain, aggressive behaviour can be shown to occur without an external stimulus. Studies of emotions in animals have concentrated on aggression and sexual behaviour.

Moyer (1968, 1971) reviewed studies of aggression in animals and described several different types — instrumental, inter-male, predatory, fear-provoked, territorial and hierarchical — and suggested that each type was controlled by a different part of the limbic system. This is a collection of structures deep in the brain which are involved in emotional response. They include the hypothalamus, hippocampus and amygdala.

Stimulation or destruction of the amygdala can produce either placid behaviour or rage which suggests that this section of the brain plays some part in aggression. **Aronson**, 1999, electrically stimulated the amygdala of monkeys. He found that docile animals became aggressive. If, however, the monkey was in the company of more dominant monkeys it would not behave aggressively.

Extrapolation - can we generalise from non-human animal studies to humans?

Extreme aggression, for example, committing murder has been linked to abnormal activity in the prefrontal cortex and amygdala but this is a small and highly biased sample which makes it difficult to generalise from.

Limbic tumours are also associated with abnormally aggressive behaviour.


Kalat's 1998 research showed that the hormone testosterone is associated with increased aggressive behaviour. Testosterone occurs in high levels in males (male hormone) which could explain higher aggression in males. However, later research suggests that the two sexes display aggression in different ways rather than different amounts.

Twin studies suggest a genetic component in aggressiveness and there does appear to be a link with particular temperaments or dispositions (Hennig et al.,2005).

Physical damage to the brain can alter how information is processed. Remember the case study of Phineas Gage which demonstrated that when damage does occur, the resulting changes in behaviour can be dramatic.

Evaluation

The biological explanations of aggression are reductionist, they are oversimplified and also deterministic which means that they ignore the free will of the individual to control their own behaviour.

Activity 2	Make a list of the times when you have 'snapped' and said or did things out of character or aggressively. For each incident identify what contributed to your aggression, what happened before that may have caused the change in your character.
	

There is some evidence to support this theory in both humans and animals. **Flynn et al** (1970) found that electrical stimulation of areas of the limbic system in cats and rats produced an aggressive response. **Heath** (1962) found that stimulation of the limbic system in epileptics produced a fear and anger response. **Sluck et al** (1974) and **Mark** (1978), pointed to the observation that congenital abnormalities and tumours involving the limbic system were sometimes related to aggressive behaviour.

3. Psychodynamic (Psychoanalytic) Approach

Sigmund Freud is responsible for the **psychodynamic approach** to understanding human behaviour. We will study that approach in more detail in a later lesson. It is also called the "psychoanalytic" approach or "Freudian" approach. Freud (1923) argued that aggression is an instinct which is distinct from sexuality. According to Freud and his followers, we have two main sets of instincts, the Life Instincts called Eros, and Death Instincts, called Thanatos. According to Freud,

Thanatos is an innate destructiveness which is directed against the self in an attempt to recapture a state of mind without tension. The only way we can bring about this state again is to die.

Because the life instinct is in constant conflict with the death instinct we are driven to resolve the conflict. One way of dealing with this is to eroticise the death instinct by combining it with libido to create masochism, or direct it outwards with sadistic behaviour. Alternatively, aggressive instincts can also be sublimated (= kept under the surface) by redirecting them into socially acceptable activities, such as sport. This theory is similar to the ethological perspective in that aggression is a spontaneous action and the energy it generates needs to be discharged. In this theory, aggression is not seen as a response to external stimuli.

Dollard et al (1939) proposed the **Frustration-Aggression hypothesis**. They agreed to some extent with Freud that aggression is an innate response, but developed the theory to include the idea that this response is triggered by frustrating situations and events, rather than a spontaneous discharge of energy. The Frustration-Aggression hypothesis argues that frustration is always the cause of aggression, and aggression is always a result of frustration. It is usually classed as an example of the psychodynamic approach.

The hypothesis was widely criticised for being too broad-based and in 1941 it was revised by **Miller et al**. This time it was argued that frustration can be the instigator of aggression, but situational factors (such as learned inhibitions and fear of retaliation) may prevent actual aggression from occurring.

Nature or Nurture? Berkowitz and Cue-related Aggression

Berkowitz (1966) argued that for anger or psychological pain to be converted into aggressive acts, certain *cues* are needed. These cues are environmental stimuli associated either with aggressive behaviour or with the object of frustration.

Berkowitz devised an experiment in which volunteers were paired off with another person (a confederate, called either Bob Anderson or Kirk Anderson) and asked to offer a written solution to a problem. They were under stress because they knew their solution would be evaluated by their partner who would deliver between one and ten electric shocks, depending on their evaluation of that solution.

After completing their solutions, some participants were given one shock, others seven (very mild) shocks. Now it was their turn to evaluate their partner's work but first they were shown a film. Some saw *Champion*, a violent film starring Kirk Douglas, some a non-violent film. Some were also in the presence of objects associated with violence, others not. Aggression was then measured in terms of the number of shocks the participant delivers.

Not surprisingly, the most shocks were administered by participants who were angry, having received seven shocks, saw the violent film and thought their partner's name was Kirk. With so many variables, the results did not offer simple conclusions. In various further experiments, the confederate's name was adjusted, according to characters and actors in *Champion*, and this did have an effect on the level of aggression. Altogether the results offered reasonable support to Berkowitz's aggressive-cue theory although the experiments can be challenged both in terms of experiment design effectiveness and on ethical grounds.

4. Social Learning Theory Approaches

The underlying assumption of observational learning is that children observe others behaving in certain ways (models/modelling) and come to imitate and identify with that model, thereby producing the observed behaviour. **Bandura** (1973) and **Baron** (1977) found that aggressive children tend to have parents who frequently model aggressive behaviour. **Strauss et al** (1980) found that parents who abuse their children have often been the victims of abuse themselves and have therefore, through observational learning, imitated, identified with and reproduced that observed behaviour with their own children.

This theory does not ignore the role of biological factors but a person's genetic characteristics create a potential for aggression.


Albert Bandura suggested that we learn simply by observing the role models with whom we identify. We learn the consequences by watching others succeed. This is termed indirect or **vicarious reinforcement**. Children may witness numerous examples of aggressive behaviour at home, school on TV or at the movies. They learn what is considered to be

appropriate and successful conduct and when and if such behaviours are worth copying.

Social Learning Theory (SLT) quantitative studies have found that television averages 10 violent acts each hour, whilst on-screen deaths in movies such as *Die Hard* range from 80 to 264. Correlations have also been found between the viewing of violence and increased interpersonal aggression in childhood and adolescence.

What is important in the modelling of violence, live and onscreen, is seeing not only that aggressive behaviour occurs but also that it works. If the violent parent or action hero is rewarded rather than punished that behaviour is much more likely to serve as a positive model.

SLT began as an explanation for aggression and has been extended to explain other kinds of behaviour .

Activity 3	Make a list of the other areas of this course where SLT has been mentioned. Now go on to the internet and find any other areas of psychology that SLT has been applied to.
	

A positive criticism of SLT is that it can explain differences between and within individuals such as cultural diversity. Parts of the USA demonstrate a highly violent culture compared to that of the pygmies of Central Africa who manage to live in cooperative friendliness (Aronson, 1999). This suggests that the difference might be due to social learning.

A negative criticism is that SLT is not a complete explanation of aggression as it does not explain the impulse to aggress.

Even if you have watched a model behave aggressively you will only act if frustrated or aroused.

Bobo Doll Study - Bandura (1961)

Method

The participants were male and female children ranging from 3 to 5 years. Half of the experimental children were exposed to aggressive models, interacting with a life-sized inflatable Bobo doll (kicking it, hitting it on the head and shouting at it) and half were exposed to models that were non-aggressive in their behaviour towards the doll. The children were then deliberately frustrated by the experimenter as they were not allowed to play with the attractive new toys that they were shown. Instead they were taken into a room with other older toys, including the Bobo doll.

Findings

Children in the aggression condition reproduced some of the physical and verbal aggressive behaviour they saw. Children in the non-aggressive and control groups showed virtually no aggression toward the Bobo doll.

Conclusion

Children do learn and copy aggressive responses as a result of watching others. Exposure to the model increased disinhibition and made the children more likely to imitate any behaviour. In the Bobo study the children were frustrated in order to create an aggressive response. This study also shows the role of frustration in aggressive behaviour.

In later studies Bandura also discovered that a filmed version is as effective as a live model.

Evaluation

This is a hugely influential and well-controlled experiment. To control for individual differences in aggression, the children were rated for aggressiveness prior to the study and participants in the experimental and control group were matched for aggressiveness to ensure equal weighting of each group.

- High control leads to a loss of real-life validity.

- Demand characteristics were a problem as the children may have been aware of what was expected of them.
- It only looks at short-term behaviour and this theory may not apply to long-term behaviour.
- This study looked at aggression towards a doll not a real person. The Bobo doll does not retaliate when hit.

Practice Test

- 1) Explain two evaluative points concerning the Social Learning Theory of Aggression. (4 marks)
- 2) What conclusions can be drawn from the Bobo doll study? (4 marks)
- 3) Name two forms of behaviour therapy. (2 marks)
- 4) Describe how the token economy system could be used to get a disturbed and withdrawn child to make more eye contact with familiar carers. (5 marks)

Suggested Answers to Practice Test

- 1) Explain two evaluative points concerning the Social Learning Theory of Aggression. (4 marks)

A positive criticism of Social Learning Theory is that it can explain cultural diversity with regards to aggression levels. SLT describes differences between and within individuals. For example, parts of the USA demonstrate a highly violent culture compared to that of the pygmies of Central Africa who manage to live in cooperative friendliness (Aronson, 1999). This suggests that the difference might be due to social learning.

A negative criticism of the SLT of aggression is that it is not a complete explanation of aggression as it does not explain the impulse to be aggressive. Even if you have watched a model behave aggressively you will only act if frustrated or aroused.

- 2) What conclusions can be drawn from the Bobo doll study? (4 marks)

The conclusions that can be drawn from Bandura's Bobo doll study are:

- i. Children do learn and copy aggressive responses as a result of watching others.
- ii. Exposure to the model increased disinhibition and made the children more likely to imitate any behaviour.
- iii. In the Bobo study the children were frustrated in order to create an aggressive response.
- iv. This study also shows the role of frustration in aggressive behaviour.

Any of the above conclusions should be awarded 2 marks.

- 3) Systematic Desensitisation and Aversion Therapy.
- 4) First you would have to find out what the child really enjoyed. If the child liked spending time with animals, you could use this as the primary reinforcer. Each time the child made eye contact with a carer, the carer would give the child a token. After the child collected 20 tokens, a visit would be arranged to a local farm zoo so the child could spend half an hour petting the animals. As the child made more frequent eye contact, the tokens might only be given after eye-contact with speech.