

Causes for development of aggression in children



**ASSIGN
BUSTER**

Aggression can be loosely defined as any behaviour which is intended to cause harm to another person whether physically or verbally. This investigation specifically evaluates the biological and learning perspective of psychology accounting for the development of aggression in children.

Aggression from the biological perspective is often seen as an innate behaviour which is genetically passed on from the parents to their offspring or through other biological factors such as low levels of the neurotransmitter serotonin and certain brain structures when manipulated may result in aggressive behaviour.

When considering the learning perspective and environmental determinants of aggression in children. The key factors which play an essential role in the development of aggression in children are the observation of others behaviour as demonstrated by Albert Bandura (1961) as well as, the frustration aggression hypothesis which has been found to be a considerable factor in the development of aggression.

This examination investigates the origins of childhood aggression and evaluates two differing perspectives being the biological and learning perspective and collectively concludes that there are various factors which contribute to a child acting aggressively. Biological factors such as genetics, low levels of serotonin and the amygdale have proven to result in childhood aggression. Similarly, environmental determinants such as observation of others, media and video games have also been found to cause childhood aggression.

However, an understanding and strong evaluation of both the biological and learning perspective has led to a stronger foundation of understanding childhood aggression. Therefore, to fully understand the origins of aggressive behaviour both biological and environmental factors must be considered within their limited scope (i. e. Strengths and weaknesses).

There are many ways in which aggression can be defined. According to Berkowitz (1975) aggression is any behaviour which causes intentional harm to another person. There are many different forms of aggression which includes verbal, physical and emotional behaviours that are apparent in some children. Studies conducted on young children suggest that aggression develops in young children based on their biological background or their environmental context. This essay will be exploring and evaluating the biological perspective and learning perspective of psychology accounting for the development of aggression in young children. This issue is worthy of investigation since aggression has become a substantial social problem amongst upcoming generations. It has always appealed to me to understand the basis of aggressive behaviour as I have seen this behaviour amongst most children, teenagers as well as adults. It is my curiosity and eagerness to discover more about the development of aggression from two opposing views being the biological and learning which has motivated me to undertake this research topic for my extended essay.

To begin with, the biological perspective is based on the assumption that behaviour is biologically determined. All psychological issues stem from a physiological background. Therefore, aggression in children based on the biological perspective is considered to be an innate behaviour. Biological

<https://assignbuster.com/causes-for-development-of-aggression-in-children/>

factors which trigger aggressive behaviour in children are inheritance, as well as the neurotransmitter serotonin and certain structures in the brain which trigger aggressive behaviour. Many theories and case studies have been put forward to support the hypothesis that aggression in children is biologically determined which will be discussed in further detail. (Weiten, W. 2007).

Biological Perspective

The biological perspective suggests that aggression in children is inherited through the traits of parents. Many theories have been driven by findings from research on animals, which highlight that there is some genetic aspect to aggression. Selective breeding has been one of the longest existing methods to find the existence of a phenotypic characteristic. In 1979 a Finnish psychologist Kristi Lagerspetz, took the most aggressive mice from an assembly and mated them with others, and similarly the same applied for those non aggressive mice. Lagerspetz's procedure was repeated over 26 generations of mice giving birth to their offspring. (Grivas. J, Carter. L pg. 95). The results indicated that the final group of offspring, which the mice had been bred for aggressive tendencies showed tremendous levels of aggression; in many cases they instantly attacked other mice simply for being in the same cage as that mouse. On the contrary, the mice which were non aggressive didn't show any signs of aggression, even when other mice attacked them they did not illustrate the tendency to retaliate. In criticism of this experiment, it clearly cannot be conducted with humans because it is clearly unethical. However a significant contribution of this selective breeding experiment is its illustration of a genetic basis of aggression and

how it can be passed onto the offspring. These mice had a practical advantage over humans because these species reproduce a new generation in a very short time, which is essential as aggressive behaviour can be monitored over successive generations in a short period of time. Similarly, mice can also be kept imprisoned in the laboratory to observe their behaviours unlike humans. However there is some criticism of extrapolating from animals to humans. Despite some similarity between humans and animals it is often argued that there is still a large difference between humans and animals therefore, a direct link cannot be made between the mice species and children.

On the other hand, more efficient methods of demonstrating that aggression in children is a heritable behaviour is emphasised by other research methodologies such as twin studies. Twin studies suggest that aggression in children is a heritable trait and is passed on from parents to their offspring. Twin studies are very useful for the reason that twins are made from a single egg fertilised only by a single sperm, in regards to the study it assists in identifying the characteristics of their genes. Hence, most characteristics that the twins share occur as a likelihood of being part of their genetic information which is identical; whereas whatever differences there are occurs as a result of the environment and experiences experienced by the individual. In one study, conducted by study by Caspi (1998) data was collected from identical and non identical twins following a questionnaire asking various personal and non personal questions. The results indicated that aggressive behaviour was only partly inherited and the environment played an equally contributing role. However, according to Baron and

Richardson (1994), the tendency to be aggressive is not passed on from the parents to the offspring; rather the temperament which is capable of making someone more or less aggressive can be inherited. Hence giving a different approach to how aggressive behaviour may be genetically passed on. These two twin studies are clearly indicative of the heritability of aggressive behaviour, yet it cannot be claimed that inheritance is the only key factor which causes aggressive behaviour or the tendency in young children.

Over time research has also consistently indicated that low levels of the neurotransmitter serotonin also plays a central role in increased levels of aggression in children. In a study which was conducted in a laboratory at the National Institute of Mental Health (Bethesda MD), a positive correlation was found between the neurotransmitter serotonin and the levels of aggression in children with attention deficit hyperactivity disorder (Serotonin and aggression in children, Vol 2, pg 95-101). In another study conducted by Russian researchers, silver foxes were studied and it was found that those foxes which had been selected for over 30 years for domestic behaviour showed no defensive reactions to humans because they had high levels of serotonin in various structures of the brain, compared to the foxes which had been bred without freedom (Popova, Voitenko, Kulikov, Avgustinovich, 1991, pg 751). These studies clearly highlight the role which serotonin plays in causing aggressive behaviour amongst children; the lower the levels of serotonin the higher the level of aggression. Of course this research could be criticised on the grounds that it is a big jump from animals to children. Yet, the strength of this experiment was that these foxes could be trained and

kept ever an extended period of time where their behaviour is closely observed unlike humans who cannot be kept in such tamed conditions.

There are also certain parts of the brain which have been found to be responsible for the development of aggression in humans particularly children. These two structures located within the brain being the hypothalamus and the amygdalae were found to be responsible for aggressive behaviour. Both structures are made up of nerve cells and communicate with each other via electric signals. These brain structures can be manipulated using electrical currents where the experimenter may either choose to switch on or switch off the brain structures disabling their normal operation using an electrode. It has been found through numerous attempts that when these structures were stimulated, some animals initiate an increase in aggressive responses and when it was switched off meaning its functioning was ended aggressive responses decreased. For instance when animals such as dogs and cats' hypothalamus and amygdalae were manipulated by the electrode and their activity was blocked the animals demonstrated no behaviour towards certain objects which generally trigger an aggressive response. For instance a dog wouldn't bark at any passing dog, highlighting no aggressive response. However, during the normal operation of these structures these animals generally bark at any passing dog. This clearly demonstrates that the manipulation of the hypothalamus and amygdalae both play a role in the development of aggression. Such methods of demonstrating the role which certain structures of the

Evaluation of the biological perspective

The biological approach of explaining aggressive behaviour in children is very scientific consequently regarded as reliable. It is based on many experimental studies which are conducted in laboratory conditions. However this is only not only strength but also a potential weakness as associated with the biological perspective in explaining aggressive behaviour in children. The reason being is that individuals particularly children will behave differently under laboratory conditions then when faced with a similar situation in real life. Thus, this does not implicate that such lab experiments are not valuable rather they are limited to the generalisability. However, it has been found that there is a positive correlation between real life situations and predicted aggressive behaviour in laboratory studies which indicate that laboratory experiments are fairly useful.

The biological perspective can be criticised on the basis that aggression in children cannot be related to studies which have been conducted on animals. One argument stemming from this criticism is that it is not possible to apply animal findings to humans regardless of the similarities because they are different. Parallels between humans and animals may be oversimplified and therefore social as well as learning processes must also be taken into consideration. Interpretation of animal results from the biological perspective requires cautious interpretation. However on the contrary, using animals to demonstrate the link between childhood aggression and biological factors is also very beneficial. This is due to the fact that some studies such as the breeding of generations and the localisation of the brain to identify parts which play key roles in the development of aggression cannot be conducted

on humans because it will cause psychological and physical harm to the participants and mostly likely will result in death. Similarly, there is always some sort of connection and similarity between animals and humans therefore using animals can be a starting point to understanding the biological bases of aggression in children is beneficial.

Another weakness of explaining the development of aggression in children from the biological perspective is because the biological approach is reductionist. This is one of the main weaknesses which the biological perspective incorporates. It does not regard or take into the account the interaction of the mind and body with the environment rather only takes into consideration the neurological processes. It does not take into perspective the affect of the surrounding environment. This is a downfall as complex human behaviours cannot always be explained on a genetic basis; the surrounding environment also plays a central role in the influencing and triggering of aggressive behaviour. For instance, it cannot be claimed that only one structure of the brain is responsible for the development of aggression in children because all structures of the brain are connected and their influence or triggering of behaviour cannot be based on one structure.

The biological perspective also involves low ecological validity. Most studies are conducted within laboratory conditions therefore having low ecological validity. Experiments conducted in the laboratory will most certainly produce different results than in real life situations as participants will not demonstrate the exact same behavior in real life situations as they will in the laboratory.

Similarly, the findings of all studies conducted cannot be generalised to all children. These findings are applicable to a small sample and findings cannot be expected to be the same for a different sample of children as all children are different. Yet, this can be a starting point to understanding the basis of aggressive behaviour.

Learning Perspective

On the other hand the learning perspective is established on the basis that although everyone is born with a genetic endowment which is the root of instinctual behaviours, the majority of behaviour is learned from the environment. From this basic assumption the learning perspective suggest that aggression in children does not purely develop as a result of biological factors, rather it accounts for a very minor part. Aggression is learnt from the observation of other people and their aggressive behaviour. Aggression in children is also learnt through the observation of frustrated people who surround them and frustration also triggers aggressive behaviour. It has also been found that violent video games are linked to aggressive behaviour amongst children.

Firstly, one of the theories proposed to support aggression from the learning perspective is the 'frustration-aggression hypothesis' which was proposed by John Dallas (1930) and his partners. The frustration aggression theory suggests that frustration is the main factor which contributes to aggression. If in a situation where one is frustrated then it will immediately result in aggressive behaviour. According to this hypothesis aggression will only occur due to frustration and no other particular factor. Also, the level of aggression demonstrated is purely dependant on how frustrated one may be. For

<https://assignbuster.com/causes-for-development-of-aggression-in-children/>

instance when a child is prevented from taking a course of action or being prevented from something it is most likely believed that the child will be aggressive; occurring as a result of being frustrated. For instance, when a child wants a toy or a chocolate from the supermarket and they don't get what they want then very often they become aggressive against their parents whether physically or even verbally. However, this theory has its weaknesses. Frustration will not always lead to aggression it can often lead to depression and even withdrawal. Also, aggression generally occurs as a result of many other emotions such as sadness, fear, anxiety etc.

Roger Barker, Tamara Dembo and Kurt Lewin (1941) further investigated frustration as a cause of aggression in young children. In their conducted study, children were shown a roomful of attractive toys which were kept out of their reach. The children were kept away from the toys a while before they were allowed to play with them. On the other hand, the controlled conditioned group of the children were allowed to immediately play with the toys. Similar to Dallas's findings, it was observed from this conducted study that the children who were frustrated as they had to wait an extended period of time before being exposed to the toys, played aggressively with the toys by smashing and stomping the toys. On the other hand, the children who were allowed to play immediately with the toys handled them carefully and played happily.

One social determinant of aggressive behaviour is Albert Bandura's social learning theory (1961) which highlights the role of observation and its consequences on the aggressive behaviour of children from the learning perspective. Albert Bandura believes that most of human behaviour is

<https://assignbuster.com/causes-for-development-of-aggression-in-children/>

learned by observing a model or simply another person, which affects a child's view of how this new behaviour can be developed and ultimately believing that this new attained behaviour is a guide for their actions. This provides the basis of explaining aggressive behaviour in children from the learning perspective. Albert Bandura's most well known experiment was the Bobo doll experiment; bobo doll being a plastic clown doll. In this experiment Albert Bandura and his colleagues, examined the consequences of children observing an adult behave aggressively with a bobo doll. During the experiment he had children watching model acting aggressively towards a bobo doll. They watched the video of the model constantly acting aggressively in a way of sitting on the doll, punching it and kicking it repeatedly. He also had other children watch a non aggressive model playing calmly with the bobo doll. Once the children were exposed to such models, they were taken into another room where there were many toys amongst them the bobo doll. The results from this indicated that children, who were exposed to the aggressive model and observed their acts, imitated aggressive behaviour towards the bobo doll. Whereas, the children who were exposed to the non aggressive model showed no or very little aggressive behaviour.

Albert Bandura's Bobo Doll was suitable to highlight the role of observation in children's learning. Children were the subject as they are less socially conditioned unlike adults. However, this experiment raises the possibility that children may have thought that this experiment was a game as a consequence of the bobo doll having a spring which springs back immediately after being knocked down. A criticism of this research is that it

is not ecological. Thus the children may have not acted aggressively towards any human in real life.

A criticism of the social learning theory is also that this theory does not take into account the changes which a child undertakes including physical and mental as a child matures. Children at different ages may respond to laboratory experiments in different ways.

Much like observation of other's behaviours violent video games and television shows have also been proved to a certain extent to trigger aggression in children. The learning perspective suggests that children who play violent video games very often such as Doom, Wolfenstein 3D or Mortal Combat and others could trigger aggressive behaviour, either physically or verbally. Violent video games have a supplementary impact on young children and trigger aggressive behaviour more than violent television shows because they are more interactive where the child is engaged in such aggressive acts and ultimately they are rewarded for acting aggressively in the game. Dr. Craig A. Anderson, Ph. D. (2000), of Iowa State University in Ames and his colleagues found that in the U. S and Japan that Japanese and American children who played violent video games demonstrated more aggressive behaviour months later compared to their peers who didn't. In this study, 181 Japanese students aged between 12 and 15 years old and 364 U. S. children aged between 9 and 12 years old were tested. The U. S children named their favourite video games and how often they played them. Whereas with the Japanese children, they were observed to see how often they played violent video games. The children were later on asked to rate their level of aggression and reports from their teachers and peers were

<https://assignbuster.com/causes-for-development-of-aggression-in-children/>

also taken into consideration. From the results it was found that the children who were exposed to more violent video games were much more aggressive than those who were less exposed. This was particularly demonstrated when a comparison was made between their prior levels of aggression (at the beginning of the study) and how there was a dramatic rise in this level.

(Cited in BBC News, Video games 'increase aggression, Health Section).

Violent video games can impact on children's aggression levels, this is due to the fact the children begin to believe that the world is a hostile place and aggressive acts are acceptable and are part of a normal daily life to deal with the aggressive world. It is also been discovered that constant and excessive exposure to violent video games causes children to become desensitized to violence. Once they have been engaged in aggressive acts it impacts on the children emotionally and as a consequence these children find it much easier and acceptable to engage in violence and aggressive acts.

Berkowitz. et. al (1979) investigated the effect of pain and discomfort on individuals to demonstrate their likelihood of acting aggressively. He induced pain by placing the participant's hands in cold or warm water while they distributed rewards and punishments to a partner. Berkowitz identified that those who had their hands placed in the cold water caused greater harm to their partner than those who had their hands immersed in warm water.

Evaluation of the learning perspective

The learning perspective also incorporates strengths and weaknesses.

Similar to the biological perspective of explain aggressive behaviour in children, it is reductionist. It explains aggressive behaviour in terms of a characteristic which is being learnt although it does not deny/ or reject the

<https://assignbuster.com/causes-for-development-of-aggression-in-children/>

genetic endowment of aggressive behaviour it argues that aggressive behaviour is learned through observation and triggered by the surrounding environment and conditions. It simplifies the occurrence of certain behaviours especially aggression into a few steps. For instance the problem of reduction is evident in Albert Bandura's study of the bobo doll whereby aggressive behaviour is reduced to the process of imitation. Thus, it has overlooked other leading causes of the development of aggression including the children's upbringing and home environment. Children were varied therefore some children may have been brought up in a violent home and exposed to many aggressive situations, therefore this may have affected the way they acted in the laboratory and the ultimate results of the experiment.

The Frustration aggression hypothesis supported by Dallas (1931) is not a very efficient method of demonstrating how childhood aggression develops as in some cases, such as learned helplessness, frustration may not lead to aggression instead may lead to depression; therefore frustration is not the only key factor which contributes to aggressive behaviour there are other sources which may lead to aggressive behaviour.

The learning perspective also denies some very important mental processes which also result in the development of aggression in children. It does not take into account how certain brain structures may trigger aggressive behaviour, in other words it does not take into account neurological processes rather simply accounts for the influences of daily lives and the environmental context which a person is brought up in. It does not incorporate any biological or cognitive processes which are also responsible for the development of aggression.

<https://assignbuster.com/causes-for-development-of-aggression-in-children/>

Nevertheless, the learning perspective focuses on the environment and the condition in which a child is conditioned to produce an aggressive response. It has many practical applications which have been effective in explaining the development of aggressive behaviour. It clearly highlights how certain behaviours particularly aggression can be learned by the observation of others.

The learning perspective also has a low ecological validity, whereby the children who were engaging in the experiment may have acted differently in the laboratory than what they would have in a real life situation. To be specific, Albert Bandura's bobo doll experiment can be criticised on the grounds that the children's aggression was measured away from their natural environment. However if such experiments are conducted in a more realistic manner then the results would be more beneficial in terms of understanding how aggressive behaviour in children develops.

Conclusion:

Having considered the interpretations of the development of aggression in children from both the biological and learning perspective and the criticisms which arise from the research conducted, it can be concluded that both the biological and learning perspective contribute to the development of aggression in children. In terms of the biological perspective, this looks at aggression as purely based on biological bases. It is highly reliable since is based on science. However the learning perspective, views aggression as unrelated to genes rather being learnt. The learning perspective's social learning theory is a very useful explanation for the aggressive behaviour of children. It not only applies to direct experiences such as being disciplined

<https://assignbuster.com/causes-for-development-of-aggression-in-children/>

by parents but rather at all times such as when watching television. Whereas the frustration-aggression hypothesis has a weaker stand, this is because frustration does not always elude aggression rather it may encourage retaliation. The hypothesis suggests that frustration accounts for all aggressive acts for this reason it is not completely justified, because there are more determinants of aggressive behaviour. Both the biological perspective and learning perspective are based on a lot of support and studies which have been conducted. However, the learning perspective views aggression in children as having some sort of biological basis, yet through experience and reinforcement that aggression becomes evident amongst children. For instance, the role of the parent is paramount in using the biological factors of the child to mould the child and guide them through their development. If a child's genes are aggressive, the parent within the environment will attempt to nurture and accommodate for their child's genes by trying to provide a calm background. Parents may also choose to put their child in a career that is sports oriented to cater for the aggressive levels in order to use their energy in a positive way. From this it is clearly evident that both the biological perspective and learning perspective account for and contribute to the development of aggression in children.

Both the learning perspective and biological contribute equally to the development of aggression in children as it is difficult to isolate the contributing factors. It is clear that biological factors as well as the surrounding environment both play a substantial role in the development of aggressive behaviour in children.

References

Bandura, A. And Ross, D. and Ross, S. A (1961). Transmission of aggression through imitation of aggressive models, *Journal of Abnormal and Social Psychology*, 63, 575-582

Baron. R, Richardson. D , 2005, *Human Aggression*, Second Edition, Plenum Publishing

Barker, R. Dembo, T., and Lewin K. (1941). Frustration and aggression: An experiment with young children, *University of Iowa Studies in Child Welfare*, 18, 1-314.

BBC News, Video games ' increase aggression, health Section, Sunday, 23 April, 2000, accessed 5th July 2009 available from: <http://news.bbc.co.uk/2/hi/health/720707.stm>

Berkowitz, L. (1975). *A survey of Social Psychology*. Hillsdale, IL: Dryden Press

Caspi, R. Plomin, R., Corley, A., Fulker, D. W., & DeFries, J. C. (1998). Adoption results for self-reported personality: *Journal of Personality and Social Psychology*, 75, 211-218

Effie M. Mitsis, Jeffrey M. Halperin and Jeffrey H. Newcorn, 2000, Serotonin and aggression in children, *Current Psychiatry Reports Journal*, Volume 2, Number 2, (1535- 1645).

Glassman, William. E, (1947), *Approaches to Psychology*- 2nd edition

Harding Anne, CNN, Violent video games linked to child aggression, 2009
accessed on the 18th July, 2008 from <http://www.cnn.com/2008/HEALTH/family/11/03/healthmag.violent.video.kids/index.html>

Popova N, Voitenko N, Kulikov A, Avgustinovich D. Evidence for the involvement of central serotonin in mechanism of domestication of silver foxes. *Pharmacol Biochem Behav.* 1991; 40: 751-756

Russell G. Geen (Editor), Edward I. Donnerstein, August 1998, *Human Aggression: Theories, Research, And Implications For Social Policy* also available from: <http://www.springerlink.com/content/f713000110546w0h/>

Tremblay Richard, Willard W, Archer John, 2005, *Developmental origins of aggression*

Weiten, W. (2007). *Psychology: Themes and variations.* (7th Edition).