

Effects of Aggressive Movies on Children's Aggressive Behaviour

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Abstract

This study was about effects of aggressive movies on children's aggressive behaviour. Forty (40) pupils were randomly selected from Korle Abansoro Primary School, Koforidua, Eastern Ghana, to participate in the study. An adapted version of peer nomination instrument for aggression designed by Crick & Grotpeter in 1995 was used to acquire the data. Half the participants watched an aggressive movie while the other half watched non-aggressive movie for thirty minutes each after which the participants were assessed using the aggressive behavioral checklist or scale. The independent 't' test was used to analyze the results. Two of the hypotheses were confirmed while the other two were rejected. This indicated that children who watched an aggressive movie exhibited more aggressive behavior than children who watched non-aggressive movie and males were not more aggressive than females. Two of the findings were consistent with previous findings. The implication of these results was discussed.

Keywords: Aggressive movie, Aggressive behaviour, Pro-social behavior.

Background to the Study

Learning theorists or behaviorists define aggression as 'any behaviour that hurts others'. Aggression can also be defined as any action that is intended to hurt others. Albert Bandura and others have demonstrated the importance of observation and modeling especially in the lives of children. The theoretical frame work is the observational learning theory which says that behaviors are learnt by observing others. In the olden days, typical Ghanaian children were seen to be humble, obedient, respected authority and less aggressive. Being less aggressive here means the children or the youth did not know how to use guns and knives for robbery or collaborating with adult persons who are armed robbers to rob their parents, committing rapes, assaulting school or classmates and teachers, to mention but a few. Due to the influence of westernization in the Ghanaian society through the use of television, internet, playing violent video games and watching violent movies by Ghanaian children, one can witness or hear in the news of crimes being committed by these children. These children may be caught and send to borstal homes for reformation. The researcher has identified that Ghana as a nation is losing her potential future leaders to this problem caused by observational learning and the media. Strong evidence shows that violent movies, video games, television programming contribute to children's aggressive behavior. It is commonly said that we are living in violent times. There are wars all around the world, and in Ghana the incidence of such violent crimes as murder, rape, and assault is clearly on the rise. The statistics on battered wives and abused children are alarming testimony to the fact that the home is as violent as the street.

Furthermore, violence is increasingly being depicted in the mass media, both as entertainment and as information. Children's cartoons have long been known for the number and variety of aggressive acts the former depict, and adult television programs and films are filled with every imaginable type of interpersonal violence. Meanwhile, more and more research has demonstrated that exposure to violence fosters aggressiveness in the viewers. Media executives often respond that violence sells and that the former, after all, are only giving the public what the latter wants. The general public should be worried about this saying by media executives and take some pragmatic measures to bring this situation under control. The long history of widespread aggression and the seriousness of its consequences have prompted extensive study, by psychologists and others, of the causes of violent behavior. The issue of concern is the violent content of these programs and video games the children watch or play or are exposed to. For instance, a review of 10,000 hours of television programming by the National Television Violence Center in the United States of America (USA), reported in 2004 showed that: Sixty percent (60%) of the programs it sampled contained

violent scenes; one-third of the violence scenes showed villains who were never punished; seventy percent (70%) of these 'bad' characters showed no remorse when committing violence; forty percent (40%) of violence in the scenes was carried out by the hero; Only fewer than 5% of these violent programs had anti-violence messages. In a related study carried out over a period three consecutive years by a Television Violence Monitoring Project and reported by Smith and Donnerstein (1998), it was found that: Sixty-one percent (61%) of television programs contain some violence, and only 4% of those containing violent content featured "anti-violence" themes; forty-four percent (44%) of the violent interactions on television involve perpetrators who have some attractive qualities worthy of emulation; forty-three percent (43%) of violent scenes involve humor either directed at the violence or used by characters involved with the violence; nearly 75% of violent scenes on television feature no immediate punishment or condemnation of violent; forty percent (40%) of programs feature "bad" characters who are never or rarely punished for their aggressive actions. (Wiafe-Akenten, 2009; cited in the Ghana International Journal of Mental Health).

Although there are extensive studies on Ghana in terms of the exact or even appropriate content (violence and otherwise) of TV/ Video programs and video/computers game, a careful observation of TV programs particularly movies and to some extent cartoons show that the situation is not very different from those discussed above from countries like the United States (Wiafe-Akenten, 2009). A careful observation by Wiafe-Akenten (2009) and two research assistants over a period of three months showed that a significant number of the movies and especially cartoons shown on Ghana's TV screens contain significant amount of violent scenes and in almost all cases, the aggressors were invariably not punished but got away with their aggressive behavior.

An interesting question can be posed as 'Could it be that aggressive children just turned to prefer violent television and video games'? Research suggests it is a two-way street. Laboratory studies, correlational research, and cross-cultural studies among children in five different countries (Australia, Finland, Israel, Poland, and the United States) have all found that exposure to television violent did increase aggressiveness and that aggressive children tend to seek out violent programs (Aluja-Fabregat & Torrubia-Beltri, 1998; Singer, Slovak, Frierson & York, 1998). On controlling or eliminating aggression, some therapist's advice people to release aggressive impulses by engaging in harmless form of aggression, such as vigorous exercise, punching a pillow, and watching competitive sports. But studies suggest that 'draining the aggressive reservoir' doesn't really help (Bushman, Baumeister, & Stack, 1999). In fact, expressing an emotion, anger or otherwise, tends to intensify the feeling rather than reduce it.

A second approach, which does seem to effectively reduce or control aggression, is to introduce incompatible responses. Because certain emotional responses, such as empathy and humor, are incompatible with aggression, purposely making a joke or showing some sympathy for the other person's point of view can reduce anger and frustration (Harvey & Miceli, 1999; Kaukianen et al., 1999; Oshima, 2000). A third approach to controlling aggression is to improve social and communication skills. Studies show that people with the most deficient communication skills account for a disproportionate share of the violent in society (Trump, 2000; Vance, Fernandez, & Biber, 1998). Unfortunately, little effort is made in our schools or families to teach basic communication skills or techniques for conflict resolution.

Statement of the Problem

Aggression is any form of behavior intended to harm or injure another living being that is motivated to avoid such treatment (Baron, 2000). The study evaluated participants after either watching an aggressive movie or non-aggressive movie in a classroom. Most people will exhibit aggressive behavior when angered or frustrated by a given situation or another person. All humans have aggressive instincts. Some people may have more of the aggressive instincts than others. People who have more of the aggressive instincts tend to be more aggressive than people with less aggressive instincts when angered or frustrated or when the occasion is best suited for one to aggress. A famous psychologist called J. B. Watson said that children's minds are like a blank slate which anything at all can be written on. By implication, the psychologist meant that children's behaviors are shaped by the environment or by experience. Nevertheless, some behaviors of human beings can be linked to some inborn tendencies. For instance, a person must think through situations before settling on what action(s) to take when confronted with a task or a problem or situations that induce aggression. This supports the view that man is a rational being. According to Ghana's 1992 constitution, a

child is a person who is between day one (1) and 18 years old. Children as humans can also exhibit aggressive behavior. Children are influenced by the things in the environment especially, observing others aggress. Studies have shown that children are influenced by watching aggressive movies and so tend to be more aggressive than when children watch non-aggressive movies. The watching of non-aggressive movies will make children exhibit more pro-social behaviors like sharing of play items, helping colleagues who are in need, sympathizing with others' emotions, to name a few.

The researcher has identified that exhibition of aggressive behavior by people and, especially by children is on the increase particularly in Ghana and the world in general. The researcher asked this question: "Can a day pass without one hearing of killings or fighting in some places even in Ghana and not to talk of the world over"? This is a difficult question to be answered by the researcher and most people. Exhibiting aggressive behavior can be traced to the first human beings created by God as the Bible recounts. The Bible recounts that Cain killed Abel after the former was angered that Abel's sacrifice had been accepted by God. Significant to say, borstal homes are built to keep children who have exhibited some anti-social behaviors like stealing, rape, fighting, killing, abusing drugs like cocaine and marijuana, to name a few. Borstal homes can be found in almost all the ten regions in Ghana. The question here is: "Can children (1-17 years old) behave the same way as adults do"? The answer to this question is in the affirmative. Children can even be more dangerous than adults because children may not know the consequences of such anti-social actions or behaviors and so will behave as such thinking there will be no punishment such as the law catching up with the former and putting children in the borstal homes. The borstal homes are reformatory places but conditions like restricting one's freedom to go to any place that one pleases, poor feeding, the likelihood of a child meeting very stubborn children, to say but a few, can even make children more aggressive.

In contemporary times, one can see or hear of children being used by adult combatants (rebel soldiers) to fight wars against governments in power. Places in Africa like Sierra Leone, Democratic Republic of Congo, Liberia, Sudan and others have had such an experience. These children killed, raped, robbed people of personal effects or goods, maimed other people, set fire to buildings and farms, just the same way the adults counterparts behaved. Again, one can also see or hear in the media of places like Europe, the United States of America, and Asia reporting about children who go on killing spree in schools attended by these children. More so, Ghana as a nation had not been immune to these happenings. There had been reports in the Ghanaian media about some children who have killed parents, robbed boutiques, petrol stations, forex bureaus using locally manufactured pistols or other weapons, a group of male children raping a girl, to say just a few. To sum up, all these behaviors discussed in the afore-mentioned points are aggressive behaviors exhibited by children.

Objectives of the Study

1. To identify the linkage between violent or aggressive movies and children's aggressive behavior.
2. The research sought to identify why non-aggressive movies tend to reduce considerably aggressive behavior in children thereby making children exhibit more pro-social behavior.
3. The research sought to find out whether males will be more aggressive than females when both sexes had viewed either an aggressive movie or a non-aggressive movie.

Statement of Hypotheses

- a. The hypotheses of the experiment are:
- b. Children who watch an aggressive movie will be more aggressive than children who do not watch an aggressive movie.
- c. Males who watch an aggressive movie will be more aggressive than females who watch an aggressive movie.
- d. Males who do not watch an aggressive movie will be more aggressive than females who do not watch an aggressive movie.
- e. Children who watch a non-aggressive movie will exhibit more pro-social behaviors than children who watch an aggressive movie.

Significance of the Study

The relevant of the study was to contribute to what had already been done in the area of the study and to suggest ways to all stakeholders who are burdened on shaping children's lives positively especially in

Ghana. It was also to inform people about how aggressive movies can influence children's aggressive behavior. In the first place, many researchers had been engaged in looking into the problem of why children can be influenced by the media which make children exhibit aggressive behavior. Researchers like Bandura and Walters (1963) had done extensive work on the subject. The researchers realized or saw this problem about children who are considered as the future leaders of every nation getting influenced by the media to copy or learn aggressive behaviors which can certainly make the latter aggressive as adults. If these influenced future leaders are not saved along the way by a spiritual force which has the greater strength to make the latter sober, then the future looks bleak for all. Even with the spiritual support individuals must decide whether to accept such a support or not. Again, there is no new knowledge under the sun. Events or situations keep repeating themselves and researchers will always repeat or research on what other researchers had already done. This is for a simple reason: to replicate or to add to the knowledge that had been found or given by the previous research. The researcher of the present study also wished to add to the knowledge which is already there. Other Ghanaian researchers like Wiafe-Akenten, a lecturer at the department of psychology, University of Ghana had done extensive research in this area of study.

Secondly, problems are bound to occur and solutions must be found to overcome such problems. Exhibiting aggressive behavior has a positive side that can solve a problem. For example, if an individual is being attacked by another person and the attack seems life-threatening, the one who is being attacked must devise some defense techniques against the attacker using weapons like (knife, gun, clubs, or anything) to save the life of the one who is being attacked. Some amount of aggression is good for everyone. On the other hand, one can choose not to aggress when angered or frustrated by another and if the situation is not life threatening. There had been many instances people chose not to aggress even when the situation demanded for the person to exhibit some form of aggression. Aggression can be reduced when people or children decide to copy models that are not aggressive. That is, children will not aggress even when the situation has called for exhibiting aggressive behavior. Again, children can be less aggressive when good communication skills are learnt. Children must be taught in schools, churches, mosques and shrines about good communication that can make children less aggressive. Having good communication skills can manage conflicts in the society. People who lack good communication skills are not able to manage frustration and anger coming from other people or calm down a person who is angry so as to reduce aggression in the society. Children must have a sense of humor for situations that call for anger and should laugh over matters that could easily make the children angry. Nevertheless, caution must be given here. Children should stop laughing in the presence of the one who is angry if such posture can make the person angrier. More so, the laws of the country that see to punish offenders who aggress must be swift in the implementation or execution and must also be appropriate to the offence that had been committed. For instance, there must not be delays in passing judgments on offenders by the law court to serve as a deterrent for other would be offenders. The laws of the land must be applied to all citizens regardless of a person's status in society. More so, the punishment of offenders can be published in the Junior Graphic (a new paper for children) for children who can read to read. This can make children well informed and can deter children repeating such aggressive acts or offences. Also, film makers and producers can make detective films that show how offenders of aggressive acts are punished to be shown to children. Nevertheless, caution must be given here. The film must be censored appropriately to suit children view. Lastly, non-governmental organizations (NGOs) that are into children's business or things that concern children should organize workshops and seminars for children in schools and in the communities to educate or guide children to understand the intension or ideas that are behind aggressive movies. Children must be encouraged to watch movies or play video games that do not have violent content. The government can also follow suit through the Ghana Education Service by giving teachers some in-service trainings on the measures or techniques by which aggression can be reduced in children. Teachers will then transfer/transmit or teach the pupils and students this knowledge.

Lastly, the study was to inform people about how aggressive movies can influence children's aggressive behavior. Undeniably, facts show that children are easily influenced by watching movies either an aggressive one or a non-aggressive one. Societies can be polluted or get destroyed not only by deforestation, emission of greenhouse gases, improper waste disposal, to name a few, but also by aggressive movies. To digress a bit, the Ghanaian society is even crying over erotic music videos shown everyday on television

channels, erotic lyrics or music being played by radio stations because of the influence on children which can make children promiscuous. In summary, from afore-mentioned points, one can recognize that there is the need for the government and the general public to put some measures in place as a matter of urgency to encourage children not to view aggressive movies.

Theoretical Frame Work of the Study

Why do people act aggressively? There are a number of possible explanations for aggression. These can be grouped under three broad theories. These are biological, psychosocial and the General Affective Aggressive Model theories.

a. Biological Theories

i. Instincts – Aggression has such a long history and is found among all cultures, many theories believe humans are instinctively aggressive. After personally witnessing the massive death and destruction that occurred during World War I, Sigmund Freud stated that aggressive impulses are inborn. He argued that the drive for violence arises from a basic instinct and that, therefore, human aggression cannot be eliminated (Gay, 1999, 2000; Rohrlich, 1998).

ii. Genes – Twin studies suggests that some individuals are genetically predisposed to have hostile, irritable temperaments and to engage in aggressive acts (Miles & Carey, 1997; Segal & Boucharg, 2000; Wassermam & Wachbroit, 2000)

iii. The Brain and nervous system –Electrical stimulation or severing specific parts of an animal's brain has a direct effect on aggression (Delgado , 1960: Delville, Mansour, & Ferris, 1996;Robert & Nagel , 1996). Research with brain injuries and organic disorders has also identified possible aggression circuit in the brain- in particular, the hypothalamus, Behavior, and other parts of the brain(Davidson, Putnam, & Larson, 2000; Raine et al., 1998).

iv. Substance abuse and other mental disorders – Substance abuse (particularly alcohol) within the general public is a major factor in most forms of aggression-child abuse, spousal assault, robberies, murders, stabbings, and so on) Casswell & Zhng , 1998; Goodwin, 2000; Shuntich, Loh, & Katz, 1998)

v. Hormones and neurotransmitters-Several studies have linked the male gonadal hormone testosterone to aggressive behavior (Boyd, 2000; Dabbs & Dabbs, 2000; Sanchez-Martin et al., 2000). Violent behavior has also be linked with low levels of the neurotransmitters serotonin and GABA,(gamma-amino butyric acid)

(Bernhardt, 1997; Brady, Myrick, & McElroy, 1998; LeMarquand et al., 1998; Manuck et al., 1998).

b. Psychosocial theories

i. Aversive stimuli –Research shows that aversive stimuli such as noise, heat, pain, insults, and foul odors can increase aggression (Anderson, Andresen, Dorr, DeNeve, & Flanagan, 2000; Berkowitz, 1990).

ii. Culture and learning – Observational or social learning theory suggests that we learn by watching others. Thus, people raise in a culture with aggressive models will learn aggressive responses (Matsumoto, 2000).

iii. Media and video games- Despite protestations that violence in movies, TV, and video games is only entertainment, considerable evidence exist that the media can contribute to aggression in both children and adults (Anderson & Dill, 2000; Gilligan, 2000; Hogben, 1998; Zillman & Weaver, 1999).

c. General Affective Aggression Model /Theory – It is a modern theory of aggression which suggest that human aggression stems from many different factors. A wide range of input variables influences cognitions, affect, and arousal, and these internal state plus other factors determine whether, and in what form, aggression occurs Variables falling into the first category include:

i. frustration – some kind of attack from another person (example, an insult). (Anderson,1997).

ii. Exposure to other person behaving aggressively (aggressive models). (Anderson, 1997).

iii. The presence of cues associated with aggression (example, guns or other weapons) and virtually anything that causes individuals to experience discomfort. (Anderson, 1997).

Variables in the second category include.

- i. Individual differences – it includes traits that predispose individuals towards aggression (example, high irritability). (Anderson, 1997).
- ii. Certain attitudes and beliefs about violence (example, believing that it is acceptable and appropriate). (Anderson, 1997).
- iii. Values about violence (example, the view that it is a “good” thing-perhaps that it shows an individual’s worth or masculinity). (Anderson, 1997).
- iv. Special skills related to aggression (example, knowing how to fight, knowing how to use various weapons). (Anderson, 1997).

Many research works had been conducted in this area of study. The researcher has chosen to review some of the work done so far. The researcher begins by considering an experiment conducted by Albert Bandura and Walters in 1963. In their experiment, one of three groups of children view a film of an adult acting aggressively towards a bobo doll (hitting, punching and kicking). (Bandura & Walters, 1963) Later, the children were given the opportunity to play in the same room with the same toys. The children who had seen the film were much more aggressive with the toys than were the children who had not seen it. Here, the view that children will imitate what they see others do was realized. Again, the research tells us that children (who are also creative beings) were able to create their own forms of aggressive acts at the doll. Through creativity, Man has solved many of his problems and also created many problems for himself. Again, the researchers did not test or suggest some ways to reduce aggression in children. This vacuum will be filled by the present research.

Secondly, Meyer (1972) researched on effect of viewing justify and unjustified real film violence on aggressive behavior. The researcher used Berkowitz’s basic research Paradigm to test the effects of viewing film violence on aggressive behavior. 200 male undergraduates were angered by the experimenter’s accomplice by means of electrical shocks. Students then saw a non-violent or violent film segments or no film. The violence films were real or fictional and the violence was not explained, justified or unjustified. Students then were allowed to return shocks to the instigator. Measures of aggressive behaviors included numbers of shocks return and shock intensity. Results show that angered students who viewed justified real film violence returned significantly more and more intense shocks than angered students viewing unjustified real or fictional films violent, a non-violent film or no film. Findings suggest that the effects of increased aggression demonstrated for angered viewers of justified fictional violence are also applicable to angered viewers of real film violence. This research has also supported previous findings that viewing of aggressive movies tend to produce aggressive behavior. This research has also supported the fact that frustration is one of the causes of aggression since the electric shocks frustrated the real participants making them angry and susceptible to produce aggressive behavior (electric shocks). More so, the findings have shown that human beings can think through situations to decide on the right actions to take, that is, angered students who viewed unjustified real or fictional film violence refused to produce more and more electrical shocks. However, the researcher was gender biased by taking only male participants.

Thirdly, an experiment conducted by Noble, Grant (1973) on the effects of different forms of filmed aggression on children’s constructive and destructive play. The researcher hypothesized, that children would play less constructively (an index to anxiety) and more destructively (an index to aggressive drive) after they had seen realistically rather than stylistically filmed aggression and after they had seen aggression filmed with sight of the victim rather than at a distance. A 2 x 2 designed was employed where by 4 groups of 7 male and 5 female 6 -7 years old viewed a different aggression film. The researcher assessed the constructiveness and destructiveness of post exposure play during which students play in self –selected pairs with the objects customarily available in their classroom. Students played significantly less constructively after seeing realistically rather than stylistically filmed aggression and after seeing aggression filmed with sight of the victim rather than at a distance. Significant amount of destructive play was apparent only after realistically filmed aggression had been viewed. Students play more constructively after seeing stylistic aggression filmed at a distance than after exposure to any other film. This research has supported the view held by previous researchers that the viewing of aggressive movies produces aggressive behavior. However, this research findings indicating that, realistically film produces destructive behaviors than stylistic aggressive movie can be a bit controversial. Aggressive movies in any form will tend to produce some form

of aggressiveness in the people who watch them (aggressive movies). Again, the research findings failed to tell us if there were differences in gender aggressive behavior, that is, whether males were more aggressive than females or vice-versa. Lastly, the research could have taken equal number of both gender (males and females) to ensure that the two groups were equivalent.

Fourthly, an experiment conducted by Evans (1973) on effects of aggressive versus non aggressive films on the aggressive behavior of mentally retarded children. The researcher examined effects of viewing an aggressive film on the behavior of 22 moderately and mildly mentally retarded children (5-11 years old). Students' doll playing was observed after they viewed a non-aggressive and an aggressive film. Results supported the hypothesis that students will exhibit more aggressive behavior following the aggressive than the non-aggressive film. Students with lower IQs were more influenced than students with high IQs. This research added knowledge to the previous experiment in that mentally retarded and normal children can also exhibit the same aggressive behavior when exposed to the same stimuli (aggressive movie/film).

Furthermore, Joane, Dolf and Edna (1995) conducted an experiment in the University of Wisconsin, Madison on female responses to provocation after exposure to aggressive and erotic films. Female college students were exposed to neutral, aggressive, or erotic films. The students then were either provoked or not provoked in game situation which provided an immediate opportunity for retaliation. Both instigation and retaliation were operationalized in the delivery of noxious noise to the opponent. Benevolent behavior, operationalized in the delivery of pleasant sounds, was a response alternative to noxious noise. Physiological reactions to films were measured.

These measures revealed that the erotic film was significantly more arousing than aggressive film. The neutral film held an intermediate position and did not differ significantly from the other two. For subjects who were not provoked, the prior viewing of films did differentially affect the delivery of noxious stimulation. For provoked subjects, however, those who had seen the erotic film delivered noxious noise significantly more often than those who had seen the aggressive film or the neutral film. The findings are best accounted for in terms of an excitation-transfer theory, which states that an emotion such as anger will be intensified by arousal lingering on from prior experiences. The aggressive film did intensify retaliation presumably because it was not arousing the female participants. The need to study women independently of men in media-violence research was discussed. Doing research on aggression and using only female participants is recommendable since many of the research done in the area used both male and female participants. The society and the research community have come to accept that males are more aggressive than females. The researchers for this experiment have made known to the world that women are more socially aggressive than men. Nevertheless, the researchers did not say whether the erotic film contains the use of force on victims or not. If there were application of force on victims by perpetrators, then the meaning that can be derived here is that the female participants will be offended in a way to respond aggressively during the post-testing stage.

Moreover, Robinson, Wilde, Navracruz, Haydel and Varady (2001) in the Department of Pediatrics and Centre for Research in Disease Prevention, Stamford University School of Medicine, U.S.A conducted an experiment on the topic 'effects of reducing children's television and video games use on aggressive behavior and perception of a mean and scary world. The design of the experiment was a randomized, control, school-based trial. The setting was two social demographically and scholastically matched public elementary schools in San Jose, Calif. The participant was third-and fourth-grade students (mean age, 8.9 years) and their parents or guardians. The intervention of the experiment was that children in one elementary school received an 18-lesson, 6-month classroom curriculum to reduce TV, video tape, and video game use. A 60 % random sample of children was observed for physical and verbal aggression on the playground. Parents were interviewed by telephone and reported aggressive and delinquent behaviors on the child behavior checklist. The results indicated that compared with controls, children in the intervention group has statistically significant decreases in peer ratings of aggression. Differences in observed physical aggression, parents' report of aggressive behavior, and perceptions of a mean and scary world were not statistically significant but favored the intervention group. This research has made us aware that if interventions are put in place aggressive behaviors can be reduced in the society. The researchers' use of peer ratings to measure the participants is the best since peers tend to rate their friends in an objective way. However, the use of

parents in rating participants can confound the results in that parents who are in support of their children's aggressive attitude can respond positively to the researchers' demand by rating participants' aggressive behavior as non-aggressive.

In addition, Bruce and Craig (2002) conducted a research in the University of Missouri, Columbia on effects of violent video games on aggressive behavior: Potential sex differences. Evidence of the effects of playing violent video games on subsequent aggression has been mixed. This study examined how playing a violent video game affected level of aggression displayed in a laboratory. A total of 43 undergraduate students (22 men and 21 women) were randomly assigned to play either a violent (Mortal Kombat) or nonviolent (PGA Tournament Golf) video game for 10 minutes. The participants completed with a confederate in a reaction time that allowed for provocation and retaliation. Punishment levels set by participants for opponents served as the measure of aggression. The results confirmed the hypothesis that playing the violent game would result in more aggression than would playing the non-violent game. In addition, a Game x Sex interaction showed that this effect was larger for men than for women. The research made use of almost an equal number of male and female participants and this ensured gender balance. However, the research has some flaws. One, the sample size of participants which is 43 cannot support the generalization of the results. Two, the characters in the violent "Mortal Kombat" are males and so the male participants identified more with the male characters than the female participants. This enhanced the male participants to aggress more than the female participants. Three, the research finding said that male participants were more influenced by the violent video game to exhibit aggressive behavior than the female participants, however, a research by Cooper and Mackie (1986) found that girls were more influenced by playing a violent game than were boys. Lastly, the time (10 minutes) allocated for the game played might not have been long enough to have a larger effect on the participants.

Moreso, Mytton, DiGuisseppe, Gough, Taylor, and Logan (2006) conducted an experiment in the University of West of England, Bristol, Faculty of Health and Social Care, Glenside Campus, U.K on the effects of school-based violent prevention programs for children identified as aggressive or at the risk of being aggressive. The researchers made use of such strategy by searching CENTRAL, Cochrane Injuries Group specials register, MEDLINE, EMBASE, and other specialize data bases and reference lists of articles. The researchers also contacted authors and organizations to identify any further studies. The selection criteria includes trials meeting the following criteria; (1) participants were randomly assigned to intervention and control groups ; (2) outcome data were collected concurrently; (3) participants comprise children in mandatory education, identified as exhibiting, or at risk of aggressive behavior; (4) intervention designed to reduce aggression, violent, bullying, conflict or anger; (5) school based interventions; (6) outcomes to reduce aggressive behavior, school and agency responses to acts of aggression or violent injuries. On data collection and analysis, the data was collected on designed, participants, intervention, outcomes and indicators of study quality. Results of any intervention to no intervention were compared immediately post-interventions and at 12 months using meta-analysis where appropriate. The main results showed that, of 56 trials identified, non-reported data on violent injuries. Aggressive behavior significantly reduced in intervention groups compared to no intervention groups, immediately post intervention in 34 trials. This research has added to the knowledge of reducing aggression in children. This research has made clear that school-based violent prevention can be effective. This research, however, did not tell how home-based interventions can also be employed by parents or guardians in reducing aggression in children.

Lastly, Moore et al., (2009) conducted an experiment in Cardiff, Wales, U.K on the effects of childhood diet on a hostile attitude in later life. In an effort to understand a relationship between a child's diet and aggressive behavior in later life, the researchers from the Cardiff University analyzed data of almost 17, 500 children through the 1970 British cohort study. They monitored them further at different stages of their lives and assessed factors like health, education, social and economic backgrounds, parental upbringing along with sweet consumptions. The researchers noted that 69% of the subjects who were violent between the ages of 29 and 34 had eaten sweets and chocolate nearly every day during childhood, as opposed to 42% who were not inclined towards aggressive behavior. The link between candy consumption and violence were consistent even after factors that trigger violence were taken into account. Although, the findings of this research are interesting, the association between sweet consumptions and violent needs further assessment. The researchers need to be commended for painstakingly analyzing data of almost 17,500 children. Even

though, the eating of candies and chocolate in earlier childhood can lead to aggressive behavior in later life as indicated by the researchers, there can be other factors like the influence of the media, playing violence video games, to mention but a few, can also cause or trigger aggressiveness in children or adults.

Population

The population was primary 1 and 2 pupils in Korle Nkwanta Primary and Junior High School. The school can be found in the Koforidua Municipality in the Eastern Region of Ghana. This was a targeted population because children who fall between the ages of 5-8 years were found in primary 1 and 2. Participants were both males and females. The size of the population was sixty-five (65).

Sample size

Out of the population, a sample size of forty (40) participants was randomly selected to participate in the study. Twenty (20) participants each was randomly selected from both primary 1 and 2. The sample was almost evenly divided between males and females, that is, twenty-two (22) males and eighteen (18) females. The age range of the sample size was from five (5) to eight (8) years.

Sampling

Simple random sampling technique was used to ensure that participants of the population and the sample had equal chance of being selected and assigned to (experimental and control groups). Also, it ensured that no confounding variable affected the study. The sample size of twenty (20) pupils was chosen from primary 1. All the thirty-two (32) pupils in primary 1 were made to pick a piece of paper folded with 'yes' or 'no' written on it. The twenty (20) pupils who picked 'yes' were made participants of the study. A sample size of twenty (20) pupils was chosen from primary 2. All the thirty-three (33) pupils in primary 2 were made to pick a piece of paper folded with 'yes' or 'no' written on it. The twenty (20) pupils who picked 'yes' were made participants of the study. In all the sample size of forty (40) pupils was used for the study. The same format was used to group the forty pupils or participants into the experimental and control groups. Forty pieces of papers folded with twenty 'yes' and twenty 'no' written on them were presented to the forty (40) participants. A participant who picked 'yes' automatically fell into the experimental group and a participant who picked 'no' automatically fell into the control group.

Materials /Instruments

The research used materials like two (2) television sets, two (2) video decks, two (2) filmed video discs (aggressive movie and non-aggressive movie), toy motor cycles, guns, cars, pens, felt pen, scissors, cardboard, paper, strings, table, watch or timer and footballs. An aggressive behavioral check list which was made of ten (10) items was used to score the participants. The television sets, video decks and video discs were used to show the aggressive and non-aggressive films to the experimental group and control group respectively. The toy cars, and motor cycles were given to participants to play with during the pre-testing stage. On the other hand, the toy guns, cars and motor cycles were given to participants to play with during the post-testing stage. The Felt pen was used to write numbers for the participants on the medium sized, rectangular shaped cardboard. The ordinary pens were used by the researcher and the research assistants in scoring the participants. The television sets and the video decks were put on the table which served as a stand for the machines (Television sets and video decks). The aggressive behavioral checklist was used to score the participants. 'Yes' and 'no' words were written on the pieces of the papers which were folded and used for the selection and assignment of the participants to the two groups. The watch or timer was used to time the participants when participants came into the experimental room.

Scoring

The dependent variable which is participants' aggressive behavior or responses were scored by awarding five (5) marks to participants for exhibiting aggressive behavior and awarding zero(0) for not exhibiting any aggressive behavior. Participants were scored using the aggressive behavioral checklist designed for the study.

Experimental Design

The study was an experiment and the study used an experimental design. The study consisted of two groups that is the control and the experimental groups. Again, there was a manipulation of the independent variable that is, the filming of the aggressive movie. More so, the design used randomization in selecting the sample.

The method of randomization was the simple randomized technique. Each participant of the study's sampling frame had an equal opportunity for being selected to be part of the sample size. The experimental design was a between subject pre-test post-test design. The design was chosen because the experiment required two groups (experimental and control). In addition, participants in both experimental and control groups were pre-tested and post-tested.

Procedure

The researcher got a letter from the Department of Psychology, University of Ghana, which was presented to the head teacher of Korle Nkwanta Primary and Junior High School, Koforidua . After the content of the letter had been known to the head teacher, the researcher discussed in detail the nature of the experiment or research with the head teacher. The researcher made known to the head teacher that the former wanted to conduct an experiment on the effects of aggressive movies on children's aggressive behavior. The researcher continued by saying that participants would be selected from primary one and two because the children in both classes would fit in the age range of 5-8 years which the researcher wanted to use. The researcher went ahead to tell the head teacher about the instruments the researcher would be using like television sets, video decks, video discs, toy guns, motor cycles, cars, pens, aggressive behavioral checklist, to mention but a few. Again, the researcher informed the head teacher about the researcher's intention of writing letters to the parents of the pupils in the participating classes informing the parents about the study and requesting parents' consents.

The researcher assured the head teacher of the participants' safety. After this discussion with the head teacher and getting the head teacher's approval, the researcher met the teachers of both primary one and two and discussed with the teachers the same information discussed with the head teacher and to get the latter's consents. The researcher with the head teacher and the teachers concerned agreed on the date when the research or the experiment was to be conducted. The researcher kept in touch through phone calls and visits to the school till the very day the study was conducted. This was to make sure that there was no disappointment on the part of the school even to refuse the conduct of the study. The researcher contacted the Junior High school's head teacher and discussed the researcher's intention of conducting an experiment at the primary side. The researcher requested from the Junior High School's head teacher to select four intelligent pupils who the researcher intended to train as research assistants. The research assistants assisted the researcher in the whole experimental process and, most importantly, joining the latter in scoring the participants on participants' exhibition of aggressive or non- aggressive behavior. The researcher gave the research assistants the needed training in scoring the participants. That is, when a participant exhibited an aggressive behavior as described on the aggressive behavioral checklist, a participant was awarded five (5) marks. On the other hand, when a participant did not exhibit any aggressive behavior as was seen on the aggressive behavioral checklist, the participant was awarded with zero (0).

The researcher notified the experimental school a day before the study was conducted and made known to the primary head teacher the time the study would begin, that is, 11 am (after the school's first break). On the day of the study, the normal classroom served as the setting for the conduct of the experiment. The population which was primary one pupils was thirty-two (32) and the primary two pupils thirty- three (33) making a total of sixty-five pupils. A sample size of twenty (20) pupils was chosen each from primary one and two. Both selections were done using the simple randomized technique. The simple randomized technique was used for assigning participants to both experimental and control groups. The way and manner the simple randomized technique was used has been described in detail under the sampling section. After getting the needed groups for this study, participants were treated in accordance with the 'Ethical Principles of Psychologists and Code of Conduct' (American Psychological Association, 1992). The experimenter used deception by telling the participants that the researcher will be observing how participants were able to play well with the toys. Both experimental and control group were assessed to find participants' aggression level by playing with the toy cars and motor cycles. The forty (40) participants were put into groups of five (5). In all, there were eight (8) groups. Each participant was tagged with participant's number on a small sized cardboard and a string which were hanged around the participant's neck for easy identification and scoring. Each group of five took their turns to play with toy cars and motor cycles while being scored by the experimenter and the research assistants. The exact instruction was '**can you please play with the toys**'? Each group had ten minutes to play with the toys. After the pre-testing, the two groups (experimental and

control groups) were quarantined in different rooms that is, the experimental group in one room and the control group in another room.

The experimental group was shown the aggressive movie for twenty minutes while the control group was also shown the non- aggressive movie for twenty minutes. Both activities occurred concurrently or at the same time. After the showing of the movies, the experimental group which was made of twenty participants was assessed first while the control group was still quarantined or kept in the room. Groups of five participants came in turns to go through the post-testing process. Words like male and female were written appropriately on top of the paper containing the aggressive behavioral checklist so as to find out later the differences between males and females exhibiting aggressive behaviors. Each group was given ten minutes to play with toy guns, cars and motor cycles. The exact instruction which was given to the participants was ‘can you please play with the toys’? Each participant was observed by the experimenter and the research assistants in order to score each one of them using the aggressive behavioral checklist. The five participants in each group were divided among the researcher and the research assistants to ensure that each participant was scored based on participant’s response or behavior. The group of five that was assessed was ushered into a different room to be quarantined to prevent participants’ interaction with the other participants who were yet to be assessed. This ensured internal validity. After the post-testing of the experimental group, the control group was also assessed. The participants were also put into groups of five to go through the same process or activity the experimental group went through. Each participant got the opportunity to be scored on participant’s performance or behavior by the experimenter and the research assistants. After the post-testing, the participants were debriefed immediately, that is, participants were told the purpose of the experiment and the results of the experiment. Some advices were given to participants on the need to control participants’ aggressive behaviors. The use of deception ensured the reliability and validity of the experimental results.

Table 1: Summary Table of T-Test Comparison between the Experimental and Control Group Aggressive Behavior

GROUP	No. of participants	Mean	Std Deviation	df	t obs	t.crit.	P
Experimental	20	21.25	793.75	38	11.611	2.750	P< .005 (1 – tailed)
Control	20	2.25	223.75				

The hypothesis that children who watch an aggressive movie will be more aggressive than children who do not watch an aggressive movie and children who watch a non-aggressive movie will exhibit more pro-social behavior than children who watch an aggressive movie were supported at the .005 level of significance (i.e. $p < .005$). Therefore, referring $t_{obs} (1,38) = 11.611$ to the decision rules, it can be observed that t_{obs} which is 11.611 is greater than the $t_{critical}$ which is 2.750. Therefore, H_0 is rejected at the .005 level of significance. Symbolically, $t_{obs} (1,38) = 11.611 > t_{crit} (1,38) = 2.750$. Therefore, H_0 must then be rejected.

Table 2: Summary Table of T-Test Comparison between Males and Females Who Watched Aggressive Movie

GROUP	No. of participants	Mean	Std Deviation	df	t obs	t.crit.	P
Males	12	22.9	322.92	18	1.45	1.734	n.s (1 – tailed)
Females	8	18.75	387.5				

The hypothesis that males who watch an aggressive movie will be more aggressive than females who watch an aggressive movie was not supported at the 0.05 level of significance. Therefore, referring $t_{obs} = 1.45$ to the decision rule, it can be observed that the t_{obs} which is 1.45 is less than the $t_{critical}$ which is 1.734. Therefore, H_0 is retained at the 0.05 level of significance. Symbolically, $t_{obs} (1,18) = 1.45 < t_{crit} (1,18) =$

1.734 and if $t_{obs}(1,18) = 1.45 < 1.734$, H_0 must be retained.

Table 3: Summary Table of T-Test Comparison between Males and Females Who did not Watch an Aggressive Movie

GROUP	No. of participants	Mean	Std Deviation	Df	t obs	t.crit.	P
Males	12	2.5	175	18	0.39	1.734	n.s (1 – tailed)
Females	8	1.88	46.87				

The hypothesis that males who do not watch an aggressive movie will be more aggressive than females who do not watch an aggressive movie was not supported at the 0.05 level of significance. Therefore, referring $t_{obs} = 0.39$ to the decision rule, it can be observed that the t_{obs} which is 0.39 is less than the $t_{critical}$ which is 1.734. Therefore, H_0 is retained at the 0.05 level of significance. Symbolically, $t_{obs}(1,18) = 0.39 < t_{crit}(1,18) = 1.734$ and if $t_{obs}(1,18) = 0.39 < 1.734$, H_0 must be retained.

Discussion

The aims of the research were in three parts. One, the study was to identify the linkage between violent or aggressive movie and children’s aggressive behavior. Two, the research was to find out why non-aggressive movies tend to reduce considerably aggressive behavior exhibited by children. Three, the study was to find out whether males will be more aggressive than females after viewing an aggressive movie or a non-aggressive movie. To achieve these aims, the researcher made use of an aggressive movie to find out the movie’s influence on children’s aggressive behavior and also used a non-aggressive movie to find out the movie’s influence on children’s pro-social behavior. One of the early studies on the link between a violent model and aggressive behavior was carried out by Bandura, Ross, and Ross, (1961 & 1963; cited in Myers, 2003). After series of such classic studies Bandura and his associates declared that watching an aggressive model led to aggressive behavior (Wiafe-Akenten, 2009). The hypothesis tested were children who watch an aggressive movie will be more aggressive than children who do not watch an aggressive movie; males who watch an aggressive movie will be more aggressive than females who watch an aggressive movie; males who do not watch an aggressive movie will be more aggressive than females who do not watch an aggressive movie; and lastly, children who watch a non-aggressive movie will exhibit more pro-social behavior than children who watch an aggressive movie.

From table one, one can confidently say that watching an aggressive movie by children will indeed make children exhibit aggressive behaviors and watching a non-aggressive movie by children will make children exhibit very little aggressive behaviors or no aggressive or more pro-social behaviors. These two hypotheses were confirmed by the results. This implies that $t_{(observed)}$ which is 11.611 was significant at the 0.005 level of significance. For one to be able to say that children who watch an aggressive movie will be more aggressive than children who do not watch an aggressive movie and also children who watch a non-aggressive movie will exhibit more pro-social behavior than children who watch an aggressive movie, $t_{(observed)}$ which in this case is 11.611 should be greater than the $t_{(critical)}$ which is 2.750 which can be found on the t table and this was realized.

From table two, one can recognize that watching an aggressive movie by both male and female participants could not establish a significant difference between either sexes’ aggressive responses or behaviors. The result for this hypothesis is inconsistent or incomparable to previous findings. This implies that $t_{(observed)}$ which is 1.45 was not significant at the 0.05 level of significance. For one to be able to say that males who watch an aggressive movie will be more aggressive than females who watch an aggressive movie, $t_{(observed)}$ which in this case is 1.45 should be greater than the $t_{(critical)}$ which is 1.734 which can be found on the t table. This condition or decision was not realized as one can see that the $t_{(critical)}$ which is 1.734 is rather greater than the $t_{(observed)}$ which is 1.45.

From table three, one can also see that males who did not watch an aggressive movie were not more aggressive than females who did not watch an aggressive movie. This means that there was no significant difference between both sexes. The finding for this hypothesis is incomparable to that of previous findings. This implies that $t_{(observed)}$ which 0.39 was not significant at the 0.05 level of significance. For one to be

able to say that males who did not watch an aggressive movie will be more aggressive than females who did not watch an aggressive movie, t (observed) which in this case 0.39 is should be greater than the t (critical) which is 1.734 which can be found on the t table. This decision or condition was not realized as one can see that the t (critical) which is 1.734 is greater than the t (observed) which is 0.39. Importantly, there will be the need to discuss the findings of the study in relation to previous related studies.

In the first place, the hypothesis that children who watch an aggressive movie will be more aggressive than children who do not watch an aggressive movie is consistent with the results obtained by Bandura and Walters in 1963 who conducted a research on effects of aggressive movie/model on children aggressive behavior. The results obtained by the researchers were that the children who had seen the aggressive film were much more aggressive with the toys than were the children who had not seen the aggressive movie. The present study also recorded the same results when the experimental group (participants who viewed the aggressive movie) exhibited more aggressive behaviors than the control group (participants who viewed the non-aggressive movie). Another study by Meyer T.P (1972) who researched on effects of viewing justified and unjustified real film violence on aggressive behavior also supported this hypothesis. The researcher's result indicated that angered students who viewed justified real film violence returned significantly more and more intense shock than angered students who viewed unjustified real or fictional film violent, a non-violent film or no film. Again, a study by Evans, Charles (1973) on effects of aggressive verses non-aggressive films on the aggressive behavior of mentally retarded children (5-11 years). The result indicated that the children exhibited more aggressive behavior following the aggressive than the non-aggressive. More so, a study conducted by Noble, Grant (1973) on the effects of different forms of filmed aggression on children's constructive and destructive play. The result indicated that students played significantly less constructively after seeing realistically rather than stylistically filmed aggression and after seeing aggression film with sight of the victim rather than at a distance.

From the four studies by Bandura & Walters (1963), Meyer T.P (1972), Evans, Charles (1973) and Noble, Grant (1973), researchers can say emphatically that viewing aggressive movies especially by children can make them exhibit more aggressive behavior than those who do not watch it. Comparing children (participants) that were in the research of these researchers in developed countries to that of Ghanaian children as can be seen in the present study, one can deduce that, universally, children will truly exhibit aggressive behavior when children view an aggressive movie than when children view a non-aggressive movie.

Secondly, the hypothesis that males who watch an aggressive movie will be more aggressive than females who watch an aggressive movie was not supported by previous study by Craig & Bruce (2002). The researcher conducted an experiment on effects of violent video games on aggressive behavior: Potential sex differences. The finding of the research was that playing violent video game by males made the male participants more aggressive than the female participants who played the violent video game. The finding of the present study recorded no significant difference between males and females exhibiting aggressive behavior after viewing an aggressive movie. The previous finding suggested that young men (males) may be more affected by violent video games than were young women (females). Why? One possibility is that because men (males) are more aggressive than women in general (E.g. Baron and Richardson, 1994 Geen,1990) and again , males are more sensitive to aggressive cues. More so, differences in the aggressive styles of males and females have been attributed to the influence of sex roles in determining appropriate aggressive responses; physical aggression is viewed as more appropriate for men, whereas verbal or psychological aggression is viewed as more appropriate for women (e.g Bettencourt & miller ; 1996, Deaux & Major, 1987; Eagly &Steffen,1986).

In addition, the choice of video games may have contributed to the sex differences in aggression that were found. The researchers chose "Mortal kombat" for the violent game primarily because of its sustained popularity and realistic aggressive content. However, nearly all of the characters in the game are males and so the male participants may have identified more with the characters and been more engaged by the game than were the female participants, resulting in a larger impact on men. This possibility suggests that the females may have been both less engaged in the games than the men and less likely to use the noise intensity settings to express anger. Significantly, however, one research conducted by Cooper and Mackie (1986)

found that girls were more influenced by playing a violent game than were boys. This study could support the finding of the present study in that females were also more aggressive after watching the aggressive movie and that resulted in the non-significant difference between the sexes in aggressive behavior. Again, a meta-analytic review by Eagly and Steffen (1986) investigated whether men are more aggressive than women across a variety of settings by examining studies in which behavioral measures of aggression were reported for both men and women. Although the predicted gender difference was found, the effect size was small. This can also be said about the present study. Checking from the raw scores one can see clearly see the difference in scores between males and females. Males' scores were higher than females' but statistically speaking, that is, after the t-test calculations the finding proved that the difference between males and females in exhibiting aggressive behavior after watching the movie was insignificant. Also, the present study did not employ the tactics or idea of using some participants or even confederates to provoke or frustrate other participants to elicit aggressive responses as was seen in the previous studies. Both male and female participants were given the chance to play with toy guns and cars and participants particularly used the toy guns in shooting at other participants just as was seen from the aggressive movie and also some participants went to the extent of verbally abusing other participants. This may have accounted for the no significant difference between the male and female participants. Also, because the present study did not employ the use of violent video game play could account for the insignificant difference between both sexes. In real life one can find both male and female soldiers who are allowed to handle weapons even though one cannot deny the fact that the male soldiers outnumber female soldiers who are allowed to engage in real combat. This can support the fact that both males and females can display physical aggression.

Thirdly, the hypothesis that males who do not watch an aggressive movie will be more aggressive than females who do not watch an aggressive film was not supported. Generally speaking, children regardless of sex who do not watch an aggressive film but watched a non-aggressive movie are not expected to elicit aggressive responses or be more aggressive. Rather, male and female participants should exhibit more pro-social behavior. The researcher wanted to find out the males' dominance over females in exhibiting aggressive behavior when both male and female participants were given toy guns even though the participants did not get the opportunity to observe and learn from aggressive models. According to the General Affective Aggression Model, the mere presence of cues associated with aggression like guns can trigger aggression in people especially when the people are frustrated or angered by another person(s). Males are more likely to display physical aggression while females display relational aggression. In other words, males are naturally prone to use aggressive weapons once it is available than females. But this was not generally seen here. Almost all the participants (both males and females) exhibited more pro-social behavior as was observed in the present study. As can be seen from the raw scores, 33.3% of males and 37.5% of females exhibited some aggressive responses but statistically, the difference between both sexes was insignificant. A study conducted by Eagly and Steffen (1986) investigated whether men are more aggressive than women across a variety of setting by examining studies in which behavioral measures of aggression were reported for both men and women. Although the predicted gender difference was found, the effect size was small.

This study by Eagly and Steffen dealt with employing either the watching of aggressive movies or playing violent video games. Even with such exposure to both male and female participants the effect size was small or the difference in exhibiting aggressive behavior between male and female participant was not significant. Looking at the present study and taking this hypothesis into consideration, male and female participants were not even given the opportunity to watch an aggressive movie to play violent game. Normally, one should expect no aggressive responses from both male and female participants in this case. In effect, there was no significant difference between the male and female participants. The male participants scores were not significant compared to the female participant s' scores.

Lastly, the hypothesis that children who watch a non-aggressive movie will exhibit more pro-social behavior than children who watch an aggressive movie is supported by similar findings in research conducted by Robinson T.N et al., (2001) and Mytton. J. et al., (2006). The research conducted by Robinson T. N et al (2001) was on effects of reducing children television and video games use on aggressive behavior. The intervention of the experiment was that children in one elementary school received an 18-lesson, 6-month classroom curriculum to reduce TV, video tape and video game use. The non-intervention group (control

group) was the children (participants) who were allowed to have access to TV, video tape and video game use and so had experience with some violence in these media. The results indicated that compared with the control group, children in the intervention group had statistically significant decreases in peer ratings aggression. Another study by Mytton .J. et al (2006) was on the effects of school-based violent prevention programs for children identified as aggressive or at the risk of being aggressive. Results of any intervention to no intervention group were compared immediately post-interventions and 12 months using meta-analysis where appropriate. The main results showed that, of 56 trials identified, non- reported data on violent injuries. Aggressive behavior significantly reduced in intervention group compared to no intervention group, immediately post-intervention in 34 trials. From the two studies, one can confidently say that children who either viewed non-aggressive movie or engaged in some activities that had no element of violent or aggression in the movie or activities did not reproduce aggressive behavior but rather non-aggressive behavior or pro-social behaviour. The same results were realized by the present study. Significantly, there will be the need to discuss the hypotheses and the results of this study in relation to the theoretical frame work of this study, that is, the biological and psychosocial theories.

Firstly, the hypothesis that children who watch an aggressive movie will be more aggressive than children who do not watch an aggressive movie is confirmed to a larger extent by psychosocial theories. One, culture and learning, observational and social learning theory suggest that people learn by watching others. Thus, people raised in a culture with aggressive models will learn aggressive responses (Matsumoto, 2000). The participants who watched the aggressive movie were socialized to believe that exhibiting aggressive behavior is accepted by the society. The aggressive models were not punished, for example, sentenced to some number of years by a law court even after fighting and killing a lot of people in the movie. Generally, aggressive movies are made for entertainment or entertaining the viewers, but for children between the ages of 5 to 8 years as prescribed by the present study may not understand this notion as may be understood by adult viewers. Most often, children learn by observation and therefore will try to exhibit the same behavior the children see. Two, influence of the media and video games. Violence in television programs, on the internet, video and computer games makes children susceptible to copying these violent acts either by aggressive cartoons or live models. This indicates that participants who watched the aggressive movie in the present study will not be exempted from repeating such violent or aggressive behavior. Also, according to the biological theory, some individuals are genetically predisposed to have hostile, irritable temperaments and to engage in aggressive acts (Miles & Carey, 1997). Here, one can say that if such individuals with this personality type watch aggressive movies the individuals may be even more aggressive than others who watch the same movie and do not have this personality type and relegating to the background, individuals who do not watch the movie at all. This personality element here may go for all the hypotheses in the present study and even for the previous studies.

Secondly, the hypothesis that males who watch an aggressive movie will be more aggressive than females who watch an aggressive movie has some link with the biological, psychosocial and the General Affection Aggressive theories even though the theories clearly make suggestions whether the hypothesis will be confirmed or rejected. With biological theories, humans are instinctively aggressive. The hypothesis suggests that males will be more aggressive than females who watch an aggressive movie. This means that females will also exhibit aggressive behavior but that will be lesser compared to males. However, the results obtained after the statistical calculations by the present study indicated no significant difference between males and females. Again, some individuals are genetically predisposed to have hostile, irritable temperaments and to engage in aggressive acts (Miles & Carey 1997; Segal & Boucharg, 2000; Wasser man & Wachbroit, 2000) The individuals here can be both males and females. Also, several studies have linked the male gonadal hormone testosterone to aggressive behavior (Boyd, 2000). The hormone testosterone in men can make men more aggressive than women. Females rather possess estrogen and progesterone which play a role in the feminization of the brain and not in aggression. Lastly, substance abuse (particular alcohol) within the general public is a major factor in most forms of aggression- child abuse, spousal assault, robberies murders, stabbings and so on (Casswell & Zhng 1998; Goodwin, 2000; Shuntich, Loh & Katz, 1998). Males are worse abusers of alcohol, heroin, marijuana, cocaine etc compared to women. Both males and females who abuse drugs or who are into substance abuse tend to be more aggressive that males and females who do not patronize contraband drugs and alcohol. On psychological theories, both males and

females regardless of age and culture may enjoy watching TV, movies, and playing video games. The television shows violent programs and some movies have violent content. This shows how the media and video games have influence on both males and females' aggressive behavior. Nevertheless, some video games can make children kinder and more likely to help (pro-social behavior). Also, children regardless of sex, age, and culture learn by observation. Thus, people raised in a culture with aggressive models will learn aggressive responses (Matsumoto, 2000). Lastly, on aversive stimuli, noise, heat, pain, insults and foul odors can increase a person's aggression. Both males and females may react the same way to these aversive stimuli even to aggress.

On the General Affective Aggressive Model, the presence of aggressive weapons can suggest to an individual to aggress. The presence of the guns to the participants (males and females), especially to the experimental group made the participants more aggressive. The males were more aggressive than the females but, statistically, the difference between but males and females was not significant. Thirdly, the hypothesis that males who do not watch an aggressive movie will be more aggressive than females who do not watch an aggressive movie has a link to the psychological theories, biological and the General Affective Aggressive Model even though the theories do not suggest whether the hypothesis will be confirmed or rejected. As discussed in the preceding paragraph, the psychological theories discussed on the influence of the media and video games, culture and learning and aversive stimuli. Even though this hypothesis was not confirmed statistically, one cannot rule out the fact that the media, that is, the internet and Television usage by both male and female children can influence both sexes to exhibit aggressive behavior. Again, through observational or social learning theory, one can accept that people or children learn by observation. Generally speaking, children or participants who do not watch an aggressive movie as the present study suggests should not elicit aggressive response or exhibit aggressive behavior.

Fourthly, the hypothesis that children who watch non-aggressive movie will exhibit more pro-social behavior than children who watch aggressive movie can be supported by both Psychosocial and the General affective aggression model. From the psychosocial theories, one can realize that through observational or social learning theory, children learn by watching others (parents, siblings, other family members, peers and so on). Here, the children or the participants after watching the non-aggressive movie exhibited more pro-social behavior like playing with other participants with a smiling face, sharing or exchanging play items (toy cars, motors and guns), showing no concern to retaliate when interfered by other participants during the play. Interestingly and to the surprise of the researcher and research assistants, while the participants in the experimental group pointed their toy guns at other participants and shot at the participants, it was observed that almost all the participants in the control group pointed their toy guns at the toy cars the participants were playing with and did not shoot at other colleagues or participants.

Nevertheless, few of the participants in the control group pointed their toy guns at other participants and that is how come some marks were recorded for the control group. Looking from the General affective aggressive model point of view, the fact indicates that the presence of cues (toy guns) associated with aggression can enhance the exhibition of aggressive behavior. Here, the researcher can say that some participants in the control group seeing the toy guns gave them some hint of what such "weapons" (toy guns) can be used for. The few participants defiled the norm by exhibiting aggressive behavior while the rest actually exhibited pro-social behavior after viewing the non-aggressive movie.

In conclusion, from the afore-mentioned points, one can say that the present study fit in well with the various theories of aggression and most of the findings given by the different related studies or researches. The flaw of the present study which accounted for the no significant difference between males and females by exhibiting aggressive behavior was that the present study did not adopt any activity that could frustrate or provoke participants for the latter to produce aggressive response or exhibit aggressive behavior as was seen in the previous related study by Bushman and Craig (2002). In fact, males who are frustrated or provoked will tend to use physical aggression more like using guns as was allowed in the present study than females. Females who are frustrated or provoked will more likely use social aggression in place of physical aggression. Also, some participants especially females' participants were influenced by the way and manner the other male participants used the toy guns during the play time after watching the aggressive movie or even the non- aggressive movie and so decided to do same.

Challenges/Limitations of the Study

In the first place, the researcher was very disappointed when one of the research assistants failed to show up on the very day the study was to be conducted after being trained by the researcher. The researcher had to train another person to fill the vacuum. Secondly, the research's sample size of forty (40) participants may be too small to allow the generalization of the findings or results. Thirdly, the duration of the game played could have influenced the results as well. Participants played the games for only ten (10) minutes which might not have been long enough to have a larger effect on the participants. Fourthly, males and females' participation in the study. Previous research suggests that people are more likely to behave aggressively toward same-sex targets than opposite-sex targets (Eagly & Steffen, 1986). This could account for the no significance difference between male and female participants who either watched the aggressive movie or a non-aggressive movie because participants were to aggress against both sexes. Lastly, the researcher was able to acquire a lot of information either from text books, journals, or the internet that were very useful to incorporate into the study. The researcher had a difficult time selecting from the lot and rejecting some equally useful information that had a bearing on the present study.

Conclusions

The present research was to find out the effects of aggressive movies on children's aggressive behavior. The results of the study indicated that watching aggressive movies by children will make children exhibit more aggressive behavior than when children do not watch aggressive movie and children will exhibit more pro-social behavior when children watch non-aggressive movie. The other two hypotheses were rejected. The first and the last hypotheses as indicated above were consistent with previous studies' findings while the result of the hypotheses: males who watch an aggressive movie will be more aggressive than females who watch an aggressive movie; and males who do not watch an aggressive movie will be more aggressive than females who do not watch an aggressive were not consistent with previous findings. The question that can be posed here is: "why so many researches should be conducted in this area of study? Is it for the mere fun of conducting a research or to find out the causes of why violence or aggression is more seen in our society and to develop some useful techniques of preventing and controlling aggression or violence"? The answer definitely is the latter. The implications of the research are discussed below.

In the first place, the results of this study implies that at any given time children get access to playing violent computer games, watching violent TV programs such as violent cartoons and violent live models, viewing violent films on the internet, or seeing other peers and adults quarrelling, insulting and fighting one another, then it means that these children are also going to repeat these aggressive acts at one point in time in their lives. Children can be said to be very curious, observing and playful. Curious here means that the children will always want to find out more about the world. Children tend to pose more questions to parents or guardians about the things the children find difficult to understand. If parents and guardians refuse or do not answer to settle the children, the children will want to get answers from elsewhere and may get the answers from peers who may feed the children with wrong information. Children learn by observing what especially adults do. More so, children by their nature are very playful or like playing. Children enjoy playing more because games serve as entertainment and children learn a lot when playing with mates. By implication, these attributes of children can either be used positively or negatively. Unfortunately, these children are very curious and so watch aggressive acts displayed by other people either the aggressive acts are shown by the media or when children see the aggressive behavior among community members.

Secondly, related to the preceding paragraph, one can say that many countries in the world have Cinematography laws but the question is: "are they strictly enforced"? Your guess is as good as mine. Children get easy access to materials that have violent content, for example, violent video games, aggressive movies, violent computer games, to mention but a few. Countries that are not enforcing the Cinematography laws can be said to be sitting on a time bomb. These children are seen to be the future leaders of any country and if care is not taken these children will grow to become adults who will not have forgiving hearts to pardon people who offend them, thereby making adults very aggressive. Again, countries may be destroyed through civil wars, women often getting raped, children getting more abused, the rise in poverty, friends turning into enemies, and many people dying as a result of this social canker, aggression or violence in the

society. Ghana as a country has some conflict flash points like Yendi and Bawku in the northern region, some parts of the Volta region, and recently in Techiman and Tuobodom in the Brong Ahafo region all in the name of aggression. Lives and properties have been destroyed through aggression in these places. Northern Ghana in particular is seen as under developed because of inter and intra-tribal conflicts compared to southern Ghana. Some African countries like Somalia, Democratic Republic of Congo are using child soldiers which does not auger well. Wars should be condemned by all even when the wars are being fought by adults because of the wars' huge negative impact on both natural and artificial resources.

Thirdly, children of both sexes can be very aggressive when the occasion demands it. Normally, the male child is more aggressive than the female child but considering the results of this study indicating that there was no significant difference between males and females in exhibiting aggressive behavior, one can say that when both sexes are given the same motivation, guidance (training), and making aggressive weapons like guns available to both sexes aggressive behavior will be almost the same. In fact, there are some females who rob victim at the point of a gun, some wives killing husbands, to name a few. The women who kill or abuse husbands probably were abuse when the former were young and so then to do same in future. Significantly, most females have very abusive tongues. Abusive tongues here means that females can leash out hash words when the latter are frustrated or angered by other people or events. This behavior can be seen to be an aggressive behavior. More so, the prisons do not accommodate only male offenders but also female offenders. This means females may equal males in exhibiting aggressive behavior.

Lastly, there will be the need for government all over the world and indeed the general public to send unambiguous signals to viewers that aggression is not good, unacceptable and must be condemned. In other words, current high patronage of these products must be used to shape society for the better. Fortunately, Ghana has a Cinematography Act (Act 76 of 1961) which was amended in 1975 (National Redemption Council Decree-N.R.C.D.350). The Act among others covers censorship and classification of films by Wiafe-Akenten, (2009; cited in the Ghana International Journal of Mental Health). The government of Ghana and other stake holders like operators of cinemas, parents, guardians, teachers, non-governmental organizations who have the interest of children at heart should see to the enforcement of this law in order to save the children and the youth from getting so much influence from aggressive movies and other materials that contain some violence.

Recommendations for Future Studies

To begin with, there was no activity in the study that made some participants either frustrated or angered. Frustration and anger can easily trigger aggression in people as seen in some studies on aggression. This is another way to test for aggression in people. Nevertheless, frustration is not the only thing that can make a person aggress but there are other factors as explain by the General Affective Aggressive Model. Lastly, future researchers can choose a large sample size compared to what the present study used. This can make the generalization of the results from such studies more feasible or possible.

Summary

The study was conducted on the effects of aggressive movies on children's aggressive behavior. The researcher took a letter of introduction for the University of Ghana, department of psychology, and presented the letter to the head master of Korle Abansoro Anglican Primary School in the Koforidua municipality in the eastern region of Ghana. After the researcher had discussed with the head teacher and the primary one and two teachers what the research is all about, the researcher was given the permission to conduct the study. Forty (40) participants were randomly selected for the study. Participants who fall between the ages of 5 to 8 years were selected from primary one and two. The forty participants were pretested to check participants' aggressive levels. The forty (40) participants were grouped into experiment and control group with twenty (20) participants in each group. The experimental group was shown the aggressive movie and the control group was shown the non-aggressive movie. Both control and experimental group were post tested to find out the influence of the films on the participants. The researcher used aggressive behavioral checklist to measure the aggressive behavior of participants. Two of the hypotheses were confirmed while the other two were rejected as the results obtained by the study had shown. The participants were debriefed after the study and were advised on some of the ways to reduce aggression both at school and at home. The results and the implications of the results have been discussed in

the study.

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