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# **Publisher Citation**

Wiedeman, A. M., Black, J. A., Dolle, A. L., Finney, E. J., & Coker, K. L. (2015). Factors influencing the impact of aggressive and violent media on children and adolescents. Aggression and Violent Behavior, 25, Part A, 191-198, November-December 2015.

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Factors Influencing the Impact of Aggressive and Violent Media on Children and Adolescents

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# Acknowledgements

The authors would like to thank Matthew Ensing, Aaron Johnson, and Alan Jones for their contributions to this manuscript.

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MEDIA AGGRESSION AND CHILDREN

#### 2

#### **ABSTRACT**

The influence of aggressive and violent media on children and adolescents has been a topic of concern for several decades. Research on this topic has suggested that both short term and long term exposure to aggressive/violent media can negatively impact this population. The purpose of this literature review is to discuss relevant research on the topic and examine various factors that may impact the risk of being influenced by this type of media. These factors can include time spent viewing media, content of the media viewed, gender, age, psychological characteristics, family, and peers. Various theoretical approaches to explaining the influence of violent media are also examined, as well as directions for future research.

#### **KEY WORDS**

Media Violence Media Influence Television Adolescent Children Factors Influencing the Impact of Aggressive and Violent Media on Children and Adolescents

#### 1. Introduction

Although the relationship between media exposure and aggressive/violent behavior in viewers has been studied for nearly 50 years, opinions about the effects of media exposure remain varied, specifically among the general public (Anderson & Bushman, 2001; Anderson & Bushman, 2002). Increased media coverage of events, such as school shootings and school related violence, continue to fuel significant concern from the public (Anderson & Bushman, 2002; Bushman & Anderson, 2002; Hughes, 2004; Mayer & Leone, 2007; Schildkraut & Muschert, 2014). Subsequently, research has continued to examine the influence that aggression and violence in the media (television and movies) has on children and adolescents.

Research regarding the relationship between media exposure and aggression/violence is mixed. Although the effects of aggressive or violent media on children and adolescents may be immediately apparent (Krahé, 2012), it is important to also recognize that the effects of exposure to aggression and violence in the media may be gradual, cumulative, and have other significant adverse effects (Krahé, 2012). Research has shown that exposure to aggressive or violent media may result in increased levels of desensitization to violence, increased levels of defiance, decreased likeliness to engage in prosocial behavior, or problematic peer and parental relationships (Bushman & Anderson, 2009; Drabman & Thomas, 1974; Gadow & Sprafkin, 1993; Krahé, 2012; Ostrov, Gentile, & Crick, 2006).

Numerous studies have also found links between exposure to media aggression and violence and an individual's aggressive and violent behaviors, thoughts, and feelings (Anderson et al., 2003; Bandura, Ross, & Ross, 1963; Eron, 1982; Hogben, 1998; Huesmann, Moise-Titus, Podolski, & Eron, 2003; Josephson, 1987; Liebert & Baron, 1972; Ostrov, Gentile, & Crick,

2006; Richmond & Wilson, 2008; Wood, Wong, & Chachere, 1991). Experimental studies in laboratory and field settings, cross-sectional studies, longitudinal studies, and several meta-analyses have demonstrated links between exposure to media violence and aggressive, violent, and/or criminal behaviors and thoughts (Bushman & Anderson, 2002; Krahé, 2012).

This literature review examines research related to the influence of media aggression/violence on children and adolescents and discusses various factors that may impact the risk of being influenced by media aggression and violence. While research has focused on each of these factors, the factors are often studied individually. This literature review aims to include information regarding each factor, as well as directions for future research.

Aggression is often defined as a spectrum (Miller, 2004). Aggression is "any behavior directed toward another individual that is carried out with the [immediate] intent to cause harm" (Anderson & Bushman, 2002, p. 28). Violence is defined as "aggression that has extreme harm as its goal (e.g., death)" (Anderson & Bushman, 2002, p. 29). Moreover, aggressive and violent acts are found everywhere from movies/television shows featuring real people to movies/television shows featuring cartoon or animated characters (Anderson & Bushman, 2001; Krahé, 2012).

# 2. Theoretical Perspectives

## 2.1 General Aggression Model

The General Aggression Model (GAM) explains aggression through developmental, social-cognitive, and social learning theories. The GAM examines aggression by considering the influence of situational, individual, and biological variables (Anderson & Bushman, 2002; Miller, 2004; DeWall & Anderson, 2011). Social behavior is learned; therefore, it differs from individual to individual (Anderson & Bushman, 2002; DeWall, Anderson, & Bushman, 2011).

Despite these individual differences in social behavior, the GAM looks at an individual's behavior in the present moment, how the individual interprets events, beliefs about the events, characteristic ways of reacting to events, perceived abilities for reacting to events in dissimilar ways, and expectations concerning outcomes (Anderson & Bushman, 2002; DeWall & Anderson, 2011). These factors regarding social behavior are crucial to the GAM because it demonstrates how an individual reacts in an environment that may be familiar or unfamiliar to the individual (Anderson & Bushman, 2002; DeWall & Anderson, 2011).

According to the GAM, based on how individuals experience their environments and move through their life experiences, they develop different scripts and knowledge structures. Scripts allow an individual to organize information about how to behave in certain situations. For example, a restaurant script may include information about how to order from a menu, waiting for food to be brought to the table, and how to pay after a meal (DeWall & Anderson, 2011; Miller, 2004). Based on the interaction of the aforementioned variables and factors, different individuals may develop different scripts for certain scenarios. Knowledge structures include information that an individual uses to identify physical elements (e.g., tables, chairs, books), social events (e.g., insults, compliments), and beliefs about other people (DeWall & Anderson, 2011; Miller, 2004).

These scripts and knowledge structures tend to impact an individual's perceptions of the world (Anderson & Bushman, 2002; DeWall & Anderson, 2011). In a given situation, characteristics of an individual, their environment, and the scripts or knowledge they have acquired interact to influence the individual's current behavior. This interaction, and subsequent internal state, impacts how the individual chooses to respond to the current situation. A response may be thoughtful and decisive or it may be impulsive (DeWall & Anderson, 2011; Miller,

2004). The use of established scripts and knowledge structures may become automatic and may be related to an individual's mood (Anderson & Bushman, 2002). This experience and situation will further influence future knowledge, interactions, and decisions.

There are three different stages to observe when applying the GAM. The first stage involves the individual and situational inputs. This includes individual and situational factors that can increase or decrease an individual's aggression in any given situation (Anderson & Bushman, 2002). Examples of individual factors are personality traits, gender, beliefs, attitudes, and values (Anderson & Bushman, 2002). Examples of situational factors include aggressive cues, frustration, provocation, drugs, and incentives (Anderson & Bushman, 2002). In this stage, the GAM also includes biological factors, like hormones (Anderson & Bushman, 2002). The second stage involves an individual's current internal state. These internal states revolve around an individual's cognitions, affect, and arousal (Anderson & Bushman, 2002; DeWall et al., 2011). The third stage involves outcomes. Outcomes involve the appraisal of a situation and the individual's decision-making processes (Anderson & Bushman, 2002; DeWall et al., 2011). The appraisal component can be broken down into immediate or controlled (Anderson & Bushman, 2002). These processes are part of the decision-making, which will ultimately determine how the individual chooses to react to the situation (Anderson & Bushman, 2002; DeWall et al., 2011).

The GAM can be useful in understanding and explaining the effects of media aggression and violence on children and adolescents. As children age, their scripts and knowledge structures also develop. When a child is frequently exposed to aggressive or violent media, they will likely incorporate what they are watching into their scripts and knowledge structures, thus leading to the possibility of using this "knowledge" in a real life situation and responding in an aggressive manner (Carnagey & Anderson, 2003). For example, when watching media with violent content,

a child may develop scripts and knowledge related to what types of items can be used as weapons, how to use weapons, what outcomes can be expected from using those weapons, and what situations weapons can be used in (Gentile, Mathieson, & Crick, 2011). It is also possible that frequent exposure to aggressive or violent media could create an internal state with high levels of anger, therefore leading the child to respond in an aggressive or violent manner, even in response to non-threatening situations (Carnagey & Anderson, 2003).

Media violence is an example of a situational input in the GAM. Bushman and Anderson (2001) found that viewing this aggression can affect an individual's present internal state, which can be either physiological or psychological, and can subsequently affect their reactions, cognitively, affectively, and through arousal. A situational input is important because it affects an individual's internal state, and in turn, primes an individual to exhibit aggressiveness (Bushman & Anderson, 2001). Gentile et al. (2011) studied media violence within the framework of the GAM. The researchers found that after viewing media violence, children were more likely to be hostile, demonstrating behaviors such as hitting and punching, which demonstrate how situational inputs affect an individual's response and internal state (Bushman & Anderson, 2001; Gentile, Coyne, & Walsh, 2011).

# 2.2 Social Learning Theory

Social Learning Theory asserts that learning occurs through direct experience and observing the behavior of others (Bandura, 1977; Bandura, Ross, & Ross, 1961). Additionally, rewards or punishments following an individual's behavior may increase or decrease the likelihood that the individual will display that behavior again (Bandura, 1977; Bandura et al., 1961). Learning by example, or modeling, is an important aspect of Social Learning Theory. Modeling involves the demonstration of social cues and how to behave in various situations

(Bandura, 1977; Bandura et al., 1961). Social cues are important to the learning process and observational learning and modeling helps individuals understand them (Bandura, 1977; Bandura et al., 1961). The reinforcement component of Social Learning Theory helps lead to the retention of what has been learned through observation. Behaviors that are reinforced are likely repeated (Bandura, 1977; Bandura et al., 1961).

Social Learning Theory explains aggression by asserting that aggression is learned through modeling behaviors (Tedeschi & Felson, 1994). Bandura et al. (1963) conducted a study on the imitation of examples of film aggression. The researchers found that children who were exposed to aggressive film clips were more likely to have a strong aggressive response themselves (Bandura, Ross, & Ross, 1963). Bandura and colleagues (1963) included both human and cartoon aggressive scenes in the study, and children who viewed the aggressive scenes demonstrated twice as much aggression when compared to those who had not viewed the scenes. It is also important to note that children who viewed these aggressive scenes modeled their behavior after what they had watched; thus, television can be considered an influential source from which children learn social behaviors (Bandura et al., 1963). Despite the results of this study, it is important to remember that there is a difference between learning aggressive behaviors and imitating aggressive behaviors. The researchers asserted that these children may have imitated the behaviors rather than learned the behaviors (Bandura et al., 1963). Nonetheless, this study demonstrated that children were influenced by what they viewed, which is consistent with Social Learning Theory's suggestion that direct experience and observed behavior contributes to learning (Bandura 1977; Bandura et al., 1963).

Yang and Huesmann (2013) found that children whose families watched television during their leisure time were more likely to adopt the attitudes and values of those television

shows. Yang and Huesmann (2013) further argued that parents who repeatedly watched violent media with their children nearby could foster their children's acceptance of violence.

Furthermore, children were more likely to have positive attitudes toward television violence if their parents accepted the violence on television (Yang & Huesmann, 2013). Slife and Rychlak (1982) found that after watching a video clip of an adult being aggressive towards a toy, children imitated the aggressive acts of the adult. The authors argued that Social Learning Theory could explain the actions of the children, as the children had modeled what the adult depicted in the video clip.

# 3. Time Spent Viewing Media

Access to all types of media is much greater now than in previous decades (Bushman & Anderson, 2001). In 2005, youth ages 8 to 18 spent an average of 6 ½ hours per day utilizing various forms of media (including television, music, computers, video games, and movies). However, in 2010, this same age group spent an average of 8 ½ hours per day utilizing various forms of media (Rideout, Foehr, & Roberts, 2010). Nearly all families with children own at least one television set, and nearly 80% of those families subscribe to cable television (Josephson, 2003). Many children and adolescents also have a television in their bedroom, which is associated with increased television viewing (Haines et al., 2013; Josephson, 2003). Additionally, the number of youth in this age group who own their own cell phone increased approximately 25% between 2005 and 2010. Between 2005 and 2010, the number of youth who own their own laptop increased approximately 17% and the number of youth who had Internet access in their bedrooms increased approximately 13% (Rideout et al., 2010).

Thus, the average American youth spends upwards of forty hours per week using media of some variety (Bushman & Anderson, 2001; Rideout, Foehr, & Roberts, 2010). It has been

estimated that nearly half of this time is spent watching television shows or movies (Bushman & Anderson, 2001). Additionally, the amount of violence in television shows has increased over the years, as approximately 60% of television shows contain violence and it has been estimated that children will have viewed around 8,000 murders and around 100,000 other violent acts (including assault and rape) by the time they reach middle school (Bushman & Anderson, 2001; Erwin & Morton, 2008; Josephson, 2003).

This increased access to various forms of media also means that children and adolescents have increased access to violent media via televisions, smart phones, or computers (Bushman & Anderson, 2001). Again, due to the greater availability of various forms of media, these populations can access violent media any time of the day and often without parental supervision (Krahé, 2012). This rise in the access to media with aggressive or violent content can lead to children and adolescents spending even more time viewing this type of media (Bushman & Anderson, 2001).

Several studies have demonstrated both short and long-term effects of viewing aggressive or violent media. Research has shown that a child or adolescent's aggressive behavior can increase after viewing violent media even for a brief period of time; however, the effects of a single viewing of violent media likely subside quickly (Anderson & Bushman, 2001; Bushman & Anderson, 2001; Josephson, 2003; Liebert & Baron, 1972). Libert and Baron (1972) found that children who watched an approximately three minute long video clip of a violent movie scene were more likely to behave aggressively during subsequent play time than children who watched a non-violent video clip. Additionally, the children who watched the violent video clip were more likely to choose to administer an electric shock to a peer than to help the peer when given the choice (Liebert & Baron, 1972).

Prolonged or repeated exposure to violent media has been found to result in individual changes that more closely resemble a personality trait of aggressiveness (Anderson & Bushman, 2001; Anderson & Murphy, 2003; Bushman & Anderson, 2001; Richmond & Wilson, 2008). The repeated exposure to violent media allows the viewer to develop over-learned and inaccurate attitudes about violence, which can lead to aggressive and violent behaviors that occur impulsively, thus giving the appearance of a personality trait (Richmond & Wilson, 2008). Research has also demonstrated long term effects of violent media exposure on children and adolescents even when variables such as parenting style and discipline practices, family socioeconomic status, parental aggressiveness, and parental education are controlled (Josephson, 2003; Murray, 2008).

Similarly, Richmond and Wilson (2008) described this process of developing cognitive distortions, or inaccurate thoughts or beliefs, through repeated exposure to aggressive or violent media as moral disengagement. Richmond and Wilson (2008) stated that individuals who repeatedly viewed aggressive or violent media developed inaccurate beliefs about what they are viewing. Through these inaccurate beliefs, people can restructure their views of moral or humane conduct, which allows them to incorporate aggressive or violent behavior into what they now qualify as moral or acceptable. Thus, this process of increased exposure to violent media can contribute to a stronger tendency to disengage from moral controls, resulting in higher levels of aggression (Richmond & Wilson, 2008).

Exposure to aggressive or violent media, whether brief or prolonged, cannot only increase aggressive and violent behaviors among children and adolescents, but it can also facilitate desensitization to violence and the suffering of others. This desensitization, or numbing, can lead to a decreased level in helpfulness when others are in need (Bushman &

Anderson, 2009). After repeatedly viewing aggressive or violent media, there can be a decrease in, or even elimination of, "cognitive, emotional, physiological, and ultimately behavioral responses to a stimulus," such as the suffering of others (Funk, Baldacci, Pasold, & Baumgardner, 2003; Krahé, 2012, p. 339). Drabman and Thomas (1974, 1976) found that, after viewing a film with aggressive content, children who witnessed an altercation among their peers were less likely to seek help from an adult than those children who did not view the film. The researchers hypothesized that this may be due, in part, to desensitization to violence (Drabman & Thomas, 1974).

#### 4. Content of Media Viewed

Early research and commentary regarding violence in video games and media debated whether exposure to such content "purged [individuals] of hostile impulses or prepared [them] for future delinquency" (Ellison, 2012, p. 520). Subsequent research has found that exposure to violent video games and media can increase an individual's propensity for violent or aggressive behavior (Anderson & Bushman, 2001; Ellison, 2012).

As previously mentioned, approximately 60% of television programs contain violence; similarly, approximately 90% of movies contain some violence (Josephson, 2003; Potts & Belden, 2009). Additionally, only 4% of those programs include an antiviolence component or message (Josephson, 2003). To elaborate further, approximately 44% of perpetrators of violence on television have attractive qualities, approximately 40% of violent scenes on television utilize humor, and approximately 75% of violent scenes on television display no immediate punishment (Josephson, 2003). Yokota and Thompson (2004) examined 74 children's movies (rated G for all audiences) and found that in approximately 50% of the movies violence was rewarded,

approximately 99% of the violent scenes included the use of a weapon, and violence was frequently used as a problem solving tactic.

Aggression and violence occur in both animated television shows/movies and television shows/movies with real people. Despite the fact that even young children tend to be able to distinguish cartoon programs from the real world; cartoons containing violence can still impact children's attitudes towards aggression (Bjorkqvist & Lagerspetz, 1985; Signorielli & Gerbner, 1995). Children exposed to cartoons with violent content can develop beliefs that aggression and/or violence is permissible (Bjorkqvist & Lagerspetz, 1985). Violence in the context of cartoons may appear to have a greater element of "fun," thus reinforcing the belief that violence is permissible (Mussen & Rutherford, 1961). Similarly, several studies have also found that even brief exposure to cartoons with violent content can increase a child's likelihood of exhibiting aggressive behaviors (Bandura et al., 1963; Ellis & Sekyra, 1972; Mussen & Rutherford, 1961).

Furthermore, Bandura and colleagues (1963) found that both children exposed to video of cartoon violence and children exposed to video of human violence exhibited higher levels of aggression than children who were not exposed to videos of violence. This study examined the responses of frustrated children following the viewing of violent or non-violent videos. The children who viewed violent videos were more likely to become aggressive when resolving their frustration (Bandura et al., 1963).

Nathanson and Cantor (2000) exposed children to video clips of violent cartoons and instructed one group of the children to focus on the victim, while the other group focused on the character performing the violent acts. The researchers found that the children who focused on the victim exhibited less aggression afterwards when compared to the group of children who focused on the violent character (Nathanson & Cantor, 2000).

#### 5. Gender

Little research has been done regarding the effects of media violence and aggression on females (Anderson & Murphy, 2003). This may be due to lower perceived levels of interest in violent media among females (Anderson & Murphy, 2003) or the overall greater likelihood of males to engage in violent behavior (Connor, Steingard, Anderson, & Melloni, 2003; Feder, Levant, & Dean, 2010). However, existing research has demonstrated gender differences in the effects of violent media exposure on aggression and violence (Ostrov, Gentile, & Crick, 2006). Ostrov et al. (2006) found that when exposed to violent media, male children exhibited increases in physical and verbal aggression while female children exhibited increases in verbal aggression. There also tend to be fewer physically aggressive females on television, which may decrease the number of characters that young females want to model their behavior after (Eron, Huesmann, Lefkowitz, & Walder, 1972).

Gender differences exist during adolescence in regard to the type of media used (Friedlander, Connolly, Pepler, & Craig, 2013). While television is watched at similar rates for male and female adolescents, males tend to use video games more than females, and females tend to use audio and print media more than males (Friedlander et al., 2013). Additionally, adolescent males tend to view violent media more frequently than adolescent females (Comstock & Paik, 1991; Friedlander et al., 2013, Yang & Huesmann, 2013). Slater et al. (2003) mentioned that adolescent males may be more easily influenced by aggressive or violent media due to the fact that they generally have "less social disinhibition for aggressiveness" (p. 731).

# 6. Age

In today's society, children are often exposed and pay attention to television and movies at a very young age. Beginning around the ages of 2 to 5, children begin to make connections

between what they are viewing on television and what they experience in the real world (Wright, Hutson, Reitz, & Piemyat, 1994). Research found that 2-year-old children had difficulty distinguishing between what was happening solely on the television and what was happening in real life. Additionally, 3 to 4-year-old children tended to believe that anything on television was fictional, while 5-year-old children began to differentiate between fictional television and factual news reports (Wright et al., 1994). This demonstrates that understanding of television programming and the nature of the programs comes from both cognitive developments associated with developmental milestones and personal experience with different types of programs (Wright et al., 1994).

Similarly, children in this preschool age group are often unable to view a television show/movie as a continuous story; rather, they view it as a series of separate events without a beginning, middle, or end (Bjorkqvist & Lagerspetz, 1985; Noble, 1975). Thus, this age group is likely to view violent scenes as isolated events, unrelated to a story line, and may be impressed by the behaviors, especially if they exhibit aggressive tendencies themselves (Bjorkqvist & Lagerspetz, 1985). This may lead to the early development of beliefs related to the acceptability of aggression/violence and the imitation of these seemingly isolated behaviors (Bjorkqvist & Lagerspetz, 1985; Ostrov, Gentile, & Crick, 2006). When witnessing violence on television, this young age group is also less likely to be able to distinguish reality from fantasy, which can lead to distorted perceptions of reality and the world around them (Erwin & Morton, 2008). Children in this age group also engage in role-play or imaginative play, which can be "negatively impacted" by exposure to media violence (Erwin & Morton, 2008, p. 107). Children may imitate what they view on television because they cannot understand the implications of their actions or distinguish between reality and television (Erwin & Morton, 2008).

Media can have influential effects on individuals of any age, which can subsequently lead to imitation behaviors among media consumers. However, younger children are most likely to be influenced by what they view, and when they frequently imitate the aggressive behaviors that they see, it increases the likelihood that these children will begin to view such behavior as acceptable and normal (Krahé, 2012).

Additionally, children and adolescents are continually developing and creating their "moral scaffolding," or sense of right and wrong, and exposure to media violence can negatively impact their development (Funk et al., 2003). One of the best predictors of violence in older adolescence or young adulthood is a history of violence during childhood (Anderson et al., 2003). If children are exposed to violent media at a young age, while they are going through crucial developmental periods, they may be at a greater risk to exhibit aggressive behavior, which may, in turn, increase their risk of being aggressive later in life (Anderson et al., 2003).

# 7. Psychological Characteristics

# 7.1 Aggressiveness

Individuals who, by nature, are generally more aggressive are likely to already have stronger established cognitive networks associated with aggression and violence (Saleem, Anderson, & Gentile, 2012). Research has shown that individuals tend to seek out media that meets their psychological needs, and therefore, individuals with a more aggressive disposition may be more likely to seek out media with aggressive or violent content (Bjorkqvist & Lagerspetz, 1985; Bushman & Anderson, 2001; Eron, 1982; Richmond & Wilson, 2003; Slater et al., 2003). Slater et al. (2003) described this relationship as a downward spiral, wherein the media with violent content reinforces aggressive or violent behavior and aggressive or violent behavior reinforces the desire to seek out media with violent content.

It has also been suggested that aggressive children may seek out television shows/movies with aggressive or violent content because they relate to the characters (real or animated) on a personal level and, thus, gain a feeling of being understood (Bjorkqvist & Lagerspetz, 1985; Yang & Huesmann, 2013). Furthermore, identifying with a violent character, can lead children to imitate the character's behavior and believe that their aggression is acceptable, subsequently increasing their aggressive behavior (Bjorkqvist & Lagerspetz, 1985; Josephson, 2003).

Martin (2007) analyzed fourth grade children's attitudes towards superheroes. It was found that children may learn moral values from superheroes, and, thus, superheroes can serve as a valuable tool to assist in teaching children how to interact positively with others (Martin, 2007). Gender differences were examined, and it was found that male children identified more with superheroes than female children did. This is likely due to the high popularity of male superheroes, such as Batman, and less popular female superheroes, such as Wonder Woman (Martin, 2007).

Although children and adolescents who are not generally aggressive can still be negatively influenced by violent media, research has shown that children and adolescents who are generally more aggressive tend to be more strongly influenced by exposure to violent media (Josephson, 2003; Leyens, Camino, Park, & Berkowitz, 1975). Leyens et al. (1975) found that adolescent boys who viewed violent films for five nights in a row were more likely to engage in physical altercations with one another than the group of boys who watched non-violent films during the five nights. Additionally, boys who had a more aggressive disposition to begin with displayed even higher rates of engaging in physical altercations (Josephson, 2003; Leyens et al., 1975).

## 7.2 Intelligence

Little research has examined if a child's level of intelligence has an impact on his/her risk of being negatively influenced by exposure to violent media (Josephson, 2003). Studies have shown that in comparison to children of higher intelligence, children of lower intelligence are more likely to watch greater amounts of television, thus exposing them to more violent media (Eron, 1982; Josephson, 2003) which may result in them behaving more aggressively when frustrated (Eron, 1982; Josephson, 2003). This information would appear to suggest that children of lower intelligence may be more at risk of being negatively influenced by violent media. However, children of higher intelligence may be more likely to learn quickly through observational learning, thus increasing this population's risk of being influenced by violent media (Josephson, 2003). The body of research regarding this factor has not yet provided conclusive results in either direction (Josephson, 2003).

#### 7.3 Mental Illness

The effect of media violence on children and adolescents who have been diagnosed with mental illness has not been studied in depth (Erwin & Morton, 2008). However, a study conducted by Grimes et al. (1997) found that adolescents with Disruptive Behavior Disorders (DBD) who were exposed to clips of media violence tended to have a lower emotional response to the victim's suffering than did adolescents without DBD. Another study examined the effects of media violence on adolescents "who had been classified by the school district as emotionally disturbed or learning disabled, and seemed to fit the criteria for DBD" (Erwin & Morton, 2008, p. 108). It was found that these adolescents generally viewed more violent media, tended to favor aggressive characters within this media, and had a lower understanding of the unrealistic nature of the media (Erwin & Morton, 2008; Gadow & Sprafkin, 1993). Subsequently, children and

adolescents with various emotional, learning, or behavioral disorders may be at a greater risk for being negatively influenced by violent media (Gadow & Sprafkin, 1993).

# 8. Family

In 2010, less than half of surveyed youth ages 8 to 18 reported that their parents set rules about what they were not allowed to watch on television (Rideout, Foehr, & Roberts, 2010; Walsh & Gentile, 2001). Additionally, children and adolescents who favored television shows with adult content or violence were likely influenced by the television viewing preferences of their parents (Wright et al., 1994; Yang & Huesmann, 2013). When parents watch media with violent themes in the presence of their children, they likely convey the message that they condone or approve of violence (Nathanson, 2001). Nathanson (1999) found that when a parent limited a child's exposure to violent programming and facilitated a discussion about the wrongfulness of the violence, there were lower reported rates of children's aggressive tendencies than among children whose parents did not limit exposure or discuss the violence. While parents do not always have control over the programming that their children view, the effects of such viewing may be mitigated by parental discussion of the program content or parental monitoring (Gentile & Bushman, 2012; Nathanson, 1999).

Research has also shown that children from "lower [socioeconomic status] SES families, less educated families, and minority families" consume violent media at higher rates (Comstock & Paik, 1991; Yang & Huesmann, 2013, p. 359). One explanation for these results is that television and movies are less expensive forms of entertainment (Comstock & Paik, 1991; Yang & Huesmann, 2013). Despite this, there is little research suggesting that socioeconomic status significantly impacts a child or adolescent's risk of being influenced by violent media (Josephson, 2003).

Miller et al. (2012) found that exposure to violent media was a factor in increasing the likelihood that children would be aggressive towards their siblings. This is likely due to children viewing violent media with their siblings and/or being in close proximity to them after viewing the violent media, which is the time when aggressiveness is increased (Miller, Grabell, Thomas, Bermann, & Graham-Bermann, 2012).

#### 9. Peers

As children age, they are less influenced by their caregivers and more influenced by their peers or social group (Tarantino, Tully, Garcia, & South, 2014). Between the ages of 8 and 11, children begin to develop more meaningful relationships with peers (Kail & Cavanaugh, 2009). By developing this sense of intimacy or closeness with peers, children no longer feel the need to rely on parents, siblings, or close relatives when they are in need of social support or guidance.

While some parents may not allow their children to view aggressive or violent media in their home, this does not mean that all families operate this way. With the increased amount of time spent with peers during adolescence, there is an increased likelihood that adolescents will spend more time alone with their peers or at the homes of their peers (Masten, Telzer, Fuligni, Lieberman, & Eisenberger, 2012). Thus, even individuals who do not view aggressive or violent media in their own home may be exposed to this type of media in the presence of their peers or in the homes of their peers. While parents often cannot control what their children view while with peers, parents can help attenuate any negative peer or media influences watched with peers by preparing their child and discussing, as previously mentioned, the implications of violence (Nathanson, 1999).

However, not all children and adolescents develop close peer relationships. Eron (1982) found that aggressive children were less popular among their peers than non-aggressive children.

Thus, these children may spend more time watching television, and likely violent programming, because their social interactions are not satisfying (Eron, 1982). This can lead to a cyclical effect wherein the violent television programs reinforce the child's existing aggressive behaviors (Eron, 1982; Slater et al., 2003).

## 10. Implications

While rating systems for television programs and movies do exist, they may not contain enough information about the program to be helpful to parents (Krahé, 2012). The Motion Picture Association of America (MPAA) was established in 1968 and has become the standard rating system used by media outlets to determine how explicit the content of a film may be (Walsh & Gentile, 2001). The MPAA uses five ratings to categorize films for appropriate audiences: general audience (G), parental guidance suggested (PG), parents strongly cautioned (PG-13), restricted (R), and no one under 18 permitted (NC-17) (Walsh & Gentile, 2001). Starting in 1993, the MPAA added additional information to the ratings to serve as a brief justification (Potts & Belden, 2009). For example, a film rated PG-13 may include a description of, "For some violence, brief nudity, and harsh language," (Potts & Belden, 2009). These MPAA ratings are assigned by the Classification and Rating Administration (CARA), which consists of MPAA administrators and 8-15 movie raters employed by the MPAA (Potts & Belden, 2009). In order to qualify as a rater, an individual must have parenting experience, intellectual maturity, and the ability to put themselves in the role of an average American parent (Potts & Belden, 2009). However, the rating process appears to be very subjective in nature and without many specific guidelines (Potts & Belden, 2009). Additionally, in recent years, the amount of adult content (e.g., violence and sex) in G, PG, and PG-13 movies has increased, although it is not

known if this is related to policy changes or changes in what raters find explicit (Potts & Belden, 2009; Thompson & Yokota, 2004; Yokota & Thompson, 2000).

The television industry has developed a similar rating system to classify programs into age-based categories. The six television ratings consist of: all children (TV-Y), older children (TV-Y7), general audience (G), parental guidance suggested (TV-PG), parents strongly cautioned (TV-14), and mature audiences only (TV-MA) (Walsh & Gentile, 2001). Additionally, the television industry has added further ratings, or content descriptors (Walsh & Gentile, 2001). These content descriptors include: fantasy violence (FV), language (L), violence (V), sexual situations (S), and sexual dialogue (SD) (Walsh & Gentile, 2001). Despite these rating systems, content intended for older viewers (e.g. violence and sex) has also started to appear in television programs for younger viewers (Walsh & Gentile, 2001). Rideout (2004) discovered that only 12% of parents knew what the FV label stood for; and 8% of parents believed it stood for 'family viewing.'

Additionally, the use of these rating systems is voluntary, leaving some films and television programs to be un-rated (Walsh & Gentile, 2001). In a study conducted by Walsh and Gentile (2001), less than half of youth ages 10 to 17 reported that their parents utilized the television rating system. Furthermore, an increasing number of children and adolescents have televisions in their bedrooms, which further prevents parents from utilizing the rating system (Walsh & Gentile, 2001). However, it is known that parental limits on media consumption and discussion about media content can be beneficial in mitigating any negative effects associated with media consumption, specifically violent media (Nathanson, 1999; Walsh & Gentile, 2001).

Linders and Gentile (2009) examined the validity of the television rating system. They found that, overall, the television rating system does not look at the amount of aggression within

a television show, and does not take into account the different types of aggression, such as verbal and indirect (Linders & Gentile, 2009). Their results indicated that there are often higher levels of aggression in children's programming than in adult programming; additionally, programs included in the TV-Y7 rating contained the highest levels of violence when compared to any other ratings (Linders & Gentile, 2009).

Additionally, the media often fails to convey the message that violence is immoral, should be punished, or that "crime does not pay," and without parental intervention, children and adolescents may grow to believe that is violence is acceptable (Signorielli, 2003, p. 55). This has led to the suggestion that medical physicians should incorporate questions and suggestions related to media consumption when talking to children/adolescents and their parents (Walsh & Gentile, 2001). Other suggestions for mitigating negative effects associated with viewing violent media include restricting children and adolescents' access to violent media, promoting recognition and understanding of media violence and its potentially negative effects, and encouraging youth to engage in activities other than using various forms of media (Josephson, 2003; Ukoha, 2013).

Although limiting children and adolescents' access to violent media appears to be one of the most commonly supported methods of decreasing the influence the media has on this population, it is not without complications (Potts & Belden, 2009). Legal restrictions regarding censorship of violent media tend to conflict with constitutional guarantees and, as a result, there are few legal restrictions on the content of media (Potts & Belden, 2009). Instead, the television and movie industries provide content ratings, which leave the responsibility of restricting access to media to parents, which, as previously mentioned, also has its own complications (Potts & Belden, 2009). Parents infrequently utilize the rating systems in place, adult content is becoming

more prevalent in programming for younger viewers, and younger viewers are gaining access to media that is rated R and intended for adult viewers (Potts & Belden, 2009). Young viewers may gain access to this content by bypassing movie theatre rules, renting from video stores, or through pay-per-view access at home (Potts & Belden, 2009; Walsh & Gentile, 2001).

Another popular method of decreasing the influence of media is to encourage youth to engage in activities other than watching television (Haines et al., 2013). Parents are encouraged to find alternative activities in the home, such as reading or playing games, and to schedule time that can be used for watching television (Haines et al., 2013). Additionally, parents are encouraged to develop family routines that include less time spent watching television and to find ways to manage challenging times during the day without the use of television (Haines et al., 2013).

#### 11. Discussion

Although the topic of media aggression/violence and its affect on viewers has been studied for nearly 50 years, there are still areas that require further research (Anderson & Bushman, 2002). As previously mentioned, much of the research has been focused on male viewers. It was once thought that the effects of violent media on males was a more significant area of study than the effects of violent media on females; however, more recent research is finding that violent media has a significant impact on females as well (Eron, 1982). Thus, future research should also take gender differences into account (Anderson & Murphy, 2003).

Additionally, little research has focused on how media violence affects children and adolescents with mental illnesses (Erwin & Morton, 2008). Children and adolescents with emotional disturbances, learning disorders, and behavioral disorders may be especially vulnerable to the negative effects of violent media, thus making this population a significant

subject for future research (Gadow & Sprafkin, 1993). Research regarding this population should also examine potential benefits associated with educating children about the fictional nature of many television shows and movies (Gadow & Sprafkin, 1993). Similarly, additional research regarding intelligence levels among children and adolescents exposed to violent media would also be beneficial, as existing research does not provide a clear understanding of potential relationships (Josephson, 2003).

There has also been very limited research regarding the effects of news reports of violent events and subsequent "copycat" behaviors (Josephson, 2003). Existing studies of this nature tend to focus on the level of violence in a specific community after a publicized violent event (Josephson, 2003). The results of the existing research are mixed; some studies support a "contagion effect," but also have methodological complications (Josephson, 2003). Future research should examine the impact of news reports containing violence on individual children and adolescents, in addition to communities.

Longitudinal studies appear to be one of the best methods for studying the effects of exposure to media violence on children and adolescents; however, these types of studies have not yet been amply conducted (Josephson, 2003). Longitudinal studies that begin collecting data from children at an early age allow for better insight into whether aggressive behavior is a direct result of viewing violent media and other factors that may predispose children to act aggressively (Josephson, 2003).

Future research should also examine effective intervention strategies. It is known that parents can be an important component to mitigating potentially negative effects of violent media (Nathanson, 1999). However, more information regarding parents' attitudes towards their children's television viewing preferences would be beneficial when deciding how to effectively

engage parents (Haines et al., 2013). Similarly, additional research should also be conducted regarding the effectiveness of various means of educating parents about the risks associated with heavy media consumption and subsequent reduction techniques (Haines et al., 2013).

While research has continually demonstrated that exposure to violent media can have both short and long-term effects on children and adolescents, it is important to remember that media exposure is not the only factor to consider when assessing aggression (Bandura et al., 1963; Gentile & Bushman, 2012; Hogben, 1998; Huesmann et al., 2003; Libert & Baron, 1972; Ostrov, Gentile, & Crick, 2006; Richmond & Wilson, 2008; Wood, Wong, & Chachere, 1991). Exposure to violent media is an important factor to consider; however, other factors, such as past aggressive behavior, being the victim of aggressive behavior, and exposure to community violence should also be examined (Gentile & Bushman, 2012; Miller et al., 2012).

## References

Anderson, C. A., & Bushman, B. J. (2001). Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and prosocial behavior: A meta-analytic review of the scientific literature. *Psychological Science*, 12,

- 353-359.
- Anderson, C. A., & Bushman, B. J. (2002). The effects of media violence on society. *Science*, 295(5564).
- Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual Review Of Psychology*, 53, 1-27.
- Anderson, C. A., Berkowitz, L., Donnerstein, E., Huesmann, L. R., Johnson, J. D., Linz, D., Malamuth, N. M., & Wartella, E. (2003). The influence of media violence on youth. *Psychological Science in the Public Interest, 4*, 81-110.
- Anderson, C. A., & Murphy, C. R. (2003). Violent video games and aggressive behavior in young women. *Aggressive Behavior*, *29*, 423-429.
- Bandura, A. (1977). Social learning theory. New York: General Learning Press.
- Bandura, A. A., Ross, D., & Ross, S. A. (1961). Transmission of aggression through imitation of aggressive models. *The Journal of Abnormal And Social Psychology*, *63*(3), 575-582. doi:10.1037/h0045925
- Bandura, A., Ross, D., & Ross, S. A. (1963). Imitation of film-mediated aggressive models. *The Journal of Abnormal And Social Psychology*, 66, 3-11. doi:10.1037/h0048687
- Bjorkqvist, K., & Lagerspetz, K. (1985). Children's experience of three types of cartoon at two age levels. *International Journal of Psychology*, 20, 77-93.
- Bushman, B. J., & Anderson, C. A. (2001). Media violence and the American public: Scientific facts versus media misinformation. *American Psychologist*, *56*, 477-489. doi:10.1037//0003-066X.56.6-7.477
- Bushman, B. J., & Anderson, C. A. (2002). Violent video games and hostile expectations: A

- test of the general aggression model. *Personality and Social Psychology Bulletin, 28,* 1679-1686. doi:10.1177/014616702237649
- Bushman, B. J., & Anderson, C. A. (2009). Comfortably numb: Desensitizing effects of violent media on helping others. *Psychological Science*, *20*, 273-277.
- Carnagey, N. L., & Anderson, C. A. (2003). Theory in the study of media violence: The general aggression model. In D.A. Gentile (Ed.), *Media violence and children: A guide for parents* (pg. 95-105). Westport, Connecticut: Praeger.
- Comstock, G. A., & Paik, H. (1991). *Television and the American child*. San Diego, CA: Academic Press.
- Connor, D. F., Steingard, R. J., Anderson, J. J., & Melloni Jr., R. H. (2003). Gender differences in reactive and proactive aggression. *Child Psychiatry and Human Development, 33*, 279-294.
- Coyne, S. M., Linder, J. R., Nelson, D. A., & Gentile, D. A. (2012). "Frenemies, fraitors, and mean-em-aitors": Priming effects of viewing physical and relational aggression in the media on women. *Aggressive Behavior*, *38*, 141-149.
- Coyne, S. M., Nelson, D. A., Lawton, F., Haslam, S., Rooney, L., Titterington, L., Trainor, H., Remnant, J., & Ogunlaja, L. (2008). The effects of viewing physical and relational aggression in the media: Evidence for a cross-over effect. *Journal of Experimental Social Psychology*, 44, 1551-1554.
- DeWall, C., & Anderson, C. A. (2011). The general aggression model. In P. R. Shaver, M.
  Mikulincer (Eds.), *Human aggression and violence: Causes, manifestations, and consequences* (pp. 15-33). Washington, DC, US: American Psychological Association.
  doi:10.1037/12346-001

- DeWall, C., Anderson, C. A., & Bushman, B. J. (2011). The general aggression model: Theoretical extensions to violence. *Psychology of Violence*, *1*(3), 245-258. doi:10.1037/a0023842
- Drabman, R. S., & Thomas, M. H. (1974). Does media violence increase children's tolerance of real-life aggression? *Developmental Psychology*, *10*, 418-421.
- Drabman, R. S., & Thomas, M. H. (1976). Does watching violence on television cause apathy? *Pediatrics*, *57*, 329-331.
- Ellis, G. T., & Sekyra, F. (1972). The effect of aggressive cartoons on the behavior of first grade children. *The Journal of Psychology*, *81*, 37-43.
- Ellison, G. C. (2012). Fantasy as addition to reality? An exploration of fantasy aggression and fantasy aggrace-ion in violent media. *Pastoral Psychology*, *61*, 513-530.
- Eron, L. D. (1982). Parent-child interaction, television violence, and aggression of children.

  \*American Psychologist, 37, 197-211.
- Eron, L. D., Huesmann, L. R., Lefkowitz, M. M., & Walder, L. O. (1972). Does television violence cause aggression? *American Psychologist*, 253-263.
- Erwin, E. J., & Morton, N. (2008). Exposure to media violence and young children with and without disabilities: Powerful opportunities for family-professional partnerships.

  Early Childhood Education Journal, 36, 105-112. doi:10.1007/s10643-008-0276-x
- Feder, J., Levant, R. F., & Dean, J. (2010). Boys and violence: A gender-informed analysis.

  \*Psychology of Violence, 1, 3-12.
- Friedlander, L. J., Connolly, J. A., Pepler, D. J., & Craig, W. M. Extensiveness and persistence of aggressive media exposure as longitudinal risk factors for teen dating violence.

  \*Psychology of Violence, 3, 310-322.

- Funk, J. B., Baldacci, H. B., Pasold, T., & Baumgardner, J. (2003). Violence exposure in reallife, video games, television, movies, and the internet: Is there desensitization? *Journal* of Adolescence, 27, 23-39.
- Gadow, K. D., & Sprafkin, J. (1993). Television 'violence' and children with emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders*, *1*, 54-63. doi:10.1177/106342669300100108
- Gentile, D. A., & Bushman, B. J. (2012). Reassessing media violence effects using a risk and resiliance approach to understanding aggression. *Psychology of Popular Media Culture, 1*, 138-151. doi:10.1037/a0028481
- Gentile, D. A., Coyne, S., & Walsh, D. A. (2011). Media violence, physical aggression, and relational aggression in school age children: A short-term longitudinal study.

  \*Aggressive Behavior, 37, 193-206.
- Gentile, D. A., Mathieson, L. C., & Crick, N. R. (2011). Media violence associations with the form and function of aggression among elementary school children. *Social Development*, 20, 213-232. doi:10.1111/j.1467-9507.2010.00577.x
- Grimes, T., Vernberg, E., & Cathers, T. (1997). Emotionally disturbed children's reactions to violent media segments. *Journal of Health Communication*, *2*, 157-168.
- Haines, J., O'Brien, A., McDonald, J., Goldman, R. E., Evans-Schmidt, M., Price, S., King, S.,
  Sherry, B., & Taveras, E. M. (2013). Television viewing and televisions in bedrooms:
  Perceptions of racial/ethnic minority parents of young children. *Journal of Child and Family Studies*, 22, 749-756. doi:10.1007/s10826-012-9629-6
- Hogben, M. (1998). Factors moderating the effect of televised aggression on viewer behavior.

  \*Communication Research, 25, 220-247.

- Huesmann, L. R., Moise, J., Podolski, C., & Eron, L. (2003). Longitudinal relations between children's exposure to television violence and their later aggressive and violent behavior in young adulthood: 1977-1992. *Developmental Psychology*, 39, 201-221. doi:10.1037/0012-1649.39.2.201
- Hughes, M. (2004). How schools of social work perceive and are responding to juvenile violence: A national survey. *Social Work Education*, *23*, 63-75
- Josephson, W. L. (1987). Television violence and children's aggression: Testing the priming, social script, and disinhibition predictions. *Journal of Personality and Social Psychology*, 53, 882-890.
- Kail, R. V., & Cavanaugh, J. C. (2009). *Human development: A life-span view*. (5th ed.). Belmont, CA: Wadsworth, Cengage Leanring.
- Krahé, B. (2012). Report of the media violence commission. *Aggressive Behavior*, *38*, 335-341. doi:10.1002/ab.21443
- Leyens, J. P., Camino, L., Parke, R. D., & Berkowtiz, L. (1975). Effects of movie violence on aggression in a field setting as a function of group dominance and cohesion. *Journal of Personality and Social Psychology*, 32, 346-360.
- Linder, J. R., & Gentile, D. A. (2009). Is the television rating system valid? Indirect, verbal, and physical aggression in programs viewed by fifth grade girls and associations with behavior. *Journal of applied developmental psychology*, 30(3), 286-297.
- Martin, J. F. (2007). Children's attitudes toward superheroes as a potential indicator of their moral understanding. *Journal Of Moral Education*, *36*(2), 239-250.
- Masten, C. L., Telzer, E. H., Fuligni, A. J., Lieberman, M. D., & Eisenberger, N. I. (2012).

  Time spent with friends in adolescence relates to less neural sensitivity to later peer

- rejection. Social Cognitive & Affective Neuroscience, 7, 106-114.
- Mayer, M. J., & Leone, P. E. (2007). School violence and disruption revisited: Equity and safety in the school house. *Focus On Exceptional Children, 40,* 1-27.
- Miller, A. G. (2004). The social psychology of good and evil. New York: The Guilford Press.
- Miller, L. E., Grabell, A., Thomas, A., Bermann, E., & Graham-Bermann, S. A. (2012). The associations between community violence, television violence, intimate partner violence, parent-child aggression, and aggression in sibling relationships of a sample of preschoolers. *Psychology of Violence*, *2*, 165-178.
- Mounts, N. S., & Steinberg, L. (1995). An ecological analysis of peer influence on adolescent grade point average and drug use. *Developmental Psychology*, *31*, 915-922.
- Murray, J. P. (2008). Media violence: The effects are both real and strong. *American Behavioral Scientist*, *51*, 1212-1230. doi: 10.1177/0002764207312018
- Mussen, P., & Rutherford, E. (1961). Effects of aggressive cartoons on children's aggressive play. *Journal of Abnormal and Social Psychology*, *62*, 461-464.
- Nathanson, A. I. (1999). Identifying and explaining the relationship between parental mediation and children's aggression. *Communication Research*, *26*, 124-143.
- Nathanson, A. I. (2001). Parent and child perspective on the presence and meaning of parental television mediation. *Journal of Broadcasting and Electronic Media*, 45, 210-220.
- Nathanson, A. I., & Cantor, J. (2000). Reducing aggression-promoting effect of violent cartoons by increasing children's fictional involvement with the victim: A study of active mediation. *Journal of Broadcasting and Electronic Media, 44,* 125-142.
- Noble, G. (1975). Children in front of the small screen. London: Constable.
- Ostrov, J. M., Gentile, D. A., & Crick, N. R. (2006). Media exposure, aggression and prosocial

- behavior during early childhood: A longitudinal study. Social Development, 15, 612-627.
- Richmond, J., & Wilson, J. C. (2008). Are graphic media violence, aggression and moral disengagement related? *The Australian and New Zealand Association of Psychiatry*, *Psychology and Law*, *15*, 350-357. doi:10.1080/13218710802199716
- Potts, R., & Belden, A. (2009). Parental guidance: A content analysis of MPAA motion picture rating justifications 1993-2005. *Current Psychology*, 28, 266-283. doi:10.1007/s12144-009-9065-v.
- Rideout, V. (2004). Parents, media and public policy: A Kaiser Family Foundation survey.

  Menlo Park, CA: Kaiser Family Foundation.
- Rideout, V. J., Foehr, U. G., & Roberts, D. F. (2010). Generation M2: Media in the lives of 8- to18-year-olds: A Kaiser family foundation study. Retrieved March 28, 2014 from http://kaiserfamilyfoundation.files.wordpress.com/2013/01/8010.pdf
- Saleem, M., Anderson, C. A., & Gentile, D. A. (2012). Effects of prosocial, neutral, and violent video games on children's helpful and hurtful behaviors. *Aggressive Behavior*, *38*, 281-287. doi:10.1002/ab.21428
- Schildkraut, J., & Muschert, G. W. (2014). Media salience and the framing of mass murder in schools: A comparison of the Columbine and Sandy Hook massacres. *Homicide Studies*, 18, 23-43.
- Signorielli, N., & Gerbner, G. (1995). Violence on television: The cultural indicators project.

  \*Journal of Broadcasting & Electronic Media, 39, 278-283.
- Signorielli, N. (2003). Prime-time violence 1993-2001: Has the picture really changed? *Journal of Broadcasting & Electronic Media*, 47, 36-55.
- Slater, M. D., Henry, K. L., Swaim, R. C., & Anderson, L. L. (2003). Violent media content and

- aggressiveness in adolescents: A downward spiral model. *Communication Research*, *30*, 713-736. doi:10.1177/0093650203258281
- Slife, B. D., & Rychlak, J. F. (1982). Role of affective assessment in modeling aggressive behavior. *Journal Of Personality And Social Psychology*, 43(4), 861-868.
- Tarantino, N., Tully, E. C., Garcia, S. E., & South, S. (2014). Genetic and environmental influences on affiliation with deviant peers during adolescence and early adulthood. *Developmental Psychology*, *50*, 663-673.
- Tedeschi, J. T., & Felson, R. B. (1994). Learning theory and aggression. In *Violence, aggression, and coercive actions* (pp. 93-126). Washington, DC US: American Psychological Association. doi:10.1037/10160-004.
- Thompson, K., & Yokota, F. (2004). Violence, sex, and profanity in films: Correlation of movie ratings with content. *Medscape General Medicine*, *6*, 3.
- Ukoha, E. K. (2013). Media violence and violent behaviour of Nigerian youths: Intervention strategies. *IFE PsychologIA*, 21, 230-237.
- Walsh, D. A., & Gentile, D. A. (2001). A validity test of movie, television, and video-game ratings. *Pediatrics*, 107, 1302-1308.
- Wood, W., Wong, F. Y., & Chachere, J. G. (1991). Effects of media violence on viewers' aggression in unconstrained social interaction. *Psychological Bulletin*, 109, 371-383.
- Wright, J. C., Hutson, A. C., Reitz, A. L., & Piemyat, S. (1994). Young children's perceptions of television reality: Determinants and developmental differences. *Developmental Psychology*, 30, 229-239.
- Yang, G. S., & Huesmann, L. R. (2013). Correlations of media habits across time, generations, and media modalities. *Journal of Broadcasting & Electronic Media*, 57, 356-373.

doi:10.1080/08838151.2013.816711

Yokota, F., & Thompson, K. M. (2000). Violence in G-rated animated films. *Journal of the American Medical Association*, 283, 2716-2720.