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The Media and Teenage Violence: How Much Is Too Much When It Comes to Adolescent Aggression?

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The Media and Teenage Violence: How Much Is Too Much When It Comes to Adolescent

Aggression?

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The Media and Teenage Violence: How Much Is Too Much When It Comes to Adolescent

Aggression?

With the advent of increasingly accessible technology and the growing prevalence of

both fictional and nonfictional violence in the media (American Academy of Pediatrics 2009;

American Psychological Association 2013; Emmons 2013; Pew Research Center 2015), the

effects of such content on emotional states and behavioral patterns in youths has garnered a

great deal of interest among sociologists, psychologists, and developmental experts.

However, the results of existing research are inconclusive and often contradictory (APA

2013; Siegel and Welsh 2017:86-87), providing no clear answer to the question of whether or

not this content actually affects viewer behavior. I explore the current body of literature

examining the relationship between exposure to media violence and its elicitation of

aggression and violence in children, adolescents, and young adults before performing my

own analysis of data from a previously completed study (Schneider and Waite 1998-2000),

specifically analyzing variables that have not yet been examined together. Finally, I suggest

directions for future research, discuss relevant limitations, and offer conclusions based on the

past and present results.

The Media and Teenage Violence: How Much Is Too Much When It Comes to Adolescent

Aggression?

Exposure to violence in mass media has been argued to play a considerable role in eliciting future violent behaviors, and even more so when the individual in question is predisposed to engage in violence and exhibit aggressive tendencies. Particularly for children who lack normative examples of proper behavior, media violence may serve not only as a model, but a guide for how to behave in provocative situations (Hubner 2005:125). Given this, it is especially important to determine whether different kinds of violence have different effects on viewers, whether different media outlets are more likely than others to incite violence, and how strong these influences are in relation to one another. A substantial body of literature addressing the relationship between media violence consumption and violent behavior already exists, with the hypothesized relationship ranging anywhere from a direct causal link to absolutely no association at all (American Psychological Association 2013; Siegel and Welsh 2017:86-87).

Regardless of the findings, most of the previous research on media violence has only focused on general categories of aggression without considering the nuances of the violence being consumed through movies, television, video games, or even music. However, there are likely individual relationships between media and real-world violence and aggression that involve more complex mechanisms than originally believed. For example, individuals of different ages, genders, biological sexes, races, ethnicities, or socioeconomic statuses may be influenced differently by different types of media violence. It is therefore critical to examine the extent to which, under what conditions, and through what mechanisms mass media

influences violence and aggression in children, adolescents, and young adults. Unfortunately, as I will discuss later, it is incredibly difficult— if not impossible— to design a study that captures all possible variables and relationships.

THEORETICAL PERSPECTIVES

In their groundbreaking social psychological study, Bandura and Walters (1977) set forth the framework for social learning theory, or the view that all behavior is learned through modeling and replicated through imitation. This perspective and its multiple variations are commonly cited by researchers investigating the media violence–aggression link as a plausible explanation for this relationship (Felson 1996; Ferguson 2011; Gentile et al. 2011; Krahé et al. 2011; Möller et al. 2012; Williams 2009). Many behaviors can be learned directly, as proponents of classical and operant conditioning have suggested, or indirectly (Bandura and Walters 1977:3, 5). It is this second manner of learning that has more commonly been used to explain the effects of media violence on aggressive behaviors.

Bandura and Walters explained that behavioral modeling and replication occur through several mechanisms; for example, a model can demonstrate an appropriate behavior by showing the learner what *not* to do, rather than by exhibiting what one *should* do (1977:5). The authors drew from previous theories of the same type to further detail how this modeling works, but countered that these perspectives either showed that responses were copied without any true behavioral learning having taken place, or that the replicated behaviors were merely slightly altered versions of what the model originally demonstrated (Bandura and Walters 1977:6).

To correct for these gaps in reasoning, Bandura and Walters suggested social learning theory, which "assumes that modeling influences produce learning principally through their informative functions and that observers acquire mainly symbolic representations of modeled activities rather than specific stimulus–response associations" (1977:6). Given that the learner attends to the modeled behavior, retains what he or she observes, successfully reproduces these actions, and is reinforced or incentivized for this reproduction, he or she will have sufficiently learned this behavior for adequate future replication (Bandura and Walters 1977:6-8).

It is through these mechanisms that the authors proposed that children and adolescents learn to imitate the violence and aggression they consume through the media. Take, for example, a standard superhero film: the hero defeats the villain through a series of violent acts, thus gaining the admiration of the people who have been saved and perhaps even the adoration of a love interest (Coyne et al. 2017:10). However, although girls and boys view the same violence when they watch such movies, they still tend to engage in different types and amounts of aggressive behaviors after the fact (Coyne et al. 2017:7, 11). This is where socialization theories come into play, as they account for developmental differences between boys and girls when analyzing their behaviors.

Developmental experts hold that from an early age, children learn the values and norms of society differently: boys are socialized to be more aggressive, girls are encouraged to be less so; boys tend to engage in more physical aggression, girls in relational; boys are taught to retaliate, girls are taught to worry (Siegel and Welsh 2017:157). This perspective helps explain why male and female children tend to engage in different types of aggression.

In the same example of superhero movies, socialization theory supplements the idea of social

learning in that female superheroes have traditionally tended to utilize more relational

aggression than their male counterparts (Coyne et al. 2017:2), thus teaching girls that this is

the more appropriate form of violence for them to utilize. Because they are simultaneously

taught that relationships are more important than other forms of social capital (Siegel and

Welsh 2017:157), and because they identify with the female superheroes they are watching,

girls are quicker to internalize and replicate the behaviors being modeled for them in these

movies.

However, social learning and socialization perspectives fail to account for racial

differences in violent and aggressive behaviors, a deficit which Anderson addressed in his

discussion of the code of the streets, or "a set of informal rules governing interpersonal

public behavior, including violence" (1994:82). Anderson explained that this code is

particularly prevalent in inner-city, predominantly black neighborhoods, where residents are

plagued by a feeling of alienation from the societal mainstream and therefore engage in

excessive violence as a "cultural adaptation" (1994:81-82). This code, he stated, arises out of

the instilment of "street" values instead of "decent" values, and results in essentially one

lesson: "you have to fight for your place in the world" (Anderson 1994:82, 86).

This constant negotiation of respect has surpassed a fight for "manhood" (Anderson

1994:89) and has permeated the social lives of young black girls growing up in such

neighborhoods as well (Jones 2010:5). As with socialization theory, the code of the streets

carries heavily gendered implications, specifically in that girls raised by the code must learn

how to balance traditional expectations of femininity against the necessity of violence as a

means of survival (Jones 2010:9). Given these implications, the differential socialization of

young boys and girls, and the mechanisms of social learning, it seems that modern society is

almost perfectly crafted for the internalization of the violent messages portrayed in media

outlets most commonly used by children and adolescents. It is therefore essential that we

explore the relationship between the consumption of such media content and subsequent

aggressive behaviors in these youths, as research of this type could vitally contribute to our

understanding of this link.

PREVIOUS RESEARCH

A 2011 study by Gentile, Mathieson, and Crick focused on the relationships between

media violence exposure (MVE) and four primary subtypes of aggression. In contrast to the

more traditional notion of physical aggression (PA), relational aggression (RA) has been

conceptualized as "harming others through purposeful manipulation and damage of their peer

relationships" (Crick and Grotpeter 1995:711). As its name suggests, reactive aggression

occurs in immediate response to provocation while proactive aggression is more "deliberate

[and] goal-oriented" (Gentile et al. 2011:214). Measures of MVE depended on participants'

self-reports, while measures of aggressive behaviors were provided by the participants'

teachers (Gentile et al. 2011:220). In addition to this, participants' classmates were asked to

evaluate each one's "social adjustment," which involved components such as popularity,

likeability, and prosocial tendencies (Gentile et al. 2011:219-220). For the third-, fourth-, and

fifth-grade students who participated in this study, it was found that MVE and aggression

were significantly correlated with one another on several continuums.

First, MVE, PA, and RA were positively correlated with each other in every possible combination for both male and female participants (all $p < .01$; Gentile et al. 2011:221). It is interesting to note that the RA–MVE and PA–MVE correlations were the same within each sex (for males, both $r = .17$; for females, both $r = .16$; Gentile et al. 2011:221), but the authors did not comment on this pattern. Regression analyses demonstrated that sex moderated the relationship between MVE and RA and that this relationship was stronger for girls (Gentile et al. 2011:222). Furthermore, maleness and MVE were both significantly positively related to PA, but the relationship between MVE and PA was not moderated by sex (Gentile et al. 2011:222).

Regarding proactive versus reactive aggression, MVE was significantly positively related to both overall types of PA (both $p < .01$), but not related to either subcategory of RA. Breaking these relationships down by sex established that MVE was significantly positively correlated with both proactive and reactive PA ($p < .05$ and $.01$, respectively) as well as proactive RA for males ($p < .05$; Gentile et al. 2011:224). Similarly, MVE was significantly positively correlated with both subtypes of PA and RA (all $p < .05$; Gentile et al. 2011:224). As with the basic relationship between MVE and both types of aggression, regression analyses showed that male students exhibited higher levels of PA than female students; more specifically, MVE and reactive PA were significantly positively correlated (Gentile et al. 2011:224). Sex did not significantly predict reactive RA, and femaleness and MVE were significantly related to higher levels of proactive RA (Gentile et al. 2011:225).

These extensive results indicate that not only does exposure to media violence elicit behavioral aggression in children, but that there are several more specific mechanisms that

influence this relationship. Namely, MVE leads to both physical and relational aggression, and its influence on RA is particularly salient for young girls (Gentile et al. 2011:225). However, it is worth noting that this study did not examine the nature or medium of the violence consumed by the children, both of which could play critical roles in affecting the types of aggression elicited in their behaviors. For example, girls are generally more prone to engage in RA while boys typically resort to retaliatory PA (Coyne et al. 2017:11; Siegel and Welsh 2017:157); thus, it is possible that boys are more vulnerable to media portrayals of PA while girls are more vulnerable to RA. Further exploration of the specific underlying mechanisms of such relationships would greatly contribute to this field of research and our understanding of aggression and violence in young adults.

Boxer et al., for example, also relied on input from individuals other than just the participants to examine aggression resulting from media violence consumption, utilizing a combination of participant recall, participant self-ratings, and third-party participant ratings to determine the association between childhood television programs and levels of aggression in high school students and incarcerated adolescents (2008:419). Aggression was a composite measure examining delinquent behaviors, physical aggression, and trait aggression, all of which were assessed by both the participants as well as various authority figures present in their lives at the time of the study (Boxer et al. 2008:420).

During individual interviews or group surveys, each participant provided his or her three favorite childhood television programs, movies, and/or video games, which were then rated for levels of violence by an independent panel; the participants, their guardians, and their authority figures then completed a series of surveys and interviews measuring the

adolescents' current delinquent involvement, aggressive tendencies, academic aptitude,

psychopathology, and everyday exposure to violence (Boxer et al. 2008:419-421). Most

importantly, childhood and current exposure to media violence were both significantly

positively correlated with aggressive tendencies and violent behavior (Boxer et al. 2008:422).

Furthermore, regression analyses determined that childhood preference for violent media was

a significant predictor of later violence and aggression, suggesting that earlier tendencies

may be risk factors for future delinquent behavior (Boxer et al. 2008:425).

Ferguson et al. examined aggression within the context of other variables, namely

"gender and personality, exposure to physical abuse and violence in the family, and exposure

to media violence in both television and in video games" (2008:396). Except for cases of

"direct physical abuse," exposure to media and/or family violence did not help in predicting

later trait aggression among youths (Ferguson et al. 2008:407). The other two significant

predictors were sex— particularly for male youths— and neuroticism (Ferguson et al.

2008:407).

Looking to the futures of children who regularly consume media violence, Möller et

al. (2012) decided to approach the media–violence relationship by examining the

effectiveness of an intervention program designed to minimize the effect of one on the other

by reducing the amount of violent media exposure and subsequently examining the teenage

participants' levels of aggression following the intervention. Overall, consumption of media

violence led to statistically significantly higher levels of self-reported aggression among both

boys and girls (Möller et al. 2012:111). The researchers found that media violence

consumption reduction did not significantly relate to pre-experimental self-reported levels of

aggression; participants with high self-reported pre-experimental levels of aggression

significantly benefited from the intervention while those with lower levels of pre-

experimental aggression did not; and the same relationship was also found across these

categories in terms of "normative acceptance of aggression" (Möller et al. 2012:105).

Ferguson also considered various risk factors by specifically examining the effects of

video game violence on youth violence "in context with other influences… such as family

environment, peer delinquency, and depressive symptoms" (2011:377). In particular, the

variables studied were neighborhood problems; nature of relationships with adults; antisocial

personality traits; family attachment, interaction styles, and instances of violence; association

with delinquent peers; depressive symptoms; and history of aggressive behaviors and

delinquency (Ferguson 2011:382-383). Violent gameplay was significantly positively

correlated with bullying behaviors at the first and last times of measurement (T1 and T2,

respectively), but not with any of the other factors examined (Ferguson 2011:384). However,

both antisocial personality traits and depressive symptoms significantly predicted aggression

at T2, while early family attachment styles tended to prevent later commission of violent

crimes (Ferguson 2011:385). Interestingly, though, only depressive symptoms at T2 served

as reliable predictors of violence at T2, whereas T1 depression was not associated with T2

violence (Ferguson 2011:385).

In summary, Ferguson offered these key conclusions: T1 video game violence

consumption did not significantly predict T2 aggressive behaviors, and T1 aggressive

behaviors did not significantly predict T2 violent gameplay habits (2011:388-389). The lack

of relationships among these factors and times of measurements indicates that the media

violence–aggression relationship is not causal in either direction, so "practitioners may need to be careful not to 'profile' youth who have not committed serious aggressive acts," as no one factor reliably predicts later aggression (Ferguson 2011:389). It is important to note, however, that Ferguson's sample was largely Hispanic, and the participants were selected from a previously-conducted study on youth violence (Ferguson 2011:380), so these results should be carefully considered before being used to implement new policies regarding juvenile justice or rehabilitation.

Also examining the effects of violent gameplay on young adults, Williams (2009) focused on male college undergraduate students and their reactions to levels of violence in video games, specifically changes in their frustration and hostility levels. By experimentally manipulating the amount and nature of the violence in the video games played, Williams determined that trait-hostile participants, or those with naturally higher levels of aggressive behaviors, were more negatively responsive to frustration during gameplay than their trait-non-hostile counterparts (2009:302). Additionally, video games with greater violent content were more likely to increase post-gameplay hostility in participants across the board (Williams 2009:302-303). Williams further commented on the potential for desensitization to the violence consumed over time, as well as the fact that frustration during gameplay had a stronger effect on hostility than did the violence itself, emphasizing the need for further research into these phenomena (2009:304).

Smith and Hand (1987) used a combination of pre- and post-experimental surveys to produce a longitudinal, cross-sectional analysis of the social consequences of male consumption of pornography, specifically its effects on men's interactions with women.

After screening a pornographic film on a college campus, the researchers found that the aggression women experienced at the hands of male students who viewed the film did not significantly increase from the pre-experimental survey to the post-experimental survey (Smith and Hand 1987:393). Furthermore, women who had male friends who viewed the film did not report significantly higher levels of aggression from these friends than those women whose friends did not view the film (Smith and Hand 1987:394).

While these results seem to suggest that there is no link between the consumption pornographic violence and aggression toward women, the authors mentioned that the film itself lacked the nature of conventionally sexually violent pornography, and instead merely depicted explicit sexual scenes without the accompanying violence (Smith and Hand 1987:395). They further noted that this study, like many others, took place in a controlled laboratory setting; instead of experimental designs, they suggested that a more valuable approach would be to "[conduct investigations] within the actual context that such effects are proposed to appear" (Smith and Hand 1987:396).

Opting instead for a meta-analytical approach, Hernandez (2009) assessed previous literature addressing the relationship between male consumption of pornography and their subsequent attitudes toward women. Prior research has criticized pornographic materials for their "degradation, humiliation, and dehumanization of women," and these processes act as justifications for continued male power over women (Hernandez 2009:117). Feminist theories hold that men's consumption of pornography that enforces these ideals perpetuates their own social dominance by defining this hypersexualization as normal and thus

"[masking] these gender inequalities and [making] them acceptable (even desired) in society"
(Hernandez 2009:118).

Hernandez was careful, however, to caution against assuming a direct causal
relationship between pornographic violence and real-world violence against women; rather, it
is more likely that such materials simply foster existing rape culture and cast gendered
violence in a more positive light (Hernandez 2009:119). Whether men who are predisposed
to such attitudes actively select pornography for its confirming values or whether the
pornography consumed influences men's violent behavior toward women remains to be seen.
By examining various theories and previous discussions in this subject area, Hernandez
concluded that ultimately, pornography consumption is indeed positively correlated with
support of violence toward, male dominance over, and objectification of women (2009:121).
These findings lend themselves to further research regarding the nature of pornographic
materials, how to approach the issue of male entitlement, and how to change media sources
to better frame the issue of gender inequality (Hernandez 2009:121).[1]

An interesting perspective on the implications of sexuality being inherently linked to
violence in the media is that of Cowan and O'Brien (1990), who analyzed 56 slasher films
for differences between survival rates and characterizations of male versus female characters.
Although they found no significant differences between how many females survived
compared to males, they did find that those female characters who did not survive were

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[1] Consumption of pornographic violence via other mediums, such as erotica novels, also has negative effects on
the audience. Bonomi et al. (2016) examined women's perceptions of the sexual violence in one such novel and
found their reactions to be largely unfavorable, although these materials' influence on male consumers is
unclear.

consistently rated as more sexual or promiscuous than their surviving female counterparts

(Cowan and O'Brien 1990:192). As opposed to Hernandez's suggestion that pornography

endorses violence against women by portraying them as complicit in their own abuse, Cowan

and O'Brien contend that such pairings of sexuality and violence convey "the message... that

sexual women get killed and only the pure women survive" (1990:194-195).

Just because Cowan and O'Brien's findings (1990) refuted traditional conceptions of

pornographic violence, though, does not mean that slasher films are necessarily beneficial. In

fact, the authors warned that these movies are just as dangerous as traditional pornography, if

not worse: they "reinforce the idea that female sexuality is costly," and the pairing of such

explicitly sexual characterizations of femininity with women's subsequent death justifies and

encourages gendered violence (Cowan and O'Brien 1990:195). Further highlighting this

standard is the fact that both surviving non-surviving females were rated overall as being

more promiscuous, more provocative, and more sexually engaged than their respective male

counterparts, thus reinforcing the underlying warning about the costs of female sexuality

(Cowan and O'Brien 1990:191-192, 195).

Explicit pornography is not the only source of misogynistic violence in the media;

even messages as popular and well-liked as those in modern music can endorse this ideology,

and this relationship is "intricately tied to racialized themes" (Adams and Fuller 2006:942).

The degrading mythologies of hyperdominant or sexually promiscuous women are

particularly deeply engrained in rap music, a relationship which has created a problematic

intersection between the endorsement of violence against women and "racialized hatred"

(Adams and Fuller 2006:943). What is especially concerning about misogyny in rap, the

authors explained, is that the writer's intentions do not matter; the dehumanization of

particular types of women ultimately leads to the dehumanization of all women as a social

category (Adams and Fuller 2006:949). The racist undertones of these misogynistic lyrics

pose dangerous implications for the African American community in particular,[2] thus

constructing negative perceptions that will only perpetuate the fact that African American

youths are disproportionately arrested for violent crimes compared to their European

American counterparts (Siegel and Welsh 2017:46).

Finally, Felson (1996) turned to existing literature to evaluate the various influential

factors in regards to adolescent violence and aggression. He addressed the issue in three

different contexts: experiments, media exposure, and social settings. First, he suggested that

significant results obtained from laboratory experiments are just as much due to actual

variable interactions as they are to the fact that laboratory settings are "unclear" and "novel,"

thus influencing participant behavior outside of the variables of interest (Felson 1996:106).

Second, he used cognitive theory to argue that elicited violence in such experimental contexts

is not necessarily a result of the experimental conditions themselves, but rather a result of

priming: "media violence [elicits] thoughts and emotional responses related to aggression"

(Felson 1996:112).

Felson held that the versatile nature of criminal behavior— offenders are often just as

violent as they are nonviolent (1996:103)— refutes the general belief that exposure to media

violence breeds real-life violence. What matters when it comes to eliciting future violence is

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[2] Chen et al. explained that rap is the most popular musical genre for black youths and found that aggressive
behaviors among young adults were significantly positively correlated with listening to rap, sensation-seeking
tendencies, and being black (2006:374, 378).

not this socialization, but instead "individual differences and [general] antisocial behavior" (Felson 1996:117). So instead of a direct causal relationship between exposure to media violence and later acts of violence, Felson's findings suggest that violence is largely a result of intervening variables, whether within the laboratory context or in the "real world."

SECONDARY DATA ANALYSIS

The data set used was found via the University of Michigan's Interuniversity Consortium for Political and Social Research using the topic classification "Family and Gender" (University of Michigan 2017). For The 500 Family Study, the original researchers (Schneider and Waite 1998-2000) collected data from a nonrandom convenience sample including eight different communities around the United States. Families were recruited through local schools, newspapers, and word-of-mouth; surveys, interviews, and assessments were completed individually (Schneider and Waite 1998-2000).

Given that over half of the families studied had teenagers in their households (Schneider and Waite 1998-2000), this data set was perfect for the purposes of this particular analysis. The original study examined almost 1700 variables total for the parents and their children, and questions covered a wide range of variables such as basic demographic information, socioeconomic indicators, mental health measures, and delinquent histories (Schneider and Waite 1998-2000). For the present analysis, the adolescent variables examined were gender; time watching television; time spent playing computer or video games; whether or not the respondent had been in a physical fight; whether or not the respondent had hit or threatened to hit someone; and whether or not the respondent had

attacked someone with the intention of seriously hurting them (see Tables 1-7 for frequencies and Figures 1-5 for distributions by gender).

I chose these variables for their consistency with existing research on the same topic and for their relevance to my current objective. Limitations of these data include that they were only collected from adolescents between the ages of 11 and 19 years (Schneider and Waite 1998-2000:2), thus excluding younger, potentially more susceptible children. Additionally, the original sample was largely Caucasian and non-Hispanic, making these data much less generalizable to minority populations (Schneider and Waite 1998-2000:2-3). Finally, it is worth noting that more teenagers did *not* answer the questions about fighting with, hitting, and attacking other individuals than those regarding their gender, television viewing habits, and gaming habits. Whether or not these respondents' missing data would have significantly altered the results is difficult to determine; nevertheless, the following results offer telling insights into the media violence–aggression relationship even without these missing responses.

Analysis

Unless otherwise stated, the following analyses were conducted as chi-square tests of association, treating all variables as categorical, and were all conducted with SPSS Version 24.0 (IBM Corp. 2016). All missing data were excluded from these analyses.

Maintaining the original coding of gender as a dummy dichotomous variable (Schneider and Waite 1998-2000:1-2), television viewing frequency was not significantly related to gender ($p > .05$). Frequency of video gameplay, however, was significantly related

to gender, as were physical fighting tendencies and threatened or actualized physical blows (all $p < .01$). Thus, males spent significantly more time playing video games, engaged in significantly more physical fights, and threatened to or actually physically hit significantly more people than did females.

Violent attacks demonstrated slightly different patterns by gender: all but one female respondent had never attacked an individual to seriously hurt them; the one outlier responded that she had "often" instigated such an attack. Male respondents also tended to indicate never having attacked anyone in such a manner, but a handful did say that they had done so at least once or twice. These differences were also statistically significant ($p < .05$), indicating that males instigated attacks with the intention to seriously physically harm other individuals more often than did females.

Television viewing habits were not significantly related to physical fighting tendencies, and neither were threatened or actualized physical blows or attacks with the intention of causing serious physical harm (all $p > .05$). On the other hand, video gameplay was significantly related to physical fights and physical blows (both $p < .05$), but not violent attacks ($p > .05$). These results indicate that while males and females did significantly differ from one another in terms of their aggressive tendencies, television viewing frequency had little or no effect on such behaviors. Video gameplay, however, did significantly influence physical fighting as well as threatened or actualized physical blows to other children, although serious violent attacks were not affected by frequency of such gameplay.

It has been proposed that video games are particularly effective at eliciting violence and aggression in their players due to their interactive, first-person nature (AAP 2009:1496; APA 2013; Emmons 2013), which could potentially explain why video games had such strong relationships with aggressive behaviors while television viewing had negligible effects on these tendencies. Furthermore, gender's lack of relationship with television viewing habits but strong association with video gameplay also suggests that it takes more than passive consumption of media violence to elicit any behavioral effects.

DISCUSSION

Ideally, future research should focus more strictly on identifying the individual mechanisms by which media violence does— or does not— influence aggressive behaviors in its young viewers. More specifically, do different types of violence influence different people? Certain types of crime or acts of violence are committed by different demographics at various rates: for example, male offenders accounted for nearly 80% of all violent crimes that resulted in arrests in 2015, but only 62% of property crimes (United States Department of Justice 2016). The theoretical perspectives discussed above suggest possible reasons for this difference, but research up to this point has not produced results strongly favoring one theory over another. It is therefore critical for future studies to attempt to parse apart the various factors that might elicit aggressive behaviors and analyze their patterns of influence in order to determine whether or not certain factors exert stronger effects on individuals of different demographics.

Specifically, such research might address the effects of physical versus relational media aggression: what types of real-world aggression they elicit, whether boys or girls are more susceptible to one type or another, and so on. Does the length of exposure make a difference? Does beginning to consume media violence at an earlier or later age have any effect on this relationship? In terms of video games, it is possible that different formats and genres influence behaviors differently; given the more involved nature of first-person shooter games, for example, such platforms might provoke more aggressive tendencies as a result of the more realistic experience provided by gameplay. Are cartoon-style video games, movies, and television programs less likely to elicit aggressive behaviors than slightly more realistic computer-generated imagery renderings or live-action media? It is these relationships, along with countless others, that must be analyzed in order to understand the true nature of the media violence–aggression link.

Previous research has demonstrated that there is indeed some kind of link between exposure to media violence and later aggressive behaviors (Boxer et al. 2008; Gentile et al. 2011; Williams 2009); however, Felson (1996) countered that while there is no causal relationship, there are at least intervening factors that help mediate this relationship. Future research, then, should focus on identifying these intervening factors: do the length and frequency of exposure matter as much as content itself? Is there a threshold for how much violence is too much? Rather than questioning whether or not there is any relationship at all between media violence and real-life aggression, investigators should instead be concentrating on developing a deeper understanding of what exactly the nature of this relationship is. The existing literature on the media violence–aggression link is inconclusive

at best (APA 2013; Siegel and Welsh 2017:86-87), and would greatly benefit from more specific questions that attempt to dissect this relationship further.

Limitations

The most difficult aspect of investigating the relationship between media violence and aggressive behaviors in children is the fact that they are highly susceptible to such content, and experimentally exposing them to this violence is extremely unethical. Unfortunately, it is also difficult to monitor exactly how much media violence an individual consumes on a day-to-day basis, as some of it might be inadvertently viewed, or they might not accurately keep track of their media habits. Researchers are therefore left to choose between potentially inaccurate self-reports that are subject to participant error and unethical experimental designs that essentially force participants to view violent content which could have irreversible negative psychological effects on them.

Similarly, relying on the reports of participants' peers, teachers, family members, and other significant figures does not allow for the fact that none of these individuals receives a complete perspective of the child in question. That is, a child may act one way at home, another with his or her friends, another with authority figures such as teachers and school administrators, and still another in contexts outside of these groups. Thus, studies that use these outside perspectives (Boxer et al. 2008; Gentile et al. 2011; Smith and Hand 1987) may be missing vital pieces of the puzzle.

These obstacles extend to policy proposals as well; interventions such as the one implemented by Möller et al. (2012) are only effective to the extent that they truly inhibit the

consumption of media violence, but in an increasingly electronic world, this is difficult— if

not impossible— to do. A 2015 Pew Research Center report indicated that 87% of all

teenagers reported having access to desktop or laptop computers; 81% had access to gaming

consoles; and 73% had access to Internet-capable smartphones. While the majority of parents

reported monitoring their children's online activities or even limiting their Internet usage,

(Pew 2016:5, 8), almost all teenagers accessed the Internet on a daily basis (Pew 2015:16).

This near-constant use of the Internet to access social media sites, games, and messaging

services can make it more difficult for parents to effectively monitor their teenagers' online

activities. Nevertheless, half of young adolescents' parents said they frequently discussed

appropriate media content with their children (Pew 2016:13).

Additionally, there are a great number of other factors that surely influence

aggression in children, adolescents, and young adults, such as genetic factors, family

environment, and psychopathology. It is virtually impossible to control for every potential

intervening variable while only examining one in a study, and we therefore cannot say with

absolute certainty that media violence exposure leads to aggressive behaviors or that

aggressive predispositions lead individuals to seek out violent media. Even studies that rely

on longitudinal and cross-sectional designs (Ferguson 2011; Möller et al. 2012; Smith and

Hand 1987) are not enough, as they do not account for environmental or individual changes

between the times of measurement.

CONCLUSION

The increasing accessibility of such media outlets and the violence they portray (AAP 2009; APA 2013; Emmons 2013; Pew 2015) must be addressed in order to better understand how aggressive and violent behaviors are changing across time. For instance, the growing prevalence of mobile devices and near-constant access to social media platforms (Pew 2015) has vastly increased youths' opportunities to engage in— or be victimized by— cyberbullying (Kowalski et al. 2014:1108). Furthermore, video streaming platforms such as Hulu, Netflix, and Amazon make a wide range of content available to a wide audience, with just under half of all American households holding subscriptions to such services (Pallotta 2015). The possibilities are virtually endless, making it even more important that researchers identify the mechanisms through which media violence influences youth behavior so that parents and guardians can take appropriate action to effectively monitor and moderate this relationship.

The existing body of literature analyzing the relationship between media violence exposure and aggressive behaviors in children, adolescents, and young adults has established a solid foundation for the field, but it is still severely lacking. Widely inconclusive results leave much room for doubt and still leave many questions unanswered. Although the present findings indicate that there indeed might be a relationship between consumption of media violence and later aggression, there is not nearly enough evidence to provide a decisive answer either way. For deeper knowledge of these relationships, it is necessary for future research to examine the specific underlying mechanisms through which media violence influences its viewers' behaviors.

REFERENCES

Adams, Terri M. and Douglas B. Fuller. 2006. "The Words Have Changed But the Ideology
  Remains the Same: Misogynistic Lyrics in Rap Music." *Journal of Black Studies*
  36(6):938-957.

American Academy of Pediatrics. 2009. "Policy Statement — Media Violence." *Pediatrics*
  124(5):1495-1503. doi:10.1542/peds.2009-2146.

American Psychological Association. 2013. "Violence in the Media: Psychologists Study
  Potential Harmful Effects." Retrieved April 27, 2017
  (http://www.apa.org/action/resources/research-in-action/protect.aspx).

Anderson, Elijah. 1994. "The Code of the Streets." *Atlantic Monthly* 273(5):81-94.

Bandura, Albert and Richard H. Walters. 1977. *Social Learning Theory.* Englewood Cliffs,
  NJ: Prentice-Hall.

Bonomi, Amy E., Emily M. Nichols, Christin L. Carotta, Yuya Kiuchi, and Samantha Perry.
  2016. "Young Women's Perceptions of the Relationship in Fifty Shades of Grey."
  Journal of Women's Health 25(2):139-148. doi:10.1089/jwh/2015.5318.

Boxer, Paul, L. Rowell Huesmann, Brad J. Bushman, Maureen O'Brien, and Dominic
  Moceri. 2008. "The Role of Violent Media Preference in Cumulative Developmental
  Risk for Violence and General Aggression." *Journal of Youth & Adolescence* 38:417-
  428. doi:10.1007/s10964-008-9335-2.

Chen, Meng-Jinn, Brenda A. Miller, Joel W. Grube, and Elizabeth D. Waiters. 2006. "Music,

Substance Use, and Aggression." *Journal of Studies on Alcohol* 67(3):373-381.

Cowan, Gloria and Margaret O'Brien. 1990. "Gender and Survival vs. Death in Slasher

Films: A Content Analysis." *Sex Roles* 23(3-4):187-196.

Coyne, S. M., Laura Stockdale, Jennifer Ruh Linder, David A. Nelson, Kevin M. Collier, and

Lee W. Essig. 2017. "Pow! Boom! Kablam! Effects of Viewing Superhero Programs

on Aggressive, Prosocial, and Defending Behaviors in Preschool Children." *Journal

of Abnormal Child Psychology* e1-13. doi:10.1007/s10802-016-0253-6.

Crick, Nicki R. and Jennifer K. Grotpeter. 1995. "Relational Aggression, Gender, and Social-

Psychological Adjustment." *Child Development* 66(3):710-722.

Emmons, Sasha. 2013. "Is media violence damaging to kids?" *CNN*, February 21. Retrieved

April 27, 2017 (http://www.cnn.com/2013/02/21/living/parenting-kids-violence-

media/).

Felson, Richard B. 1996. "Mass Media Effects on Violent Behavior." *Annual Review of

Sociology* 22:103-128.

Ferguson, Christopher J. 2011. "Video Games and Youth Violence: A Prospective Analysis

in Adolescents." *Journal of Youth & Adolescence* 40:377-391. doi:10.1007/s10964-

010-9610-x.

Ferguson, Christopher J., Amanda M. Cruz, Daniel Martinez, Stephanie M. Rueda, Diana E.

    Ferguson, and Charles Negy. 2008. "Personality, Parental, and Media Influences on

    Aggressive Personality and Violent Crime in Young Adults." *Journal of Aggression,*

    Maltreatment & Trauma 17(4):395-414. doi:10.1080/10926770802471522.

Gentile, Douglas A., Lindsay C. Mathieson, and Nicki R. Crick. 2011. "Media Violence

    Associations with the Form and Function of Aggression among Elementary School

    Children." *Social Development* 20(2):213-232. doi:10.1111/j.1467-

    9507.2010.00577.x.

Hernandez, Danielle. 2009. "The Effects of Consuming Pornography: Men's Attitudes

    toward Violence against Women, Dominance over and Objectification of Women,

    and Sexual Expectations of Women." *Perspectives* 116-123.

Hubner, John. 2005. *Last Chance in Texas: The Redemption of Criminal Youth.* New York:

    Random House.

IBM Corp. Released 2016. IBM SPSS Statistics for Windows, Version 24.0. Armonk, NY:

    IBM Corp.

Jones, Nikki. 2010. *Between Good and Ghetto: African American Girls and Inner-City*

    Violence. New Brunswick, NJ: Rutgers University Press.

Kowalski, Robin M., Gary W. Giumetti, Amber N. Schroeder, and Micah R. Lattanner. 2014.

 "Bullying in the Digital Age: A Critical Review and Meta-Analysis of Cyberbullying

 Research Among Youth." *Psychological Bulletin* 140(4):1073-1137.

 doi:10.1037/a0035618.

Möller, Ingrid, Barbara Krahé, Robert Busching, and Christina Krause. 2012. "Efficacy of an

 Intervention to Reduce the Use of Media Violence and Aggression: An Experimental

 Evaluation with Adolescents in Germany." *Journal of Youth & Adolescence* 41:105-

 120. doi:10.1007/s10964-011-9654-6.

Pallotta, Frank. 2015. "4 in 10 TV households also subscribe to Netflix, Amazon, or Hulu."

 CNN, March 11. Retrieved May 3, 2017

 (http://money.cnn.com/2015/03/11/media/nielsen-report-netflix-amazon-hulu/)

Pew Research Center. 2015. "Teens, Social Media & Technology Overview 2015:

 Smartphones facilitate shifts in communication landscape for teens." Retrieved April

 24, 2017

 (http://www.pewinternet.org/files/2015/04/PI_TeensandTech_Update2015_0409151.

 pdf).

Pew Research Center. 2016. "Parents, Teens and Digital Monitoring: Parents monitor their

 teen's digital behavior in a number of ways, but using technical means like parental

 controls are less common." Retrieved April 24, 2017

 (http://www.pewinternet.org/files/2016/01/PI_2016-01-07_Parents-Teens-Digital-

 Monitoring_FINAL.pdf).

Schneider, Barbara, and Linda J. Waite. The 500 Family Study [1998-2000: United States].

    ICPSR04549-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social

    Research [distributor], 2008-05-30. http://doi.org/10.3886/ICPSR04549.v1.

Siegel, Larry J. and Brandon C. Welsh. 2017. *Juvenile Delinquency: The Core.* 6th ed.

    Boston: Cengage Learning.

Smith, M. Dwayne and Carl Hand. 1987. "The Pornography/Aggression Linkage: Results

    from a Field Study." *Deviant Behavior* 8:389-399.

United States Department of Justice, Federal Bureau of Investigation. 2016. *Crime in the

    United States, 2013* [Table 38]. Retrieved April 26, 2017 (https://ucr.fbi.gov/crime-

    in-the-u.s/2013/crime-in-the-u.s.-2013/tables/table-38).

University of Michigan. 2017. "ICPSR." Retrieved April 20, 2017

    (https://www.icpsr.umich.edu/icpsrweb/)

Williams, Kevin D. 2009. "The Effects of Frustration, Violence, and Trait Hostility After

    Playing a Video Game." *Mass Communication and Society* 12:291-310.

    doi:10.1080/15205430802461087.

500 Family Study. Student Data. Analysis ran from 2017-04-25 to 2017-04-28 using SDA

    3.5: Tables.

APPENDIX A

Table 1: *What is your gender (Schneider and Waite 1998-2000:1-2)*

GENDER_1	*N*
MALE (1)	223
FEMALE (2)	239
MISSING (9)	3

Table 2: *Time watching TV (Schneider and Waite 1998-2000:130-131)*

TV_____1	*N*
RARELY OR NEVER (1)	24
LESS THAN ONCE A WEEK (2)	50
ONCE/TWICE A WEEK (3)	143
ALMOST EVERYDAY (4)	48
MISSING (9)	48

Table 3: *Time for playing computer/video games (Schneider and Waite 1998-2000:131)*

GAMES__1	*N*
RARELY OR NEVER (1)	139
LESS THAN ONCE A WEEK (2)	80
ONCE/TWICE A WEEK (3)	114
ALMOST EVERYDAY (4)	85
MISSING (9)	47

Table 4: *Did you get into a physical fight (Schneider and Waite 1998-2000:163-164)*

FIGHTS_1	*N*
NEVER (0)	354
ONCE OR TWICE (1)	43
SEVERAL TIMES (2)	6
OFTEN (3)	1
MISSING (9)	61

Table 5: *Did you hit or threaten to hit someone* *(Schneider and Waite 1998-2000:165)*

HIT____1	N
NEVER (0)	327
ONCE OR TWICE (1)	56
SEVERAL TIMES (2)	20
OFTEN (3)	3
MISSING (9)	59

Table 6: *Did you attack someone to seriously hurt* *(Schneider and Waite 1998-2000:165)*

VIOLEN_1	N
NEVER (0)	395
ONCE OR TWICE (1)	4
SEVERAL TIMES (2)	4
OFTEN (3)	2
MISSING (9)	60

Figure 1: *TV_____1 by GENDER_1* *(500 Family Study 2017)*
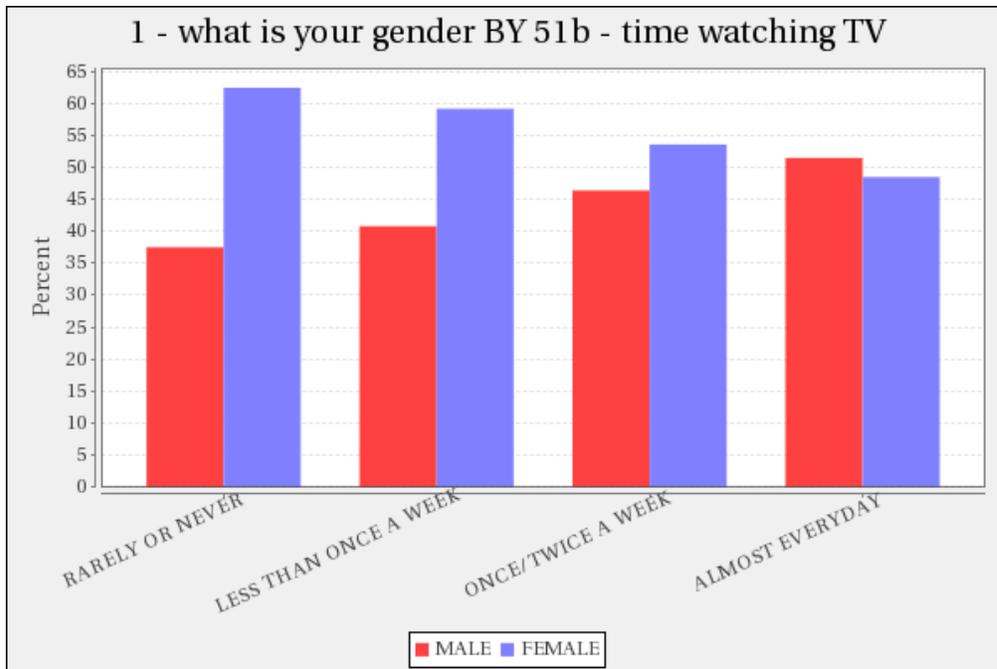
Figure 2: GAMES__1 by GENDER_1 (500 Family Study 2017)
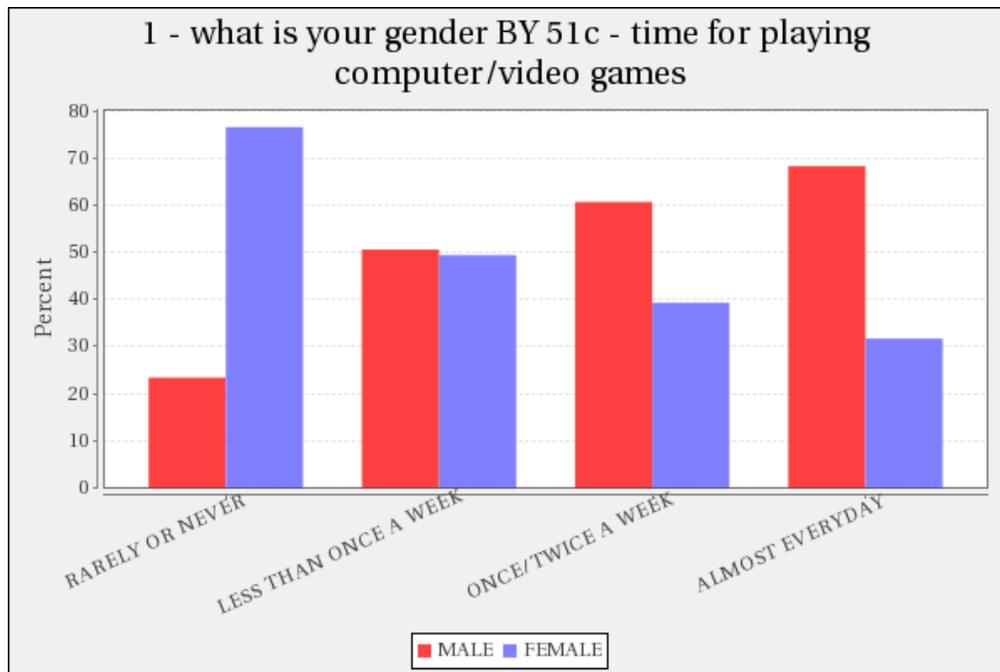


Figure 3: FIGHTS_1 by GENDER_1 (500 Family Study 2017)
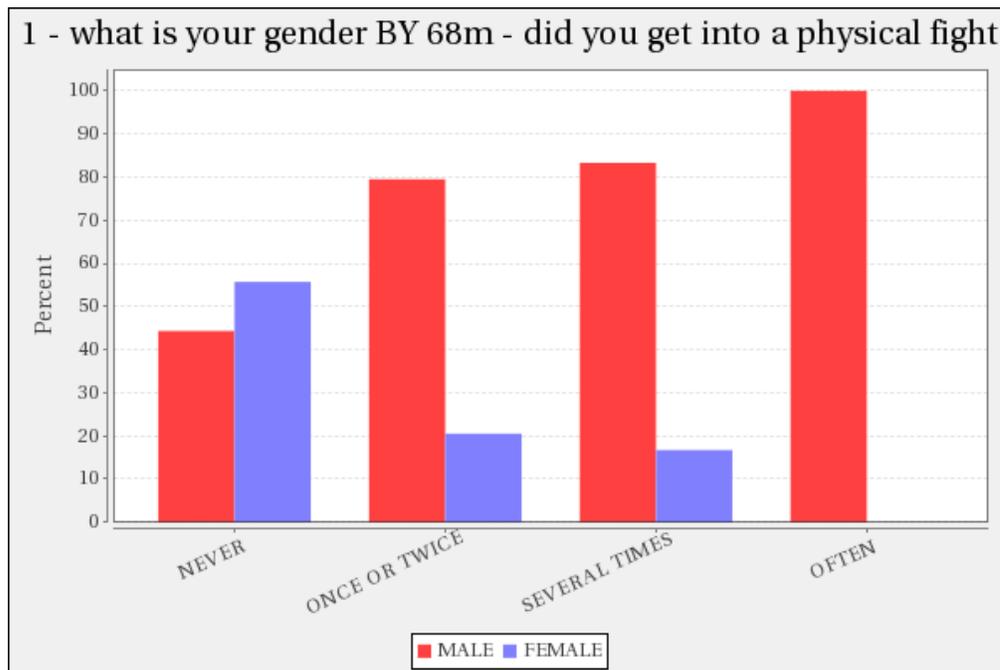
Figure 4: HIT____1 by GENDER_1 *(500 Family Study 2017)*
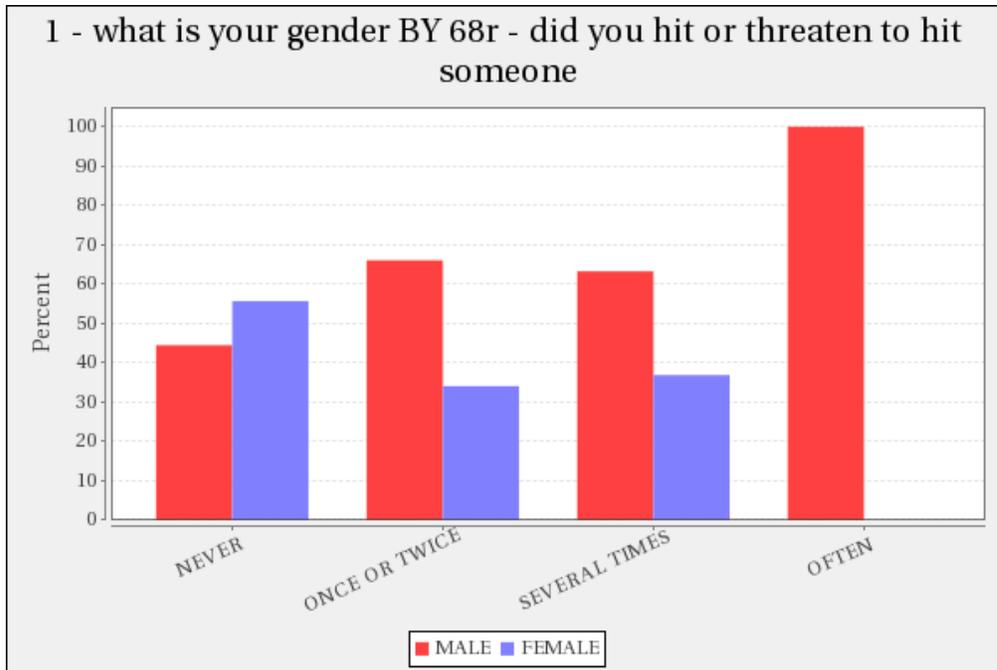
Figure 5: VIOLEN_1 by GENDER_1 *(500 Family Study 2017)*