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# A CONTENT ANALYSIS OF INDIRECT, VERBAL, AND PHYSICAL AGGRESSION IN TELEVISION PROGRAMS POPULAR AMONG SCHOOL-AGED GIRLS

JENNIFER RUH LINDER AND KELSEY ANN LYLE

*A content analysis of indirect, verbal, and physical aggression was conducted of 77 hours of television programming popular among fifth grade girls. Eighty eight percent of programs contained aggression. Physical aggression occurred at a rate of 9.6 acts per hour, whereas indirect and verbal aggression occurred at a rate of 3.7 and 2.8 acts per hour, respectively. Rates of aggression varied by gender, age, and attractiveness of perpetrators, as well as by relationship between perpetrator and victim. Additionally, motivation and consequences of aggressive acts varied by form of aggression. Implications of the findings are discussed in light of current research and theories of media effects.*

**Keywords:** televised aggression, indirect, verbal, physical, children, girls

Existing research indicates that physical aggression is prevalent on television and results in a variety of negative effects on child viewers (Gentile & Sesma, 2003; Paik & Comstock, 1994; Wilson, 2008). Researchers have also investigated the effects of televised depictions of non-physical forms of aggression more typically used by girls, including indirect and verbal aggression. Correlational and experimental research has found that viewing indirect and verbal aggression has negative effects on the behavior and cognitions of children, adolescents, and adults (Banerjee, Greene, Krcmar, & Bagdasarov, 2009; Chory-Assad, 2004; Coyne et al., 2008; Coyne & Archer, 2005; Coyne, Archer, & Eslea, 2004; Linder &

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Gentile, 2009). Despite evidence highlighting the harmful effects of exposure to non-physical forms of media aggression, there is limited research on the portrayal of indirect and verbal aggression on television, especially in programs viewed by young girls. Therefore, the goal of the current study was to document the amount and context of indirect, verbal, and physical aggression in programs popular among fifth grade girls.

## PREVALENCE OF TELEVISED AGGRESSION

There have been numerous content analyses of physical aggression on television from the 1960's to the 1990's (for a review, see Hetsroni, 2007). The most comprehensive was the National Television Violence Study (NTVS), which examined violence in 2,700 hours of cable and broadcast programming over a 5-year period in the mid 1990's (Wilson et al., 1997). This study revealed that 69% of children's programs and 57% of non-children's programs contained physical violence, a frequency of 5.6 acts per hour in adult programming and 14.1 acts per hour in children's programming (Wilson et al., 1997, 2002). A more recent content analysis of a week of primetime programming reported 71.2% of shows contained physical aggression, at an average rate of 9.5 acts per hour (Glascok, 2008).

Many existing content analyses suggest that televised verbal aggression occurs at higher rates than physical aggression. Greenberg, Edison, Korzenny, Fernandez-Collado, and Atkin (1980) reported 22 acts per hour of verbal aggression in prime time programs and 19 acts per hour in Saturday morning programs. Williams, Zabrack, and Joy (1982) reported 7.8 acts per hour of verbal aggression in a sample of 109 programs popular among Canadian viewers. More recent research confirms that verbal aggression occurs more frequently than other forms of aggression in both prime time programming (Glascok, 2008) and in programs popular among adolescents (Feshbach, 2005). In contrast, in a related report of the content analysis presented in this paper, XXX (XXXX) reported that 76 hours of programming popular among fifth grade girls contained an average of only 2.8 acts of verbal aggression per hour. The frequency of verbal aggression therefore appears to vary widely depending on the sample of programs.

Recent evidence indicates that indirect aggression is also prevalent on television. Indirect aggression is a broad term that encompasses a variety of non-physical aggressive acts, including behaviors labeled by researchers as either relational or social aggression (for a review, see Card, Stucky, Sawalani, & Little, 2008). More specifically, indirect aggression refers to methods of inflicting harm covertly through the manipulation of relationships or social status, and includes behaviors such as social exclusion, the silent treatment, and spreading rumors (for a review, see Archer & Coyne, 2005). The current study examined this broader construct, indirect aggression, in order to capture the full range of non-physical acts of aggression portrayed on television, as well as to facilitate comparisons with prior content

analyses. Feshbach (2005) reported that indirect aggression occurred frequently in programs viewed by adolescents, with 93% of female characters in half-hour programs in the sample engaging in indirect aggression. Similarly, Coyne and Archer (2004) found that indirect aggression was present in 92% of 29 programs popular among British adolescents. Regarding frequency of indirect aggression, Coyne and Archer (2004) reported an average rate of 9.3 acts per hour, Glascock (2008) reported 19.2 acts per hour in a sample of primetime programs, and Linder and Gentile (2009) reported 3.7 acts per hour in a sample of programs viewed by young girls.

## CONTEXT OF TELEVISED AGGRESSION

Although research on the *amount* of physical, verbal, and indirect aggression on television is important for understanding the potential risks of television exposure for viewers, research on *how* aggression is portrayed on television is also essential. Theories of media violence effects suggest that certain types of televised aggressive acts may be more harmful than others. Specifically, justified and rewarded violence increases aggressive responding by children (Bandura, 1965; Bandura, Ross, & Ross, 1963a; Berkowitz & Powers, 1979; Hoggan, 1998; Wilson et al., 1998). Similarly, characteristics of the perpetrators of aggression on television may affect child responses. Social learning theory and classic studies by Bandura (e.g., 1986; Bandura, Ross, & Ross, 1963b) suggest that children are more likely to attend to, identify with, and learn from attractive characters, and characters that are high on perceived similarity, such as same-sex and same-age characters. Research has demonstrated that children have enhanced attention to and identification with same-age and same-sex characters (Hoffner & Cantor, 1991; Schmitt, Anderson, & Collins, 1999), which may increase the learning of aggressive behaviors if enacted by such characters (Paik & Comstock, 1994; Potter, 1999). Therefore, it is important to document the context of aggression on television, including motivation, consequences, and characteristics of perpetrators, in order to understand the potential effects on child viewers.

Televised physical aggression is often portrayed in ways that may enhance learning of aggression. The National Television Violence Study reported that nearly three quarters of violent acts on television were unpunished, nearly half the acts were portrayed as justified, and perpetrators often possessed qualities that might result in the viewer identifying with the character (Wilson et al., 1997). Within children's programming, 36% of perpetrators had characteristics that made them appealing to children, 30% of violence was portrayed as justified, and 81% of violent scenes did not show punishment for the aggressor (Wilson et al., 2002).

Less is known about the context of televised verbal and indirect aggression. Coyne and Archer (2004) reported that the indirect aggression in programs popular among British

adolescents was often justified and rewarded and usually took place within intimate relationships. In contrast, verbal aggression was usually unjustified and had no consequences more frequently than it was rewarded or punished. Perpetrators of indirect aggression were also more likely to be physically attractive compared to perpetrators of other types of aggression. With regards to gender, perpetrators of indirect aggression on television are more likely to be female, despite the fact that sampled programs contained nearly twice as many male characters (Coyne & Archer, 2004; Glascock, 2008). These findings suggest that televised indirect and verbal aggression is modeled in close relationships and may be portrayed in ways that increase learning of aggression, especially by female viewers.

## THE CURRENT STUDY

One limitation of the majority of the existing research is that it is not possible to accurately assess television aggression exposure for *children* based on these data. Although some children may be exposed to children's programming more frequently than adult programming, it is well documented that children frequently prefer to watch adult programming (Rosengren & Windahl, 1989). In the United States, the proportion of children who view children's educational and entertainment programming begins to steadily decline at about age 8, and there is an increase in preference for genres such as sitcoms and dramas (Cantor, 1998; Roberts & Foehr, 2004). There are also gender differences in television content preferences. For example, among a sample of children ages 8-10, significantly more girls than boys reported watching comedies, music videos, and educational programs (Roberts & Foehr, 2004). Therefore, research which examines aggression in programs specifically nominated as popular among girls (regardless of the genre or age rating of the programs) is the most valid for estimating aggressive content exposure in this population.

A second limitation of existing research is the dearth of information on the context of verbal and indirect aggression on television, which may limit our understanding of the effects of aggressive media on *girls*. Although televised depictions of non-physical forms of aggression may affect boys, as well as individuals of all ages, verbal and indirect aggression on television may be especially salient for preadolescent girls. During this developmental period, girls engage in less physical aggression than boys (for a review, see Card et al., 2008), and instead use indirect and verbal aggression (Archer, Pearson, & Westeman, 1988; Lagerspetz, Bjorkqvist, & Peltonen, 1988). As a result, viewing indirect and verbal aggression may have greater effects on girls during this age period. It is especially important to document how these types of aggression are portrayed in the media, because girls may turn to the media to gather information about the social norms and consequences of using these forms of gender-normative aggression. Therefore, the current study focused on acts of aggression in programs popular among fifth grade girls.

In summary, although many content analyses of televised aggression exist in the literature, we are not aware of any that have documented the content of programs specifically nominated as popular among young girls. Additionally, there is limited research on the *context* of verbal and indirect aggression on television, the forms of aggression most often used by girls. The current study consists of a content analysis of programs popular among fifth grade girls, and examines several contextual variables of the televised aggressive acts that prior research suggest may alter effects on viewer aggression. Specifically, the following research questions were examined with regards to television programs nominated by school-aged girls: (1) How frequent is relational, physical, and verbal aggression? (2) What are the characteristics (e.g., gender, age, attractiveness, and race) of perpetrators of each type of aggression? (3) How does the relationship between the perpetrator and victim differ by type of aggression? (4) How is the motivation for the act, and consequences portrayed?

## METHOD

### Participants

Participants were 99 fifth grade girls from three schools in a suburban area of the Northwest. Participants were 10 or 11 years of age ( $M = 10.6$ ,  $SD = .50$ ). Seventy-six percent of the participants were Caucasian, 16.5% were Hispanic, and 7.5% were other ethnicities.

### Procedures

All fifth grade girls in three target schools were invited to participate. Consent rate was approximately 70%. Participants completed several questionnaires, including a media habits questionnaire, in a group setting.

### Sample of Programs

Each participant was asked to name her three favorite television programs. Of 294 total responses, 33 responses were omitted because they were names of television networks ( $n = 12$ ), movies ( $n = 10$ ), or were Spanish programs ( $n = 11$ ). The remaining responses yielded a list of 108 different programs. Of these, 22 were no longer on the air at the time of coding and nine were available only through satellite service, and therefore were excluded. The remaining programs ( $n = 77$ ) were included in the analysis. A list of all shows by genre can be seen in the Appendix.

## Aggression Coding System

One hour of programming of each show (excluding commercials) was randomly recorded and analyzed for indirect, physical, and verbal aggression by the second author and one of seven other trained coders. No reliability estimates were calculated because all programs were double-coded and a consensus procedure was used, requiring 100% agreement among coders. The coding system was a modification of an aggression inventory by Coyne and Archer (2004). Behaviors with the intent to harm were considered acts of aggression. For each act, the type of aggression was recorded, as well as contextual variables that described the incident.

*Type of aggression.* Aggressive acts were classified as either indirect (30 behaviors), physical (26 behaviors), or verbal (five behaviors). Indirect aggression was defined as an attempt to hurt someone's reputation, social status, and/or relationships or the use of someone's relationships to manipulate or hurt (e.g., "Pretend to be hurt or angry to make someone feel bad"). Verbal aggression was defined as a direct attempt to hurt someone's feelings with words or gestures (e.g., "Calling a mean name"). Physical aggression was defined as an attempt to physically harm or threaten someone or their possessions (e.g., "Hitting or punching with a closed fist").

Each uninterrupted aggressive act was recorded. Scene changes or another character speaking or acting was considered an interruption, and any subsequent aggression was coded as a separate act. Simultaneous acts of aggression were assigned separate codes. For example, if a character hit someone while shouting "I hate you", this was coded as both physical and verbal aggression.

*Characteristics of the perpetrator.* For each act, the gender, age, attractiveness, and race of all the perpetrators were recorded. Gender was not recorded if the perpetrator was a gender-neutral animal or monster. Age was coded using the following categories: child (birth-age 12), adolescent (age 13-19), and adult (age 20 and older). Attractiveness of all human perpetrators (including animated characters) was coded as either "attractive" (high number of characteristics found to be attractive in Western culture), "average" (some attractive characteristics), or "unattractive" (few attractive characteristics) (for details, see Coyne & Archer, 2004). The race variable was not analyzed, due to the small cell sizes for non-Caucasian ethnicities and the high frequency of animated characters with unclear ethnicities.

*Relationship between perpetrator and victim.* The following categories were used to classify the relationship between the perpetrator and victim: strangers, acquaintances, friends, family members, romantic partners, ex-romantic relationship, student/teacher,

colleagues, law enforcement personnel/criminal, enemies/rivals, roommates, and employee/employer. For the current study, these categories were collapsed into two categories. An *intimate relationship* category was used for close relationships that persist over time and included friends, family members, and romantic partners. All other relationship categories were combined to form the category *non-intimate relationship*.

*Motivation for the aggressive act.* Two variables described the motivation for each aggressive incident. Each act was coded as either (1) reactive or proactive, and (2) justified or unjustified. An act was recorded as *reactive* if it was in response to an actual or perceived act of aggression from another (e.g., using aggression as revenge); all other acts were coded as *proactive*. An act was coded as *justified* if it was portrayed as self defense or as necessary to gain a greater good (e.g., acts of aggression against a villain); all other acts were coded as *unjustified*.

*Consequences.* Two variables, *reward* and *punishment*, captured information about the immediate or delayed consequences of each aggressive act. Aggression was coded as having a reward if the perpetrator gained something positive as a result of the aggression (e.g., obtained a desired goal), whereas it was coded as having a punishment if there was a negative consequence for the perpetrator as a result of the aggression (e.g., loss of power).

## RESULTS

### Amount and Type of Aggression

A majority of the programs (88.3%) contained some type of aggression. 76.6% of the programs contained indirect aggression, 71.4% contained physical aggression, and 68.8% contained verbal aggression. In the 77 hours of programming, there were a total of 1,234 acts of aggression, or an average of 16.03 acts per hour (Median = 12.00,  $SD = 18.33$ ). Of the total acts, 59.8% were classified as physical aggression, 22.9% were indirect aggression, and 17.2% were verbal aggression. There were an average of 9.58 acts of physical aggression per hour (Median = 2.00,  $SD = 17.09$ , range = 0-111), 3.68 acts of indirect aggression per hour (Median = 3.00,  $SD = 3.55$ , range = 0-18), and 2.77 acts of verbal aggression per hour (Median = 2.00,  $SD = 4.24$ , range = 0-32).

A MANOVA was conducted to determine if the amount of indirect, physical, and verbal aggression varied across genre. Due to the small number of shows classified as “game shows” and “other”, these shows were not included in the analysis. Results revealed significant differences in the amount of physical aggression across genres ( $F(3, 68) = 7.63, p < .001$ ). LSD Post hoc tests revealed that there was a significantly higher amount of physical



aggression in cartoons ( $M = 21.24$ ,  $SD = 24.28$ ) than in dramas ( $M = 9.69$ ,  $SD = 11.84$ ) sitcoms ( $M = 1.74$ ,  $SD = 1.60$ ) or reality shows ( $M = .25$ ,  $SD = .46$ ). There were no significant differences in the amount of indirect or verbal aggression across genres.

In order to examine whether contextual variables varied by type of aggression, a series of Chi-square analyses were conducted. In cases where a significant chi-square value was obtained, standardized residuals for cell frequencies were examined to determine which observed cell frequencies varied from expected frequencies at a level greater than chance ( $Z_{crit}(\alpha = .05) = 1.96$ ).

### Characteristics of Perpetrators

The total and percentage of acts of indirect, verbal, and physical aggression by perpetrator characteristics can be seen in Table 1.

*Gender.* In order to determine whether male and female perpetrators differed in the type of aggression used, a Chi-square analysis was conducted. Acts in which a mixed-gender group was the perpetrator and acts in which the perpetrator gender could not be identified were excluded. A Chi-square test of independence comparing perpetrator gender with type of aggression was significant ( $\chi^2(2, N = 1138) = 93.01, p < .001, \bar{O}_c = .29$ ). Male perpetrators were more likely to use physical aggression and less likely to use verbal and indirect aggression than expected given the prevalence of these types of aggression in the programs. Females were more likely to use indirect and verbal aggression and less likely to use physical aggression than expected. An additional Chi-square analysis explored type of aggression by gender composition of the perpetrator-victim dyad. A majority of all acts of aggression (89.5%) occurred between dyads rather than within groups; therefore aggressive acts that occurred within groups were excluded from the analysis due to small cell sizes. The Chi-square test was significant ( $\chi^2(6, N = 1062) = 144.74, p < .001, \bar{O}_c = .26$ ). In female dyads, indirect and verbal aggression occurred more than expected and physical aggression occurred less than expected, whereas in male dyads, physical aggression occurred more and indirect and verbal aggression occurred less than expected. Male-to-female aggression and female-to-male aggression was more likely to be verbal than expected.

*Age.* A Chi-square test of independence comparing perpetrator age with type of aggression was significant ( $\chi^2(4, N = 1150) = 23.18, p < .001, \bar{O}_c = .10$ ). Adolescent perpetrators were less likely to use verbal aggression than expected, whereas adult perpetrators were more likely to use verbal aggression.

Table 1

*Total and Percentage of Acts of Aggression by Perpetrator Characteristics*

	Type of Aggression		
	Indirect	Verbal	Physical
<b>Gender</b>			
Male	136 (18%) <sup>b</sup>	107 (14%) <sup>b</sup>	524 (68%) <sup>a</sup>
Female	130 (35%) <sup>a</sup>	99 (27%) <sup>a</sup>	142 (38%) <sup>b</sup>
<b>Gender of perpetrator-to-victim dyad</b>			
Male-to male	90 (16%) <sup>b</sup>	60 (11%) <sup>b</sup>	404 (73%) <sup>a</sup>
Female-to-female	74 (48%) <sup>a</sup>	44 (28%) <sup>a</sup>	37 (24%) <sup>b</sup>
Male-to-female	34 (23%)	41 (28%) <sup>a</sup>	73 (49%)
Female-to-male	50 (24%)	51 (25%) <sup>a</sup>	104 (51%)
<b>Age</b>			
Child	31 (30%)	20 (19%)	52 (50%)
Adolescent	107 (28%)	43 (11%) <sup>b</sup>	229 (60%)
Adult	140 (21%)	146 (22%) <sup>a</sup>	382 (57%)
<b>Attractiveness</b>			
Attractive	188 (29%) <sup>a</sup>	102 (16%)	362 (56%)
Average	65 (21%)	74 (24%) <sup>a</sup>	164 (54%)
Unattractive	16 (9%) <sup>b</sup>	26 (15%)	130 (76%) <sup>a</sup>

<sup>a</sup> standardized residual for cell was significantly *greater* than expected by chance ( $p < .05$ )

<sup>b</sup> standardized residual for cell was significantly *less* than expected by chance ( $p < .05$ )

*Attractiveness.* A Chi-square test of independence comparing attractiveness with type of aggression was significant ( $\chi^2(4, N = 1127) = 43.15, p < .001, \bar{O}_c = .14$ ). Perpetrators of indirect aggression were more likely to be attractive and less likely to be unattractive than expected, whereas perpetrators of physical aggression were more likely to be unattractive

than expected. Additionally, perpetrators of verbal aggression were more likely to be average in attractiveness.

*Relationship between Perpetrator and Victim.* The total and percentage of acts of aggression by closeness of the relationship between the perpetrator and victim can be seen in Table 2. A Chi-square test comparing relationship with type of aggression was significant ( $\chi^2(2, N = 1209) = 122.53, p < .001, \bar{O}_c = .32$ ). Indirect and verbal aggression were more likely than expected to occur between individuals in intimate relationships, and indirect aggression was less likely than expected to occur in non-intimate relationships. In contrast, physical aggression was more likely to occur in non-intimate relationships and less likely to occur in intimate relationships.

*Motivation and Consequences of Aggression.* The total and percentage of acts of indirect, verbal, and physical aggression by motivation and consequences can be seen in Table 3. A Chi-square test of independence comparing type of aggression and whether the acts were portrayed as reactive was significant ( $\chi^2(2, N = 1235) = 116.52, p < .001, \bar{O}_c = .31$ ). Indirect aggression was portrayed as reactive less than expected whereas physical aggression was portrayed as reactive more than expected, given the frequency of reactive aggression. A Chi-square test of independence comparing type of aggression and whether the acts were portrayed as justified was also significant ( $\chi^2(2, N = 1235) = 110.99, p < .001, \bar{O}_c = .30$ ). Indirect and verbal aggression were portrayed as justified less than expected and physical aggression was portrayed as justified more than expected. A Chi-square test of independence comparing consequences by type of aggression was significant ( $\chi^2(4, N = 1235) = 125.06, p < .001, \bar{O}_c = .23$ ). Verbal aggression was punished more and had no consequences shown less than expected, whereas physical aggression was punished less and had no consequences more than expected, given the frequency of total aggressive acts that were punished, rewarded, or had no consequences.

## DISCUSSION

The current study examined the amount and context of indirect, verbal, and physical aggression in television programs popular among fifth grade girls. All forms of aggression were prevalent, and each type of aggression was portrayed in different ways. Regarding the amount of aggression, the majority of programs (88%) contained some form of aggression. Of the programs that contained aggression, the highest percentage of programs contained indirect aggression (77%), followed by physical aggression (71%) and verbal aggression (69%). In addition, there were almost three times as many acts of physical aggression per hour as acts of indirect or verbal aggression.

Table 2

*Total and Percentage of Acts of Aggression by Relationship of Perpetrator and Victim*

Type of Relationship	Type of Aggression		
	Indirect	Verbal	Physical
Non-Intimate	178 (18%) <sup>b</sup>	152 (16%)	156 (66%) <sup>a</sup>
Intimate	103 (45%) <sup>a</sup>	65 (28%) <sup>a</sup>	62 (27%) <sup>b</sup>

<sup>a</sup> standardized residual for cell was significantly *greater* than expected by chance ( $p < .05$ )

<sup>b</sup> standardized residual for cell was significantly *less* than expected by chance ( $p < .05$ )

The current findings differed slightly from previous content analyses of televised aggression. Specifically, a slightly higher percentage of programs contained physical aggression than was found in the National Television Violence Study (Wilson et al., 1997, 2002), but this percentage was consistent with a more recent content analysis (Glascok, 2008), as was the number of acts of physical aggression per hour (9.6 acts per hour) (Glascok, 2008; Wilson et al., 1997, 2002). In contrast, both the percentage of shows containing indirect aggression and the frequency per hour of verbal and indirect aggression was much lower than has been reported previously (Coyne & Archer, 2004; Feshbach, 2005; Glascok, 2008; Greenberg et al., 1980; Williams et al., 1982). These discrepancies from past research are likely due to the unique sample of programs nominated by participants in the current study. First, the large number of fantasy violence programs in the current sample may account for the high percentage of shows containing physical aggression, because these programs contained sustained fighting sequences. Second, Coyne and Archer (2004) found that the highest levels of indirect aggression occurred in soap operas, which was not a genre nominated by any girls in our sample. However, it is unclear why we found lower levels of verbal aggression than have previously been found, especially given the high number of sitcoms, a genre that has previously been found to contain the highest amount of verbal aggression (e.g. Glascok, 2008), in the current analysis.

These results highlight several concerns regarding the types of televised aggression to which young girls may be exposed. Although fewer programs contained physical aggression compared to indirect aggression, the frequency data suggest that when physical aggression is present in television programs, it is at higher levels. Additionally, there were no differences across genres in indirect or verbal aggression. Therefore, although young girls

Table 3

*Total and Percentage of Acts of Aggression by Motivation and Consequences*

	Type of Aggression		
	Indirect	Verbal	Physical
<b>Motivation</b>			
Reactive	56 (20%) <sup>b</sup>	76 (36%)	414 (56%) <sup>a</sup>
Proactive	227 (80%) <sup>a</sup>	137 (64%)	325 (43%) <sup>b</sup>
<b>Consequences</b>			
Rewarded	90 (32%)	71 (33%)	187 (25%)
Punished	37 (13%)	87 (41%) <sup>a</sup>	93 (13%) <sup>b</sup>
None	156 (55%)	55 (26%) <sup>b</sup>	459 (62%) <sup>a</sup>

<sup>a</sup> standardized residual for cell was significantly *greater* than expected by chance ( $p < .05$ )

<sup>b</sup> standardized residual for cell was significantly *less* than expected by chance ( $p < .05$ )

may be exposed to greater amounts of televised physical aggression than other forms, indirect and verbal aggression may be the most ubiquitous. That is, non-physical forms of aggression are present in more shows and a greater variety of shows than is physical aggression. Because indirect and verbal aggression are not considered by the media industry when assigning program age or content ratings, parents who are concerned about all forms of television aggression will find it challenging to monitor their children's exposure to non-physical aggressive content.

An additional goal of the current study was to document the context of aggression on television, including characteristics of perpetrators, relationship between perpetrators and victims, and consequences and motivation for aggressive acts. This information is useful for determining potential effects of televised aggression on young viewers, because these

contextual variables can moderate media effects. The findings revealed that physical, indirect, and verbal aggression are portrayed in different ways on television.

The portrayal of gender differences in perpetration of different forms of aggression tended to mirror existing gender norms held by children about aggression. Male perpetration involved physical aggression more than expected, whereas female perpetration was more likely to involve verbal or indirect aggression. This was true in same-sex dyads, whereas within mixed-sex dyads both males and females were more likely to use verbal aggression. Girls this age have parallel normative beliefs as were portrayed on television—that males more frequently use physical aggression, females are more likely to use non-overt forms of aggression, and verbal insults are the most common form of aggression used in mixed-sex interactions (Crick, Bigbee, & Howes, 1996). Interestingly, recent research indicates that although boys do engage in higher levels of physical aggression, there are minimal gender differences in indirect aggression (Card et al., 2008), suggesting these beliefs regarding gender differences in indirect aggression are inaccurate. It may be that the media contributes to the development of young girls' stereotypical (and false) beliefs about gender norms regarding aggression. At the very least, the media may confirm and perpetuate these beliefs.

These gender differences in televised aggression portrayals may also contribute to aggressive behaviors in young female viewers. Wishful identification, the desire to behave similarly to television characters, is higher for same-sex characters, especially among girls (Hoffner, 1996) and longitudinal data suggests that childhood identification with same-sex aggressive characters predicts aggressive behavior in adulthood (Huesmann, Moise-Titus, Podolski, & Eron, 2003). Current results indicated that female perpetrators of aggression were more likely to use verbal and indirect aggression; therefore future research should investigate whether young girls are more likely than boys to develop these forms of aggression as a result of viewing.

The results revealed minimal differences in the type of aggression used by perpetrators of different ages. Findings regarding age were limited to verbal aggression — adolescent perpetrators were less likely to use verbal aggression than expected, whereas adult perpetrators were more likely to use verbal aggression. Because the current study did not control for the number of characters of different ages appearing in television programs, it is difficult to interpret these findings. Given that viewers may be more likely to identify with same-age characters, future research should investigate age differences in the types of aggression used by television characters.

Attractiveness of perpetrators varied significantly across aggression type. Most notably, perpetrators of indirect aggression were more likely to be attractive than expected, whereas perpetrators of physical aggression were more likely to be unattractive. A consideration of these findings within theoretical frameworks of media effects suggests that viewing television may be a risk factor for indirect aggression in young girls via at least two distinct processes. First, child viewers may develop norms from television about the types

of individuals who use different forms of aggression that may increase their own use of indirect aggression. Cultivation theory (Gerbner, Gross, Morgan, & Signorielli, 1994) posits that cumulative exposure to media shapes viewers' perceptions of reality. The norm that is portrayed in this sample of programs is that attractive individuals use indirect aggression. Associating indirect aggression perpetration with attractiveness may normalize and glamorize the behavior. Second, based on social learning theory and past research, it is predicted that viewers may be more likely to imitate televised aggression that is perpetrated by attractive characters (e.g., Bandura, 1986).

The programs in the current content analysis also portrayed specific norms about the forms of aggression used within different types of relationships. Indirect and verbal aggression were more frequent than expected within close, intimate relationships and indirect aggression was less frequent in relationships characterized as non-intimate (e.g., strangers). The reverse pattern was seen for physical aggression. Crick and colleagues (e.g., Crick et al., 1999) have suggested that relationally aggressive girls have learned from family interactions to value close, intense relationships and that relational aggression is effective for achieving and maintaining closeness. The disproportionately higher frequency of acts of indirect aggression within close relationships on television suggests that media may function similarly as a socialization factor contributing to the development of relational aggression. Indeed, children report that they like to watch television, specifically adult programs, to learn social lessons, such as how to behave in relationships (Valkenburg, 2004).

Another contextual factor previously identified as a moderator of media effects is the motivation for the aggressive act. The current study analyzed two types of motivation—whether acts were portrayed as reactive, and whether the acts were justified. Consistent with existing content analyses of children's programming (e.g., Wilson et al., 2002), over half of physical aggression was portrayed as reactive and almost one third of physical aggression was portrayed as justified. Additionally, indirect aggression was less likely than expected to be portrayed as reactive and justified, and verbal aggression was less likely than expected to be portrayed as justified. Children are more likely to judge televised violence as morally acceptable if it is provoked (Krcmar & Cooke, 1991) and to imitate aggression that is justified (e.g., Berkowitz & Powers, 1979); therefore, acts of physical aggression were more likely to be portrayed in ways that may result increase viewer aggression. On the other hand, there is evidence that viewing *unjustified* physical aggression increases fear in viewers (e.g., Potter, 2008) and almost all (95%) of the acts of indirect and verbal aggression were portrayed as unjustified. It is unclear whether viewing unjustified indirect and verbal aggression would have a similar effect; this should be investigated by future research.

The last contextual variable examined in the current study was the consequences of the aggressive acts. A cross all types of aggression, the majority of televised aggression resulted in no consequences for the perpetrator. However, acts of verbal aggression were punished more than expected and resulted in no consequences less than expected. Therefore,

consequences (including punishments and rewards) were shown most frequently for verbal aggression. In contrast, physical aggression had no consequences shown more than expected and was punished less than expected, and over half of all acts of indirect aggression also had no consequences shown. This finding is concerning because there is evidence that children are as likely to imitate aggression with no consequences as they are to imitate rewarded aggression (Bandura, 1965). In addition, only 13% of acts of both physical and indirect aggression were punished, and over one quarter of acts of indirect, verbal, and physical aggression were rewarded. Based on social learning theory, the lack of consistent negative outcomes for aggression on television increases the risk of increased aggression in viewers.

There were several limitations of the current study. First, the coding system used in the current study did not code for the number and characteristics (e.g., age, gender) of all the characters in each program. Because we were unable to control for frequency of different types of characters (e.g. the number of child characters in each program) in the analyses, we could not make absolute comparisons of perpetration by different types of characters. For example, although child characters were less frequently perpetrators of aggression than characters of other ages, it is unclear whether this was simply the result of the lower number of child characters in the programs. Second, only one hour of programming was coded for each show, and levels of aggression might vary substantial across episodes of a television series. Additionally, several of the programs nominated by participants were not included in the content analysis because they were no longer on the air or were in Spanish, which may limit the validity of the findings.

There were several aspects of the current study that increase the validity and practical significance of the findings. The sample consisted of programs that were nominated by young girls as their favorite shows. Therefore, the results may provide a more accurate estimate of aggressive television exposure for children than content analyses based on random samples of television. To our knowledge, this content analysis was also one of the first to include both overt and non-overt forms of aggression. Additionally, the inclusion of contextual variables in the coding system allowed for the estimation of “high risk” aggression (i.e., aggression that is portrayed in ways that increase learning of aggression) exposure. Finally, the large number of programs and the variety of programs included in the sample increase the generalizability of the findings. Although these programs were selected by fifth grade girls, many of these programs are also widely viewed by other age groups and by males, so these findings also provide some insight into levels of television aggression exposure among other populations.

In conclusion, the results revealed that verbal and indirect aggression are prevalent in television programs popular among young girls. Although these forms of aggression occur on television at lower frequencies than physical aggression, non-physical aggression is often portrayed in ways that increase the risk of learning of aggression by viewers. Future research should continue to examine the portrayal of all forms of aggression on television, including



how the motivation and consequences of verbal and indirect aggressive acts may vary by the characteristics of the perpetrators. For example, past research has indicated that child characters are most likely to engage in high-risk violence (i.e., violence that is portrayed in ways that increase learning) on television (Wilson, Colvin, & Smith, 2002). Similar analyses should be conducted with respect to verbal and indirect aggression, especially in light of recent findings of associations between television exposure to high-risk verbal and indirect aggression and negative outcomes in children (Linder & Gentile, 2009). Research that provides a detailed picture of the televised aggression landscape is essential for obtaining a better understanding of media exposure as a risk factor for the development of both physical and non-physical forms of aggression in children.

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## Appendix: Television Shows Included in the Content Analysis

<i>Cartoons (n = 25)</i>		
Avatar, the Last Airbender	Fairly Odd Parents	Rugrats
Brandy and Mr. Whiskers	Family Guy	Scoobydoo
Case Closed	Inuyasha	Simpsons, The
Courage the Cowardly Dog	Kim Possible	Sponge Bob Square Pants
Cyberchase	King of the Hill	Teen Titans
Danny Phantom	Lilo and Stitch	Totally Spies
Digimon	Maya and Miguel	Yu-Gi-Oh
Dragonball Z	Pokemon	
Ed Ed and Eddy	Proud Family	
<i>Sitcoms (n = 23)</i>		
70's Show, That	Hope and Faith	Sister Sister
8 Simple Rules	I Love Lucy	That's So Raven
Boy Meets World	Lizzy Maquire	Suite Life of Zach and Cody,
Cosby Show, The	Malcolm in the Middle	Unfabulous
Fresh Prince of Bellaire, The	One on One	What I Like about You
Friends	Everybody Loves Raymond	Will and Grace
Full House	Sabrina	Zoey 101
Home Improvement	Seinfeld	
<i>Dramas (n = 16)</i>		
7th Heaven	FBI Files	O.C., The
Angel	Gilmore Girls	Saddle Club
Bonanza	Lassie	Smallville
Buffy the Vampire Slayer	Law and Order	Summerland
Charmed	Lost	
CSI: Crime Scene Investigation	MASH	
<i>Reality Shows (n = 8)</i>		
American Idol	Endurance	Surreal Life, The
Animal Cops	Fear Factor	Survivor
Cops	Simple Life, The	
<i>Game shows (n = 2)</i>		
Family Feud	Price is Right	
<i>Other (n = 3)</i>		
Mad TV	Total Request Live	Mythbusters