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What Goes In Must Come Out: Children's Media Violence Consumption at Home and Aggressive Behaviors at School

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Introduction

A significant number of studies have solidified the notion that media violence has an effect on children's subsequent aggression (see Bensley & Eenwyk, 2001 and Wilson, Smith, Potter, Kunkel, Linz, Colvin, & Donnerstein, 2002, for recent reviews). Violent media can take many forms, ranging from television programming and movies to video games and other interactive activities. This study examines a number of these different media formats. Previous studies of the impact of media violence on childhood aggression have been limited by a focus on physical forms of aggression, which tend to be more common among boys. Accordingly, little is known of the impact of media violence on aggression in girls.

This study expands upon previous research by examining subtypes of aggression in relation to violent media. In particular, research has established relational aggression as a point of contrast with physical forms of aggression (see Crick et al., 1999, for a review). Children who spread rumors, exclude peers, and engage in other relationship-oriented aggression are different than those who simply hit or kick to aggress against another. Relational aggression has been defined as "behaviors that harm others through damage (or the threat of damage) to relationships or feelings of acceptance, friendship, or group inclusion" (Crick, 1996). Studies show that relational aggression is associated with a significant level of negative consequences for both perpetrators and their victims (see Crick et al., 1999, for a review).

Physical and relational forms of aggression are moderately correlated, which is to be expected (given that they are both forms of aggressive behavior). Nonetheless, relational aggression emerges as a distinct form of aggression and studies have begun to focus on the possible differential correlates of these subtypes (Crick et al., 1999). To our knowledge, no study has yet compared physically and relationally aggressive children in terms of their violent media viewing habits. Accordingly, the current research separately considered both forms of aggression.

Research regarding the media violence and aggressive behavior has often been hampered by emphasis on the question of whether media violence actually promotes aggressive behavior or, in contrast, whether aggressive children simply prefer media violence, consistent with their behavioral style. Research tends to suggest that both processes are in

motion, and the effects of media violence are indeed heightened for children who already struggle with aggressive tendencies (Huesmann & Miller, 1994; Coie & Dodge, 1998). Accordingly, analyses in this study focus on highly aggressive children, using an extreme groups approach, in order to define the possible impact of media violence on children who are most at risk for developmental difficulties.

A second area of interest in the current study is that of social information processing styles related to exposure to media violence. In particular, we were interested in the possible relation of media violence to the formation of intent attributions. Previous research has demonstrated that the association between hostile attributional bias and social maladjustment is quite strong, and has been demonstrated with children of all ages (see Crick & Dodge, 1994, for a review). In particular, physically aggressive children tend to exhibit a hostile attributional bias, in which they tend to infer hostile intent from the actions of others, even when intent is ambiguous and might be benign. This style of processing understandably contributes to the development and maintenance of aggressive behavior. This research is also limited in regard to consideration of aggressive girls, as the focus of such studies tends to be aggressive boys. In contrast, Crick (1995) has shown that relationally aggressive children also tend to exhibit hostile attributional biases, although social context matters a lot. In particular, Crick (1995) demonstrated that instrumental conflicts (e.g., a peer breaking your toy) are more salient and provocative for physically aggressive children whereas relational conflicts (e.g., a peer fails to invite you to his birthday party) tend to elicit a response consistent with a hostile attributional bias in relationally aggressive children. Social information-processing theory suggests that violent media might activate cognitive structures, "making it more likely that other incoming information would be processed in an 'aggression' framework, possibly increasing aggressive behavior" (Bensley & Eenwyk, 2001). Considering many children seem to be predisposed to assume hostility in ambiguous situations, violent media has the potential to be a destructive contributing factor. Thus, we examined relationships between violent media habits and hostile attributional bias (for instrumental and relational conflict situations) in the current study.

Method

Participants

Two hundred and nineteen 3rd (n = 81), 4th (n = 49), and 5th grade (n= 89) students participated in the study. Students were recruited from four Minnesota schools, including one suburban private school (n = 41), two suburban public schools (n = 151), and one rural public school (n = 27). The sample was almost evenly divided between boys and girls, with 49% of the children being female (51% male). Participants ranged in age from 7 to 11 years of age (M = 9.53; SD = 1.07). Ninety-one percent of the respondents classified their ethnic background as Caucasian (which is representative of the region). Participants were treated in accordance with the "Ethical Principles of Psychologists and Code of Conduct" (American Psychological Association, 1992).

Procedure

Data were collected between November 2000 and June 2001. Letters were mailed directly to the parents of students in participating classrooms informing them about the study and requesting consent. Consent levels were greater than 70% for all classrooms. Interested teachers volunteered their classrooms for inclusion in the study. Each of the participating classrooms was a mandatory class (i.e., not elective) to reduce the likelihood of self-selection bias.
Each participant completed three confidential surveys:

1. a peer-nomination measure of aggressive and prosocial behaviors,
2. a self-report survey of media habits and demographic data, and
3. a self-report measure of hostile attribution bias.

Trained research personnel administered the peer-nomination survey, and classroom teachers were trained to administer the other surveys. The surveys were administered on consecutive days. Teachers also completed one survey for each participating child, reporting on the frequency of children's aggressive and prosocial behaviors.

Assessment of Social Adjustment

A peer nomination instrument was utilized in order to assess children's social adjustment, and was adapted from a peer nomination instrument that has been used in several previous studies of children's social behavior (e.g. Crick, 1995; Crick & Grotpeter, 1995). This instrument consists of 10 items. Two of these items were the peer sociometric items (nominations of liked and disliked peers), which are used extensively in research of this nature to assess peer acceptance and rejection (see Crick & Dodge, 1994) for a review. The remaining 8 items assess four different types of social behavior: physical aggression (2 item subscale), relational aggression (3 item subscale), prosocial behavior (2 item subscale), and verbal aggression (1 item). For the purposes of this study, the physical aggression and relational aggression subscales were examined (see Table 1 for a listing of all of items related to the different subscales). Cronbach's alpha was computed for each of the three subscales and was found to be satisfactory: a = .93 for physical aggression, a = .86 for relational aggression, and a = .81 for prosocial behavior.
Children's physical and relational aggression scores were used as continuous variables in subsequent correlational analyses and were also used to identify groups of aggressive and nonaggressive children (for categorical comparison). In particular, the classification of aggressive groups was based on an extreme groups approach. Children with scores one standard deviation above the mean were considered aggressive, and the remaining children were classified as nonaggressive. This allowed for the organization of four groups:

1. non-aggressive (both relational and physical aggression scores low),
2. physically aggressive (relational aggression low, physical aggression high),
3. relationally aggressive (relational aggression high, physical aggression low) and
4. combined relationally and physically aggressive (both scores high).

Teacher Ratings of Aggressive Behavior

Teachers completed a survey assessing children's aggression and prosocial behavior for each child participating in the study. This instrument consists of twelve behavioral subscales, including a variety of behaviors (e.g. aggressive behavior, victimization, prosocial behavior, and others). For the purposes of this study, only the subscales reflecting relational aggression and physical aggression are used in subsequent analyses. These items are listed in Table 2. Cronbach's alpha was computed and found to be satisfactory for each subscale: a = .93 for teacher ratings of relational aggression and a = .94 for teacher ratings of physical aggression. Finally, similar to the peer-nomination measure, the continuous scores for each of these subscales was used to identify groups of children according to aggressive status (as described above).

Assessment of Media Habits

Violent media exposure Similar to Anderson and Dill's (2000) approach, participants were asked to name their three favorite television shows, their three favorite video or computer games, and their three favorite movies/videos. For each named media product, participants were asked to rate how frequently they watched or played on a 5-point Likert scale (1 = "Almost never," 5 = "Almost every day"). Participants were also asked to rate how violent they consider each media product to be on a 4-point Likert scale (1 = "Not at all violent," 4 = "Very violent"). A violence exposure score was computed for each participant by multiplying the frequency of watching or playing each media product by its subjective violence rating, and then taking the mean of the three similar products. Accordingly, media-specific (i.e., Violent TV Exposure, Violent Video Game Exposure, and Violent Movies/Videos Exposure) violence exposure scores were computed for each participant. Finally, an overall violent media exposure score, the mean of all nine products (TV, video games, movies/videos), was also calculated. Previous research has confirmed that participants were likely to assess the violence in media products based on the amount of physical violence, rather than relational aggression. People's ratings were most strongly correlated with the graphicness of the portrayal of physical violence, across age, gender, amount of television viewing, and other factors (Potter, 1999).

Preference for violent video games.

One item assessed each participant's preference for more or less violent video games by asking, "On a scale from 1 to 5, how much violence do you like to have in video games?"

Amount of television watching and video game play

Participants provided the amount of time they spent watching television and playing video games during different time periods on weekdays and weekends. Weekly amounts were calculated from these responses.

Assessment of hostile attributional bias/social information processing.

The final survey was an adapted version of a hostile attribution survey that has been reliably used in past research (e.g., Crick, 1995; Nelson & Crick, 1999). This instrument is composed of 10 stories, each describing an instance of provocation in which the intent of the provocateur is ambiguous. The stories were developed to reflect common situations that children and young adolescents might encounter in the school years. Four of the stories depict instrumental provocations and six represent relational provocations. Participants answer two questions following each story. The first presents four possible reasons for the peer's behavior, two of which indicate hostile intent and two reflect benign intent. The second question asks whether the provocateur(s) intended to be mean or not. This survey relates to the participant's perception of hostility from the outside world. Two scale scores result from analysis of this measure: intent attributions for relational provocation and intent attributions for instrumental provocations.

Based on procedures delineated by Fitzgerald and Asher (1987), the children's responses to the attribution assessments were summed within and across the stories for each provocation type. Possible scores ranged from 0 through 12 (0-8 for the instrumental subscale and 0-12 for the relational subscale). Finally, Cronbach's alpha was computed for each of these scales and found to be satisfactory: intent attributions for relational provocations (a = .81) and intent attributions for instrumental provocations (a = .74).

Results

The first set of analyses report simple bivariate correlations for all of the variables included in the study. Further analyses considered grade, sex, and aggression group differences for the various media variables. These analyses were conducted separately for teacher ratings and peer behavioral nominations of aggressive behavior and, as noted earlier, discriminate between physical and relational forms of childhood aggression.

Correlation Findings

Teacher and peer ratings were generally consistent with each other across the various correlations (see Table 3). Interestingly, amount of television viewing correlated with not only exposure to violent television content, violent video games, violent movies/videos and the violent media index, but more importantly, with a preference for violence in video games and peer reports of physical aggression.

Similarly, amount of video game play per week was significantly associated with exposure to violent television content, violent video games, violent movies/videos and the violent media index. It was also correlated with a preference for violent video games and both peer and teacher reports of physical aggression. In general, children with greater exposure to violent media preferred more violent video games.

The hostile attribution scores also showed many significant correlations. Instrumental hostile attribution was significantly correlated with a preference for violent video games, amount of television watched per week, the violent television exposure index, the violent video game exposure index, the violent media exposure index, the relational hostile attribution scores, and peer ratings of relational aggression.

Likewise, the relational hostile attribution scores were associated with a preference for violent video games, the violent media exposure index, and the violent video game exposure index. (See Table 3 for all correlation findings.)

Findings Related to Teacher Ratings of Aggressions

To assess grade, sex, and physical and relational aggression group differences in children's exposure to and preference for violent media, 3 (grade) x 2 (sex) x 2 (physical aggression: aggressive or nonaggressive) x 2 (relational aggression: aggressive or nonaggressive) analyses of variance were conducted. Variables relating to children's exposure to and preference for different forms of violent media served as the dependent variables.

In regards to preference for violence in their video games, analyses produced significant main effects for grade, $F(2, 193) = 6.6$, $p < .01$, sex, $F(1, 193) = 85.1$, $p < .001$, physical aggression, $F(1, 193) = 4.5$, $p < .05$ and relational aggression, $F(1, 193) = 9.4$, $p < .01$. Specifically, a post-hoc test (Fisher's LSD) ($p < .05$) revealed that the fifth graders (M=2.7, SD=1.2) were significantly more likely than fourth graders (M=2.1, SD= 1.0) to prefer violence in their video games. In regard to the main effect for sex, boys (M=3.1, SD=1.1) were more likely to favor video game violence than girls (M=1.8, SD=1.0). In addition, physically aggressive children (M=3.2, SD=1.2) and relationally aggressive children (M=2.7, SD=1.3) also tended to favor more violence in their video game play over their nonaggressive peers (M=2.3, SD=1.2; M=2.4, SD=1.2, respectively).

The analyses of the violent television exposure index revealed significant main effects for sex, $F(1, 197) = 36.9$, $p < .001$ and relational aggression, $F(1, 197) = 8.3$, $p < .01$. In addition, a significant sex X relational aggression interaction $F(1, 197) = 5.2$, $p < .05$, and a physical aggression X relational aggression interaction $F(1, 197) = 6.6$, $p < .05$ were found. Analysis of the means showed that boys (M=6.2, SD=2.6) were exposed to relatively more violent television than girls (M=4.4, SD=1.7). In addition, relationally aggressive children (M=5.9, SD=2.6) report being exposed to significantly more violent television programming than their nonaggressive peers (M=5.2, SD=2.3). Furthermore, a simple effects of analysis of variance of the relational aggression group means (conducted separately by gender) showed the main effect of the relationally aggressive group to be significant for boys only, $F(1, 108) = 11.1$, $p < .01$. Specifically, relationally aggressive boys (M = 8.4, SD = 2.6) were significantly more likely to be exposed to violent television than nonaggressive boys (M = 5.9, SD = 2.5). Finally, a post hoc test (Fisher's LSD) ($p< .05$) conducted on the physical aggression X relational aggression means found that children who were comorbid for aggressive behavior (both physically and relationally aggressive, M=6.6, SD=2.4) were more likely to be exposed to violent television programming than nonaggressive children (M=5.1, SD=2.3).

For the violent video games exposure index, analyses demonstrated a significant main effect for sex, $F(1, 182) = 48.2$, $p < .001$, and relational aggression, $F(1, 182) = 5.2$, $p < .05$. In regard to the sex effect, boys (M= 6.7, SD = 3.7) were more likely to report greater exposure to violent video game play than girls (M = 3.6, SD =2.5). In addition, relationally aggressive children (M = 5.9, SD = 3.8) were more involved in violent video game play than their nonaggressive peers (M = 5.2, SD = 3.5).

For the violent movie/video exposure index, analyses showed a significant main effect for sex, $F(1, 195) = 16.9$, $p < .001$. Analysis of the means showed that boys (M = 4.6, SD = 2.8) were more likely to be exposed to violent movies and videos than girls (M = 3.3, SD = 2.0).

For the violent media exposure index, analyses revealed significant main effects for sex, $F(1, 199) = 63.6$, $p < .001$, and relational aggression, $F(1, 199) = 6.6$, $p < .05$. In regard to the main effect for sex, boys (M = 5.9, SD = 2.3) reported greater exposure than girls

(M= 3.8, SD = 1.6) to all forms of media violence. In addition, relationally aggressive children (M = 5.2, SD = 2.2) also reported significantly more exposure to overall media violence than their nonaggressive peers (M = 4.8, SD = 2.2). Finally, analyses revealed a physical aggression X relational aggression interaction, $F(1, 199) = 7.9$, $p < .01$. A post-hoc test (Fisher's LSD) ($p < .05$) conducted on the physical aggression X relational aggression means found that children who were physically aggressive (M=6.1, SD=2.6) were more likely to be exposed to violent media than nonaggressive children (M=4.6, SD=2.1).

Findings Relating to Peer Ratings of Aggression

To assess grade, sex, and physical and relational aggression group differences in children's exposure to and preference for violent media, 3 (grade) x 2 (sex) x 2 (physical aggression: aggressive or nonaggressive) x 2 (relational aggression: aggressive or nonaggressive) analyses of variance were conducted. Variables relating to children's exposure to and preference for different forms of violent media served as the dependent variables.

In regards to preference for violence in their video games, analyses revealed significant main effects for grade, $F(2, 192) = 7.2$, $p < .001$, sex, $F(1, 192) = 86.7$, $p < .001$, and relational aggression, $F(1, 192) = 10.1$, $p < .01$. As for the main effect for grade, post-hoc tests (Fisher's LSD) ($p < .05$) showed that both 3rd graders (M = 2.5, SD = 1.2) and 5th graders (M = 2.7, SD = 1.2) were significantly more likely to prefer violence in their video games than 4th graders (M = 2.1, SD = 1.0). In addition, boys (M = 3.1, SD = 1.1) were more likely to prefer violence than girls (M = 1.8, SD = 1.0). In regard to the main effect for relational aggression, relationally aggressive children (M = 3.0, SD = 1.4) showed a greater preference for violence than their nonaggressive peers (M = 2.4, SD = 1.2).

For the violent television exposure index, analyses demonstrated significant main effects for sex, $F(1, 196) = 37.0$, $p < .001$, physical aggression, $F(1, 196) = 7.3$, $p < .01$, and relational aggression, $F(1, 196) = 4.2$, $p < .05$. There was also a significant grade x sex interaction, $F(2, 196) = 3.4$, $p < .05$. In regard to the main effect for sex, boys (M = 6.8, SD = 3.8) were much more likely to report exposure to violent television than girls (M = 3.6, SD = 2.5). In addition, both physically aggressive children (M = 6.8, SD = 2.8) and relationally aggressive children (M = 6.2, SD = 2.6) were exposed to significantly higher levels of televised violence than nonaggressive children (M = 5.1, SD = 2.3) for physical aggression comparison; M = 5.2, SD = 2.3 for relational comparison).

Analyses of the violent video games exposure index showed significant main effects for grade, $F(2, 181) = 3.2$, $p < .05$, sex, $F(1, 181) = 48.5$, $p < .001$, and relational aggression, $F(1, 181) = 5.4$, $p < .05$. Post-hoc analyses of the means (Fisher's LSD) ($p < .05$) showed that 5th graders (M = 6.1, SD = 4.2) had significantly more exposure to violent video games than their 3rd and 4th grade counterparts (M = 5.0, SD = 3.3; M = 4.8, SD = 3.0, respectively). In addition, boys (M = 6.8, SD = 3.9) were far more likely than girls to be exposed to violent video games (M = 3.6, SD = 2.5). Finally, relationally aggressive children (M = 6.5, SD = 4.4) were more likely to play violent video games than their nonaggressive peers (M = 5.2, SD = 3.5).

Analyses of the violent movie/video exposure index revealed significant main effects for sex, $F(1, 194) = 17.4$, $p < .001$ and physical aggression, $F(1, 194) = 6.5$, $p < .05$. Analysis of the means showed that boys (M = 4.7, SD = 3.0) were more likely to watch violent movies and videos than girls (M = 3.3, SD = 2.0). In addition, physically aggressive

children (M = 5.5, SD = 4.0) were also more likely than non-physically aggressive children (M = 3.8, SD = 2.4) to watch violent movies and videos

Finally, analyses of the violent media exposure index revealed significant main effects for grade, $F(2, 198) = 3.5$, $p < .05$, sex, $F(1, 198) = 62.6$, $p < 001$, physical aggression status, $F(1, 198) = 6.0$, $p < .05$, and relational aggression group, $F(1, 198) = 7.2$, $p < .01$. Post-hoc tests of the grade means (Fisher's LSD) ($p < .05$) showed that 5th graders (M = 5.3, SD = 2.7) were more likely to be exposed to violent media of all types than their 3rd and 4th grade peers (M = 4.7, SD = 1.9; M = 4.5, SD = 2.1, respectively). In regard to the main effect for sex, boys (M = 6.0, SD = 2.4) reported significantly more exposure to all types of violent media than girls (M = 3.8, SD = 1.6). In addition, physically aggressive children (M = 6.3, SD = 2.7) reported greater exposure than non-physically aggressive children (M = 4.7, SD = 2.2) and relationally aggressive children (M = 5.8, SD = 2.5) also reported greater exposure than non-relationally aggressive peers (M = 4.7, SD = 2.2).

Discussion

To date, this is the first research conducted regarding relational aggression and media violence. The true seriousness of relational aggression and its potential destructive effects are just beginning to be recognized in the field, and much exploration of this exciting area is sure to follow these harbinger efforts. Another strength of the study is that it incorporates authentic measures of aggression, teacher and peer reports, which have strong ecological validity.

Findings revealed that children who watched more television and played video games more often were more likely to view violence and exhibit hostile attributional biases. Perhaps those spending more time engaged in these media forms have less parent supervision of their activities and viewing material, and the children are left to their own devices. Secondarily, perhaps these children are inadvertently exposed to television violence, due to the sheer number of hours they report spending with these media forms. Hostile attributions were associated with multiple indices of exposure to violent media and teacher and peer ratings of violent behavior. It appears that those children who engage in violent media viewing and play tend to assume the worst in their interactions with others. While the direction of effect is not clear, this finding merits additional investigation.

The sex difference was strong across the various findings. Boys were exposed to more violent media and preferred more violent media. The reasons for this might include socialization differences-the toys, games and even subtle messages boys and girls receive guide their behavior and what they expect of themselves. This finding has implications for the importance of prudence and care in the socialization of young children. This includes what they are exposed to in terms of media.

In regards to their preference for violent media forms, fifth graders consistently showed greater preference than either their fourth grade counterparts alone or sometimes both third and fourth grade children. The implications of this apparent increase with age are addressed further on.

Relationally aggressive children were shown to view and play more violent media than their nonaggressive peers. This provides a persuasive case for the idea that violent media does not only contribute to physical aggression, but that it is possible that subtleties in media character relationships demonstrate other ways that individuals hurt one another.

What do these relational aggression findings mean? It is possible that children who indulge in relational aggression perceive it as more subtle and easier to perpetrate without significant repercussions from parents or teachers. This may be why relational aggression often emerged as significant without physical aggression. Another possibility might be that currently comorbid children began with relational aggression for the same self-defensive reasons and then moved on to more overt, physical forms of aggression.

Of course, there were limitations in the study. Children's ratings of the violence in their favorite media were subjective. It is possible that children who view violence more frequently might report it as being less violent, having been desensitized to its content over time. Conversely, children who view violence infrequently might inflate their reports of the violence they do observe.

Also, the findings reported here are correlational and do not merit casual assessment. However, the significant level of consistency of the findings give substantial evidence for the central purpose of this report-to document differences in children's aggression, based upon their violent media consumption. Future analyses will include the factor of parental involvement, conceptualized as whether or not parents place limits on children's consumption of different kinds of media and how often a parent watches television programs with their child (providing opportunities for discussion of the various scenes portrayed). These will provide a more detailed picture of the results given here.

It is likely that the perpetration of relational aggression increases as children grow into young adolescents and peer groups become increasingly important to them (Nelson & Crick, 1999). Closer examination of popular media is needed in order to assess its danger in terms of relational aggression. This research underscores the need for continued study of these relationships. It will have implications for parents and educators alike in the prevention of aggression problems, and possibly inform future interventions with maladjusted children.

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Table 1. Peer nomination subscale items

Physical aggression subscale:

- Who hits, kicks, or punches others?
- Who pushes and shoves other kids around?

Relational aggression subscale:

- Who tries to make another kid not like a certain person by spreading rumors about them or talking behind their backs?
- Who, when they are mad at a person, get even by keeping that person from being in their group of friends?
- Who, when they are mad at a person, ignore the person or stop talking to them?

Verbal aggression item:

- Find the number of three kids who say mean things to other kids to insult them or put them down.

Prosocial behavior subscale:

- Who does nice things for others?
- Who tries to cheer up other kids who are upset or sad about something? They try to make the kids feel happy again.

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Table 2. Teacher rating subscale items used in this study.

Physical aggression subscale:

- This child hits or kicks peers.
- This child initiates or gets into physical fights with peers.
- This child threatens to hit or beat up other children.
- This child pushes or shoves peers.

Relational aggression subscale:

- When this child is mad at a peer, s/he gets even by excluding the peer from his or her clique or playgroup.
- This child spreads rumors or gossips about some peers.
- When angry at a peer, this child tries to get other children to stop playing with the peer or to stop liking the peer.
- This child threatens to stop being a peer's friend in order to hurt the peer or to get what s/he wants from the peer.
- When mad at a peer, this child ignores the peer or stops talking to the peer.

Table 3. Correlational table for variables used in this study.

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Video Game (VG) Violence Preference	1	.354**	.421**	.504**	.620**	.361**	.632**	.246**	.171*	.131	.325**	.012	.270**
2. Amt. TV per week	.354**	1	.467**	.313**	.270**	.288**	.373**	.163*	.120	.044	.160*	.064	.106
3. Amt. VG play per week	.421**	.467**	1	.378**	.628**	.345**	.602**	.107	.138	.044	.185**	-.108	.157*
4. Violent TV Expos. Index	.504**	.313**	.378**	1	.503**	.438**	.775**	.164*	.102	.200**	.300**	.140*	.214**
5. Violent VG Expo Index	.620**	.270**	.628**	.503**	1	.444**	.857**	.210**	.205**	.134	.221**	.072	.267**
6. Vio. Movie/Video Expo. Index	.361**	.288**	.345**	.438**	.444**	1	.755**	.111	.102	.135*	.243**	.037	.216**
7. Vio. Media Expo. Index	.632**	.373**	.602**	.755**	.857**	.755**	1	.201**	.167**	.191**	.320**	.091	.297**
8. Instrumental Hostile Attribution (HA)	.246**	.163**	.107	.164*	.210**	.111	.201**	1	.368**	.134*	.130	.121	.183**
9. Relational HA	.171*	.120	.138	.102	.205**	.102	.167*	.368**	1	.028	.091	.073	.130
10. PeerBRelational Aggression Scale	.131	.044	.044	.200**	.134	.135*	.191**	.134*	.028	1	.642**	.497**	.317**
11. Peer-Physical Aggression Scale	.325**	.160*	.185**	.300**	.221**	.243**	.320**	.130	.091	.624**	1	.296**	.529**
12. Teacher-Relational Aggression	.012	.064	-.108	.140*	.072	.037	.091	.121	.073	.497**	.296**	1	.313**
13. Teacher-Physical Aggression	.270**	.106	.157*	.214**	.267**	.216**	.297**	.183**	.130	.317**	.529**	.313**	1

**Correlation is significant at the 0.01 level.
*Correlation is significant at the 0.05 level.