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Do the Perpetrators' Prosocial Qualities Matter?

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# VIOLENCE ON AMERICAN TELEVISION: DO THE PERPETRATORS' PROSOCIAL QUALITIES MATTER?

By

Jennie M. Hwang

## AN ABSTRACT OF A THESIS

Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

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#### ABSTRACT

# VIOLENCE ON AMERICAN TELEVISION: DO THE PERPETRATORS' PROSOCIAL QUALITIES MATTER?

By

#### Jennie M. Hwang

The present study content analyzed prosocial perpetrators on American television. By conducting a secondary analysis of the data collected from the 3<sup>rd</sup> year of the National Television Violence Study (Smith et al., 1998), the prevalence and context of prosocial versus nonprosocial violence was assessed. Differences in prosocial and nonprosocial violence were also measured in prime time and children's shows. Overall, the findings revealed that prosocial perpetrators engaged in less violence than did nonprosocial perpetrators in terms of sheer amount. In regards to context, prosocial perpetrators were more likely to be white humans, engage in violence to protect lives of others, and the violence was usually shown as justified. Similar trends emerged in prime time. However, prosocial violence in prime time resulted in less short- and long-term harm than did nonprosocial violence. Children's programs were more likely to feature prosocial perpetrators in their childhood or teenaged years and commit justified violent behaviors. These and all other findings were discussed in terms of risk exposure to prosocial perpetrators may pose to the audience.

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#### Violence on American Television:

Do the Perpetrators' Prosocial Qualities Matter?

Recently, the issue of television violence in this country has provoked considerable concern (Friedrich-Cofer & Huston, 1986; Paik & Comstock, 1994). The reason people are worried about TV violence is that exposure to such content may be teaching our children to act aggressively. In fact, one public opinion poll shows that 40% of Americans believe that exposure to media violence contributes to violent behavior in society and an additional 28% see it as a "considerable" factor (Plagans et al., 1991). A recent survey by Annenberg Public Policy Center also indicates that 81% of parents are concerned about the violence their kids see in movies or on TV (Oldenburg & Healy, 1999). Consistent with these polls, over forty years of social science research reveals that viewing TV violence may increase the risk of learning aggressive thoughts, attitudes, and behaviors (American Medical Association, 1996; American Psychological Association, 1993; Centers for Disease Control, 1991; U.S. Surgeon General, 1972).

Although exposure to TV violence may contribute to learning, it is also the case that not all violent portrayals pose the same degree of risk to viewers. Some portrayals may increase the risk of learning or enacting aggression whereas other portrayals may decrease such risks. Indeed, research reveals that the context or way in which violence is presented influences how viewers respond to televised acts of aggression (Gunter, 1985; Wilson et al., 1997). For instance, the blockbuster film *The Terminator* glamorizes aggression as a means of social problem solving whereas the movie *Schindler's List* illustrates the moral, social, and psychological devastation caused by violence in society.

Surely, both films illustrate that the context or way in which violence is shown can influence individuals' reactions to the content differently.

It has been argued that one of the most important contextual factors may be the nature of the perpetrator (Hoffner & Cantor, 1991; Reeves, 1979; Reeves & Greenberg, 1977; Reeves & Miller, 1978). According to Social Cognitive Theory, "attractive" perpetrators are more likely to be attended to and identified with than are unattractive ones (Bandura, 1986). Thus, the influence of attractive perpetrators may pose considerable risk for viewers' learning and imitation of aggression.

But what qualities render a perpetrator attractive? One attribute that may be important is the character's prosocial orientation. Prosocial perpetrators are those who act benevolently, help others, and are motivated to consider the needs of others before themselves (Smith et al., 1998, p. 14). For example, Mel Gibson in the *Lethal Weapon* series or Bruce Willis in *Die Hard* films are two prosocial perpetrators who use violence to fight crime and/or drug infiltration in society. Prosocial perpetrators are not limited to only human characters, however. Children's programs such as the *Powerpuff Girls* and *Teenage Mutant Ninja Turtles* often feature anthropomorphized characters that fight evil forces attempting to destroy the earth. These examples underscore the idea that television and film may be saturated with violent perpetrators who are portrayed in a prosocial light.

There is a great deal of evidence that children are attracted to shows featuring prosocial perpetrators of violence. Nielsen data reveals that *Power Rangers*, a group of prosocial karate chopping teens that fight alien creatures, is one of the most popular programs in the early afternoon among 2- to 11-year-olds (Stipp, 1993). Not only are children watching this program, but they are also purchasing product-related toys and

games. By 1995, Bandai toys had sold roughly 6 million action figures from the show and forced 14 production plants into overdrive to keep up with orders (Benezra, 1995).

Besides the triumph in the toy market, empirical research reveals more directly that prosocial characters influence viewer liking. Studies show that characters or individuals who possess positive attributes (e.g., altruistic, kind) are better liked than those who possess negative attributes (e.g., selfish, cruel) (Berscheid, 1985; Hoffner & Cantor, 1985; Liefer & Roberts, 1972; Wilson, Cantor, Gordon, & Zillmann, 1986; Zillmann & Bryant, 1975). For instance, Zillmann and Cantor (1977) exposed children to a short film with either a malevolent, benevolent, or neutral main character. Immediately after exposure, children rated how much they liked the protagonist. The results showed that the benevolent protagonists were liked significantly more than the malevolent ones. Additionally, Cohen (1999) found that prosocial traits were the most prevalent reason (34%) teens cited for choosing their favorite character on television.

Research also shows that prosocial characters can affect wishful identification. Wishful identification refers to the process whereby a viewer desires to possess a character's attributes or lifestyle (von Feilitzen & Linne, 1975). Assessing the predictors of wishful identification among 7- to 12-year-olds, Hoffner (1996) found a positive relationship between prosocial attributes and wishful identification. That is, the more prosocial traits (i.e., kind, helpful, and caring) the character possessed the higher the wishful identification for that character. A negative relationship between antisocial characteristics (i.e., mean, selfish) and wishful identification also was observed. Interestingly, a character's use of violence did <u>not</u> influence wishful identification. Thus,

at least this one study shows that prosocial characters are potent role models that younger viewers identify with and desire to be like.

There is also evidence that children may imitate the behavior of prosocial characters. In terms of research in the television violence arena, studies show that prosocial perpetrators are more likely to be imitated than those perpetrators who lack benevolent qualities (Boyatzis, Matillo, & Nesbitt, 1995; Liefer & Roberts, 1972). For example, children exposed to a cartoon featuring violent superheroes were more likely to act aggressively immediately after exposure than were those who watched violent cartoons featuring perpetrators who were not superheroes (Liss, Reinhardt, & Fredriksen, 1983). Other studies show that exposure to prosocial models can also increase children's task persistence, self-control (Stein & Friedrich, 1972), generosity (Bryan & Walbek, 1970), and even helping behavior (Sprafkin, Liebert, & Poulos, 1975).

In sum, the above research suggests that prosocial perpetrators may significantly impact young viewers' learning of aggression. That is, viewers may be more likely to be attracted to and imitate the actions of prosocial perpetrators. Consequently, it becomes important to assess the prevalence and context surrounding prosocial perpetrators on American television. In the next section, I review all of those content analyses that have quantified the relative presence of benevolent perpetrators across the television landscape.

#### Content Analyses

To date, only a handful of studies have content analyzed prosocial perpetrators involved with violence on television. Perhaps the most notable study was conducted by George Gerbner and his research team (Signorielli, 1990). These scholars sampled an

intact week of network prime time and weekend morning shows from 1967-1985. Violence was defined as "the overt expression of physical force against self or other, compelling action against one's will on pain of being hurt or killed, or actually hurting or killing" (Gerbner & Gross, 1976, p. 184). The findings revealed that weekend morning programs were more likely to feature violence than were those prime-time programs (90% vs. 72% respectively). In terms of characters, the results showed that 36% of all men and 24% of all women involved with violence were good (e.g., positive or hero).

Greenberg, Edison, Korzenny, Fernandez-Collado, and Atkin (1980) also assessed the amount of anti-social behavior on television. To this end, the researchers sampled a single episode from all fictional prime time and Saturday morning television shows from 1975-78. Antisocial behavior was defined as "that which is psychologically or physically injurious to another person or persons whether intended or not, and whether successful or not" (1980, p. 102). The results showed that Saturday morning programs feature more physically aggressive acts per hour than did prime time shows (23 vs. 12 acts per hour, respectively). The findings also revealed that villains are four times more likely to engage in physically aggressive acts per hour than are heroes (2.08 vs. .50 acts per hour, respectively).

Looking more specifically at characters involved with violence, Potter and Ware (1987) assessed the context surrounding violent heroes and villains on television. Two intact weeks of prime-time programming across the three major broadcast networks (e.g., ABC, NBC, CBS) were sampled. The researchers defined an antisocial act as "any attempt by one character to harm another character" (p. 672). Overall, the results demonstrated that 8.1 physical acts of aggression occurred per prime-time hour. Further,

almost all of the violent actions of heroes are likely to be shown as rewarded (92%) and justified (97%).

The previous content analyses suggest that there is a great deal of violence on television, especially weekend mornings. Yet the past research reveals very little about the nature of the characters involved with violence. At least two of the past studies examined the prevalence of heroic instigators of violence on TV (Greenberg et al., 1980; Potter & Ware, 1987). However, heroes may be depicted far less frequently on television than prosocial perpetrators (Wilson et al., 1997; Wilson et al., 1998). Thus, we still do not know how frequently prosocial perpetrators are portrayed on American television.

The previous research suffers from a few other limitations as well. First, the definitions of violence or physical aggression used are very broad or liberal in nature including acts such as natural disasters and invasions of privacy.<sup>1</sup> Thus, the previous estimates of violence on television are probably artificially inflated. Second, the samples may not be representative of today's viewing environment. The previous research was conducted at least 15 to 30 years ago when there were only three broadcast networks on television. Today, there are at least five broadcast networks and 70% of the nation subscribes to cable programming (Nielsen Media Research, 2000). Consequently, we do not know how often prosocial perpetrators are depicted in the current multi-channel environment. Third, most of the previous research primarily focused on the amount of violence and not its context. As noted above, the context or way in which violence is shown on television is more important than sheer amount. Thus, a content analysis assessing the context of violence surrounding prosocial violence on American TV has yet to be conducted.

#### NTVS and the Present Study

Given the risk that prosocial perpetrators may pose, the goal of my thesis is to content analyze their prevalence on television using the database from the third year of the National Television Violence Study (Smith et al., 1998). This database was chosen to overcome the limitations associated with previous research. First, the NTVS scholars crafted a highly conservative definition of violence grounded in social science research. That is, the definition counted only those intentional acts that were designed to physically harm or injure a human or human like target. This conceptualization is quite consistent with the stimuli used in most experimental research examining the impact of exposure to media violence.

Second, the researchers sampled a composite week of television content from October 1996 to June of 1997 across 23 of the most frequently watched broadcast and cable channels from 6:00 a.m. to 11:00 p.m. (P.S.T.). Clearly, this is the largest and most representative sample of television content in the history of social science research.

Third, NTVS developed a coding scheme uniquely sensitive to assessing the context of violence on television. In particular, the scheme measured eight major contextual variables documented by research to either increase or decrease the risk of learning. For instance, studies show that violence involving attractive perpetrators (Bandura, 1986, 1994), justification (Berkowitz & Geen, 1966; Berkowitz & Rawlings, 1963), guns (Berkowitz, 1973; Berkowitz & LePage, 1967; Page & O'Neal, 1977), extensiveness and graphicness (Lefkowitz et al., 1977; Swart & Berkowitz, 1976), little or no consequences (Baron, 1971a, 1971b), rewards or no punishments (Bandura, Ross, & Ross, 1963b; Lando & Donnerstein, 1978), humor (Baron, 1978; Berkowitz, 1970),

and realism (Atkin, 1983; Thomas & Tell, 1974), all increase the risk of learning or enacting aggression.

Using this framework, the NTVS researchers found that 61% of all programs contained violence. Further, a great deal of the violence on television was glamorized, sanitized, trivialized, and not chastised. In terms of characters, a full 28% of all violent interactions (N = 16,000) involved "good" perpetrators. Unfortunately, the NTVS scholars considered good characters as those that were either "good" or "good and bad." As such, these findings do not reveal how often purely prosocial characters (i.e., good only) engage in violence nor the context surrounding such aggression. Therefore, the first research question asks:

RQ1: Does the prevalence and context surrounding prosocial perpetrators differ from those who lack prosocial qualities?

Given the fact that young children may be the most susceptible to learning aggression (Paik & Comstock, 1994), it becomes important to also assess the amount and nature of prosocial violence in shows that are popular with youngsters. Data consistently reveals that children are drawn to specific time slots and program genres of TV content (Nielson Media Research, 2000). That is, the most popular time of day with 2- to 11year-olds is prime time and the most popular genre is children's shows (Stipp, 1993). Thus, the second and third research questions ask:

RQ2: In children's programs, does the prevalence and context surrounding
violence of prosocial perpetrators differ from those who lack prosocial qualities?
RQ3: In prime-time programming, does the prevalence and context surrounding
violence of prosocial perpetrators differ from those who lack prosocial qualities?

#### Method

To answer the research questions outlined above, the database from the third year of the National Television Violence Study (Smith et al., 1998) was used. As a result, the sample, definition of violence, units of analysis, contextual features, coder training and reliability are explicated briefly below. For the full report, see Smith et al. (1998).

# <u>Sample</u>

Programs were randomly sampled from October of 1996 to June of 1997 to build a composite week of TV programming from 6:00 a.m. to 11:00 p.m. (P.S.T.). Programs were sampled across 23 channels that include the broadcast networks (ABC, CBS, Fox, NBC), independent broadcasters (KCAL, KCOP, KTLA), the public broadcasting network (KCET), basic cable (A&E, AMC, BET, Cartoon Network, Disney, Family Channel, Lifetime, MTV, Nickelodeon, TNT, USA, VH-1), and premium cable (Cinemax, HBO, Showtime). All programs were aired and taped in the Los Angeles market. In sum, a total of 3,212 programs were sampled in the composite week of television content.<sup>2</sup>

## **Definition of Violence**

The NTVS definition placed emphasis on three key features: intention to harm, the physical nature of harm, and the involvement of animate beings. More specifically, violence was defined as "any overt depiction of a credible threat of physical force or the actual use of such force intended to physically harm an animate being or group of beings. Violence also includes certain depictions of physically harmful consequences against an animate being or group that occur as a result of unseen violent means" (Smith et al.,

1998, p. 30). In total, there were three types of violent depictions: credible threats, behavioral acts, and harmful consequences.<sup>3</sup>

#### Units of Analysis

To fully assess the context of violence, the NTVS researchers measured aggression at three distinct units or levels of analysis. The first and most microscopic was the violent interaction. A violent interaction was defined as an aggressive exchange involving a specific perpetrator (P) performing a particular type of act (A) against a specific target (T). Any time the perpetrator, the target or type of act changed, a new violent interaction was created. The PAT was created so that the rapidly changing context of violence between characters (e.g., means used, extent of means used, imminent consequences of violence) could be assessed accurately.

The second unit of analysis was the violent scene. A violent scene was defined as a related series of violent behaviors that occurred without a significant break in the flow of actual or imminent violence (Smith et al., 1998, p. 31). One or more PATs might occur within a given violent scene among the same characters or types of characters. Several contextual variables were measured at the scene level (e.g., rewards, punishment, explicitness, humor, graphicness).

The most macro unit of analysis was the entire violent program. After watching the violent show, coders assessed variables (e.g., realism of violence, patterns of punishment, anti-violence) to capture the overall theme or message represented across a violent program (Smith et al., 1998, p. 31).

#### Contextual Measures

To assess the 8 major contextual variables (i.e., nature of perpetrator, justification, means or weapon used, extent/graphicness, consequences, reinforcements, humor, realism), 27 measures were developed. Each contextual variable will be defined at the level of analysis with which it was measured.

<u>PAT Level Variables</u>. Two types of contextual measures were examined at the PAT level: character related and violence related. In terms of character variables, demographic characteristics of the perpetrators and victims of violence were measured. The first demographic variable was type of character. Characters were categorized as either human, animal, supernatural creature, anthropomorphized animal, or anthropomorphized supernatural being.<sup>4</sup> This variable was later collapsed into four categories: humans, anthropomorphized creatures, supernatural creatures, and others. Each violent character's sex also was assessed. Sex was coded as either male or female. The next demographic variable was the age of the violent character. Each violent character was coded as a child (between infancy and 12 years of age), teen (13-20 years of age), adult (21-64 years of age), or senior citizen (65 years of age or older). Finally, each character's apparent ethnicity was assessed. Each character was categorized as White, Hispanic, Black, Native American, Asian/Pacific Islander, or Middle Eastern. Due to the low frequency observed in some of the ethnic groups, this variable was collapsed into four categories: White, Black, Hispanic, and others.

In addition to demographic data, characters were assessed in terms of specific attributive qualities. The first is orientation towards others. Characters were coded as good, bad, good and bad, or neutral. The second quality is centrality to the plot. A

character was considered central to the plot if his/her principal role was essential to the story. Each character was coded as either a primary character or not a primary character. The third is law status. Characters who worked for the state/federal government as officials, police officers, or military personnel were coded as having law status. Characters who did not work for the state/federal government were coded not having law status.

In addition to character variables, several violence-related variables were assessed at the PAT level. The first contextual factor was the reason for violence. There were six values for this measure: protection of life, retaliation, anger, personal gain, mental instability, and other. These values were collapsed into four major reasons: protect life, anger, personal gain, and other. The second variable was justification. Justified violence was defined as those aggressive acts and/or threats that were portraved as "morally correct" or "just" given the circumstances of the plot (Smith et al., 1998, p. 32). Each interaction was coded as justified or unjustified. The third was the means used in each violent interaction. Means were defined as any object, weapon, or device that a perpetrator used to threaten and/or harm a target. There were six values for this variable: use of body only (e.g., arm, leg), unconventional weapons, conventional weapons nonfirearms, handheld firearms, heavy weaponry, and bombs. Due to the low frequency of occurrence of some values, the means variable was collapsed into four values: use of body, unconventional weapons, conventional weapons, and others. The fourth variable assessed the extent of means used. For behavioral acts only, the extent variable was coded as one (single example of act), some (between 2-9 examples of the act), many

(between 10-20 examples of the act), or extreme (over 20 examples of the act). These values were later collapsed into two categories: one act versus repeated acts.

Several variables assessed the immediate consequences of violence at the PAT level. The amount of depicted pain a target experienced as a consequence of violence was measured. Pain was defined as the audible (e.g., screams, moans, yells, gasps) or visible (e.g., facial expressions, physical reactions such as clutching of a wound/injury) expression of physical suffering that occurred as a result of violence. Each interaction was coded as featuring no pain, mild pain, moderate pain, or extreme pain. Next, the amount of depicted harm to the target was recorded. Depicted harm referred to the actual portrayal of physical injury or incapacitation that was caused by violence. Depicted harm was coded as none, mild, moderate, or extreme. The amount of likely harm also was assessed. Likely harm referred to the amount of physical injury and/or incapacitation that would have been experienced if the same violence occurred against an average sized human in real life. Likely harm was measured as none, mild, moderate, or extreme. At the analysis level, the amount of likely harm was subtracted from the amount of depicted harm to yield an estimate of the extent of unrealistic harm on television. Finally, the amount of serious violence was assessed. By using the likely harm variable, all interactions featuring moderate or extreme likely harm were coded as "serious" or lethal in nature. All interactions featuring no or mild levels of likely harm were coded as "not" serious.

Scene Related Variables. Several contextual variables were assessed at the scene level.<sup>5</sup> The first contextual factor was rewards. Rewards were defined as any verbal or nonverbal positive reinforcement that was given to or taken by a violent perpetrator.

(Smith et al., 1998, p. 34). Three types of rewards were assessed at this level: self praise (e.g., perpetrator says to the self, "good job"), praise from others (e.g., another character says to perpetrator, "good job"), or material praise (e.g., perpetrator is given money for acting violently). Each of these variables are coded as present or absent. If any of these types of rewards were featured in a violent scene, then at the analysis the scene level was coded as rewards "present."

The second variable was punishments. A punishment was defined as any verbal or nonverbal sign of disapproval or disappointment that was expressed towards a perpetrator for acting violently. Punishments were classified as involving selfcondemnation that a perpetrator expresses for acting violently (e.g., perpetrator says to self for acting violently, "I shouldn't have done that"), condemnation from others (e.g., another character tells perpetrator "you shouldn't have done that"), nonviolent action to stop or penalize violence (e.g., arresting a perpetrator for acting violently), and violent action by a third party to terminate further violence (e.g., someone other than the victim using violence to stop perpetrator). Each of these variables are coded as present or absent at the scene level. Again, if any punishment was featured in the violent scene, then punishment was coded at the scene level as "present."

The third factor was graphicness. Graphicness was defined as the quantity or amount of blood, gore (e.g., innards, viscera), and/or dismemberment depicted within the violent scene. Each scene was coded as featuring no graphicness, mild graphicness, moderate graphicness, or extreme graphicness. Very few scenes used the upper limits of this scale. Thus, these levels were collapsed into two categories: graphicness vs. some graphicness. The last scene level measure was humor. Humor was defined as the use of

speech, actions and/or behaviors that a character engaged in that were intended to amuse the self, another character or characters, and/or the viewer. Humor was coded as present or absent at the end of each violent scene.

Program Level Variables. Several contextual variables were assessed at the end of the entire violent program. The first was whether the program featured an antiviolence theme or not. An anti-violence theme is one that emphasizes that violence is morally and/or socially wrong. Programs were coded as featuring an anti-violence theme if any one of the four following criteria were met: (1) alternatives to violent actions were presented and/or discussed; (2) main characters discussed repeatedly the negative consequences of violence; (3) the physical pain and emotional suffering that resulted from violence was emphasized; or (4) the punishments for violence outweighed the rewards clearly and consistently throughout the plot (Smith et al., 1998, p. 35).

The second variable was program level harm/pain. This variable assessed the extent to which negative consequences that resulted from violence were presented across the program. Negative consequences could include any physical harm/pain, emotional cost, financial loss, or psychological suffering that occurred at a result of violence. There were three values for harm/pain: (1) none, (2) short-term only, or (3) long-term or extended suffering. The next program level contextual measure was realism. Realism referred to the actuality of the characters, settings, and events that were presented in a program. Two variables were created to assess the realism of violence: authenticity and style of presentation. Authenticity referred to the programs level of realism when presenting violence. Programs were coded as actual reality, re-creation of reality, fiction, and fantasy. Later, this variable was collapsed into two categories: reality (actual reality,

recreation of reality, and fiction) versus fantasy (fantasy). Thus, a given violent program could show footage of actual events enacted by the actual people involved in real time, the past, and/or creative contexts. Fantastic violent shows, however, featured characters and/or settings that cannot possibly happen in the real-world as we know it today. In terms of the presentational style, each program was coded as animation, live action, or a mix of both. Again, this variable was collapsed into two categories: live action only versus animated action.

#### Coder Training and Reliability

A total of 56 undergraduate research assistants at the University of California, Santa Barbara were trained as coders to evaluate the sample of program content. Prior to coding, the RA's received approximately 40 hours of classroom instruction to learn the conceptual and operational definitions in the codebook. In addition, the coders spent roughly 20 hours in the laboratory unitizing and quantifying the contextual variables. Once coding began, all research assistants independently watched and coded randomly sampled program content for violence.

Two levels of reliability were assessed for NTVS: unitizing and the degree of consistency in coders' judgments on the contextual measures. In terms of unitizing, the modal number of interactions and scenes agreed upon in each reliability test was assessed. The number of coders that came within 20% of the mode on interactions and scenes in each reliability test was figured. Across all of the programs assessed for reliability (n = 20), most coders agreed upon the number of interactions (68% median agreement) and scenes (78% median agreement) within a 20% interval around the mode.

After coders agreed on the same level of analysis, their agreement on choosing a value on each of the variables in the scheme was assessed. The NTVS researchers computed a level of confidence for each of 540 reliability coefficients (27 variables on each of the 20 programs in the reliability tests). Across all 20 tests, the median reliability coefficients for each of the variables used in the present study were as follows: orientation towards others (.74), perpetrator type (.95), sex (.91), apparent ethnicity (.84), age (.80), primary character (.85), law status (.70), type of act (1.0), reason (.81), justification (.91), means used (.93), extent (.89), depicted harm (.76), likely harm (.77), pain (.70), self praise (.92), praise from other (.98), material praise (.97), self condemnation (1.0), condemnation from others (.93), graphicness (.91), humor (.90), anti-violence theme (1.0), harm/pain (.75), realism (.93), style of presentation (1.0).

#### Results

#### Analysis Plan

Three aspects of the analysis plan need to be explicated. The first aspect concerns how "prosocial" perpetrators are defined. As noted above, the NTVS researchers coded orientation towards others as good, bad, both good and bad (blended), or neutral (neither good nor bad). Using these categories, prosocial characters are defined in this study as only those "good" perpetrators who act benevolently, helped others, and/or are motivated to consider the needs of others ( $\underline{N} = 4,731$ ). Characters are considered to lack prosocial qualities if they are coded as "bad," that those who act primarily in their own self-interest and have very little regard for others ( $\underline{N} = 7,200$ ). All other categories are excluded for analysis purposes. The second concerns how to frame and/or interpret all of the findings. In explanation, prosocial status is measured at the PAT level of analysis. Yet several contextual variables are measured at the scene and program level. As such, the study "brings down" the scene and program variables to the PAT level interaction. Consequently, the correct interpretation of findings at the scene level would be "the percentage of prosocial perpetrators shown engaging in violence in a humorous context." At the program level, the results should be framed as "the percentage of prosocial perpetrators featured in contexts with little or no extended consequences from violence."

The third aspect concerns the significance of any particular finding. A chi-square statistic is executed to assess whether the distribution of prosocial violence varied by each contextual factor. Only those analyses that were significant at p < .05 are reported below. Because the sample size used in this study is large (N > 11,000), even small differences in the depiction of violence will yield significant chi-square values. Thus, only differences of 5% or greater between percentages are deemed to be of practical significance.

#### Research Question 1

<u>Amount.</u> Research Question 1 asks, "Does the frequency and context surrounding prosocial perpetrators differ from those who lack prosocial qualities?" To address the first part of this question, two variables are examined. The first is rate per hour. Rate per hour is calculated by dividing the total number of violent interactions featuring prosocial  $(\underline{N} = 4,731)$  or nonprosocial ( $\underline{N} = 7,200$ ) perpetrators by total program hours (2,586 hours) in the sample. The results show that prosocial perpetrators occur less frequently

per hour than nonprosocial perpetrators (1.83 vs. 2.78, respectively) across the entire composite week of programming.

In addition to rate per hour, the type of violence characters engaged in is assessed. Four types of acts are measured at the PAT level: credible threats, behavioral acts, harmful consequences, and accidents. A significant difference in act type is observed,  $\chi^2$  $(3, \underline{N} = 11,931) = 148.55$ , p < .05,  $\underline{V}^{*6} = .11$  Prosocial perpetrators are more likely to engage in behavioral acts (72.1%) than are nonprosocial perpetrators (64.5%). No other differences are found in this analysis. A total of 28.3% of acts involve credible threats, 2.2% harmful consequences, and only 1.9% of acts are accidental.

Contextual Variables. To answer the second half of Research Question 1, both character and context variables are examined. In terms of character-related variables, both perpetrator and victim demographics are assessed. The first measure is perpetrator type. A chi-square analysis revealed a significant difference in perpetrator type by prosocial status,  $\chi^2(3, N = 11,931) = 119.48$ , p < .05,  $V^* = .10$ . As seen in Table 1, 74.5% of prosocial perpetrators of violence are significantly more likely to be humans than are nonprosocial perpetrators (66.2%). Two other categories account for nearly all the remaining perpetrators: anthropomorphized creatures (48.8%) and supernatural creatures (10.6%). However, these two types do not differ by prosocial status.

The second variable is perpetrator sex. A significant difference in perpetrator sex by prosocial status is observed,  $\chi^2(1, \underline{N} = 10,205) = 174.89$ ,  $\underline{p} < .05$ ,  $\phi = .13$ . The findings show that males are significantly less likely to be featured as prosocial perpetrators (83.4%<sub>4</sub>) than as nonprosocial perpetrators (91.9%<sub>b</sub>). In contrast, women are significantly more likely to be featured as prosocial perpetrators  $(16.6\%_b)$  than as nonprosocial perpetrators  $(8.1\%_a)$  (see Table 1).

The third measure is age of perpetrator, which also varies significantly by prosocial status,  $\chi^2(3, \underline{N} = 9,895) = 192.62$ ,  $\underline{p} < .05$ ,  $\underline{V}^* = .14$ . The results show prosocial perpetrators (8.7%) are significantly more likely to be teens than are nonprosocial perpetrators (3.6%). Yet prosocial perpetrators (84.6%) are significantly less likely to be adults than are their nonprosocial counterparts (93.1%). No differences are found in the other subcategories (see Table 1).

The ethnicity of perpetrators is the fourth variable. For humans only, the analyses indicate a significant difference in perpetrator ethnicity,  $\chi^2$  (3, N = 8,254) = 104.80, p < .05,  $\underline{V}^* = .11$ . As seen in Table 1, prosocial perpetrators (77.0%) are significantly more likely to be white than are nonprosocial perpetrators (71.0%). No other differences are observed. Only 5.5% of perpetrators are Black, and just 2.9% are Hispanic.

Primary character is the fifth demographic variable assessed. A significant difference is observed,  $\chi^2(1, \underline{N} = 11,538) = 554.93$ , p < .05,  $\phi = .22$ . The results demonstrate that prosocial perpetrators (88.0%) are significantly more likely to be primary characters than are nonprosocial perpetrators on television (69.0%) (see Table 1).

Finally, a significant difference emerges for law status,  $\chi^2(1, \underline{N} = 11,931) = 281.07$ ,  $\underline{p} < .05$ ,  $\phi = .15$ . The findings indicate that law enforcers are significantly more likely to be portrayed as prosocial perpetrators (20.0%) than as nonprosocial perpetrators (9.2%) (see Table 1).

Together, the results reveal that prosocial perpetrators of violence on television are most likely to be humans, adult males, and white. Although less frequent in nature overall, prosocial perpetrators are more likely to be female and in their teenage years than are nonprosocial perpetrators. Also, prosocial perpetrators are more likely to be primary to the plot and possess an occupation as a law enforcer than are nonprosocial perpetrators.

In addition to perpetrator variables, the demographics of the victim are analyzed. As seen in Table 1, no differences are found in terms of victim type, ethnicity, and law status. However, a significant chi-square is observed in victim gender by prosocial status,  $\chi^2(1, N = 9,591) = 212.73$ , p < .05,  $\phi = .15$ . The results show that prosocial perpetrators are more likely to target males (92.8%) than are nonprosocial perpetrators (82.6%). A difference also is found for female victims. Prosocial perpetrators (7.2%) act less violently towards female victims than do nonprosocial perpetrators (17.4%) (see Table 1).

A significant difference emerges for victim age as well,  $\chi^2(3, \underline{N} = 9,472) =$ 134.86,  $\underline{p} < .05, \underline{V}^* = .12$ . The findings showed that prosocial perpetrators (5.1%<sub>a</sub>) are significantly less likely to harm teen victims than are nonprosocial perpetrators (10.5%<sub>b</sub>). Adults, however, are more likely to be the targets of prosocial violence (90.8%<sub>b</sub>) than nonprosocial violence (82.4%<sub>a</sub>). No other differences were found in the analyses (see Table 1).

A final difference is found in the distribution of primary characters who are victims of prosocial or nonprosocial violence. A chi-square analysis reveals a significant difference in primary character victims,  $\chi^2(1, N = 11,425) = 157.87, p < .05, \phi = .12$ . As

seen in Table 1, prosocial perpetrators  $(63.7\%_a)$  are less likely to act violently against primary characters that are victims than are nonprosocial perpetrators  $(74.7\%_b)$ .

Besides character-related variables, violent contextual variables are measured. Among all variables, no differences are observed in extent, graphicness, reinforcement, humor, and anti-violence theme (see Table 2). However, the reasons for violence differ significantly by prosocial status,  $\chi^2(3, \underline{N} = 11,917) = 4,129.77$ ,  $\underline{p} < .05$ ,  $\underline{V}^* = .59$ . The findings indicate that protection of life is significantly more likely to be the reason for violence by prosocial perpetrators (56.9%<sub>b</sub>) than by nonprosocial perpetrators (6.0%<sub>a</sub>). In contrast, anger (29.5%<sub>b</sub>), personal gain (44.8%<sub>b</sub>), and other reasons (19.6%<sub>b</sub>) are significantly more likely to be the motives for violence by nonprosocial perpetrators (see Table 2).

The second variable is justification, which varies significantly by prosocial status,  $\chi^2(1, \underline{N} = 11,881) = 4,830.95$ , p < .05,  $\phi = .64$ . The results show that justified violence is significantly more likely to be portrayed by prosocial perpetrators (64.1%) than by nonprosocial perpetrators (5.2%) (see Table 2).

The third variable is the means or weapon used. A significant difference in weapon use by prosocial status is observed,  $\chi^2(3, \underline{N} = 11,931) = 69.99, \underline{p} < .05, \underline{V}^* = .08$ . As seen in Table 2, prosocial perpetrators are significantly more likely to use their own bodies to enact violence (40.9%) than are nonprosocial perpetrators (35.7%). No other differences are found in this analysis. A total of 18.4% of perpetrators used unconventional weapons, 35.9% used conventional weapons, and only 7.9% of perpetrators used other means for violence (i.e. heavy weaponry, bombs, means unknown).

The fourth variable is consequences. Although several types of consequences are assessed (i.e. pain, depicted harm, unrealistic harm), only likely harm reveals a significant difference,  $\chi^2(3, N = 6,996) = 34.83, p < .05, V^* = .07$ . The results show that prosocial violence (28.0%<sub>a</sub>) is less likely to involve in extreme likely harm to the victims than is nonprosocial violence (34.6%<sub>b</sub>) (see Table 2).

The authenticity of the violence is the last variable assessed. Two types of authenticity are measured: realism and presentation style. A chi-square analyses shows a significant difference in realism,  $\chi^2(1, \underline{N} = 11,929) = 35.88$ ,  $\underline{p} < .05$ ,  $\phi = .06$ . Specifically, prosocial perpetrators (57.6%) are significantly more likely to be featured in contexts with realistic violence than are nonprosocial perpetrators (52.1%). In contrast, unrealistic violence is more likely to be shown with nonprosocial (47.9%) than with prosocial characters (42.4%) (see Table 2).

In regards to presentation style, a significant difference by prosocial status appears as well,  $\chi^2(1, N = 11,930) = 66.11$ , p < .05,  $\phi = .07$ . The results show that prosocial perpetrators (67.7%) are significantly more likely to be portrayed in live action contexts than are nonprosocial perpetrators (60.4%). Prosocial violence (32.3%), however, is less likely than nonprosocial violence (39.6%) to be shown in animated action (see Table 2).

In brief, prosocial perpetrators in overall programming tend to use their own bodies to commit violence, their victims are adult males, and the most likely reason for aggression is to protect life. Most often, the violence of prosocial perpetrators is justified and depicts aggression in realistic contexts.

#### Research Question 2

Research question 2 asks, "In children's programs, does the prevalence and context of violence surrounding prosocial perpetrators differ from those who lack prosocial qualities?" To answer this question, only children's shows were selected in the NTVS database. The NTVS researchers defined children's show as those that were designed for audiences 16 years of age or younger. A total of 479.50 hours of children's shows were in the NTVS database.

<u>Amount.</u> In terms of the first half of Research Question 2, rate per hour is examined. To this end, the frequency of prosocial (N = 1,585) and nonprosocial perpetrators (N = 2,811) involved in violent interactions is divided by the total program hours in children's programming (479.50 hours). The results show that prosocial perpetrators occur less frequently per hour than do nonprosocial perpetrators (3.31 vs. 5.86, respectively) in children's shows.

The second measure assesses type of act. A significant difference is observed,  $\chi^2$ (3, <u>N</u> = 4,396) = 85.75, p < .05, <u>V</u><sup>\*</sup> = .14. Prosocial perpetrators (80.2%<sub>b</sub>) are more likely to engage in behavioral acts than are nonprosocial perpetrators (67.9%<sub>a</sub>). Prosocial perpetrators (16.7%<sub>a</sub>), however, are less likely to enact credible threats than are nonprosocial perpetrators (28.8%<sub>b</sub>). No other differences are found in this analysis. A total of 0.5% of acts involve harmful consequences, and just 2.7% of acts are accidental.

<u>Contextual Variables.</u> To address the second half of Research Question 2, character and contextual variables are examined. In terms of character-related variables, only perpetrator type, sex, age, and primary character vary by prosocial status. A chisquare analysis reveals a significant difference in type of perpetrator by prosocial status,

 $\chi^2$  (3, <u>N</u> = 4,396) = 40.11, <u>p</u> < .05, <u>V</u><sup>\*</sup> = .10. The results show that prosocial perpetrators (6.9%<sub>a</sub>) are less likely to be supernatural creatures than are nonprosocial perpetrators (12.8%<sub>b</sub>). No other differences are found (see Table 3).

For perpetrator sex, a significant difference is observed as well,  $\chi^2(1, \underline{N} = 3,388) = 35.43$ , p < .05,  $\phi = .10$ . The findings show that prosocial perpetrators (85.9%<sub>a</sub>) are significantly less likely to be males than are nonprosocial perpetrators (92.3%<sub>b</sub>). In contrast, females are less likely to be featured as prosocial perpetrators (14.1%<sub>b</sub>) than as nonprosocial perpetrators (7.7%<sub>a</sub>) (see Table 3).

Age of perpetrator is the next variable that varies significantly by prosocial status in children's shows,  $\chi^2(3, \underline{N} = 2,901) = 318.29$ , p < .05,  $\underline{V}^* = .33$ . The results reveal that prosocial characters are significantly more likely to be children (13.6%) and teens (17.9%) than are nonprosocial characters (3.8% and 2.8% a, respectively). Also, a difference is observed for adult perpetrators. Prosocial perpetrators (67.1%) are less likely to be adults than are their nonprosocial counterparts (91.9%) (see Table 3).

Finally, a significant difference is found for primary characters,  $\chi^2(1, \underline{N} = 4,288) = 122.29$ , p < .05,  $\phi = .17$ . As seen in Table 3, the findings demonstrate that prosocial perpetrators (89.2%) are significantly more likely to be primary characters in children's programs than are nonprosocial perpetrators (75.3%).

In terms of the victim profile, only age and primary character are found to significantly differ (see Table 3). Specifically, a significant difference in victim age emerges in the analysis,  $\chi^2(3, \underline{N} = 2,671) = 78.53$ , p < .05,  $\underline{V}^* = .17$ . The results show that teens are significantly less likely to be victims of prosocial perpetrators (6.5%<sub>a</sub>) than of nonprosocial perpetrators (16.8%<sub>b</sub>). On the other hand, adults are more likely to be the

targets of prosocial violence  $(84.9\%_b)$  than nonprosocial violence  $(70.1\%_a)$ . No difference is observed in other subcategories. Children only account for 10.2% of total victims in children's shows (see Table 3).

The final significant difference is observed in primary character victim,  $\chi^2(1, \underline{N} = 4,241) = 33.35$ , p < .05,  $\phi = .09$ . The findings illustrate that prosocial characters (72.2%<sub>a</sub>) are less likely to act violently towards a primary character who is a victim than are nonprosocial perpetrators (80.0%<sub>b</sub>) (see Table 3).

In sum, prosocial perpetrators in children's programs are most likely to be anthropomorphized creatures, males, and white adults. Prosocial perpetrators also are more likely to be females in their childhood and teenaged years, when compared with nonprosocial perpetrators. Prosocial perpetrators also are more likely to be shown as primary characters and committing violence against adult victims.

Among all violence measures, extent, graphicness, reinforcement, humor, realism, and anti-violence theme do not vary by prosocial status. However, the reasons for violence do reveal a significant difference,  $\chi^2(3, \underline{N} = 4,396) = 1,831.91$ , p < .05,  $\underline{V}^* =$ .65. The results show that protection of life is significantly more likely to be the reason for prosocial violence (60.9%) than for nonprosocial aggression (4.4%). Yet anger (27.1%), personal gain (49.1%), and other reasons (19.4%) are significantly more likely to be the reasons for violence by nonprosocial perpetrators than prosocial perpetrators (see Table 4).

Justification also differs by prosocial status,  $\chi^2(1, \underline{N} = 4,371) = 1,924.29, \underline{p} < .05$ ,  $\phi = .66$ . The results show that justified violence is significantly more likely to be

portrayed by prosocial aggressors  $(64.4\%_b)$  than by nonprosocial aggressors  $(4.0\%_a)$  (see Table 4).

A significant difference is observed in the types of means used as well,  $\chi^2$  (3, N = 4,334) = 17.40, p < .05, V\* = .06. As seen in Table 4, prosocial perpetrators use their own bodies to enact violence (45.8%<sub>b</sub>) significantly more than do nonprosocial perpetrators (40.8%<sub>a</sub>). No other differences are found in this analysis.

Depicted harm varies significantly by prosocial status,  $\chi^2(3, \underline{N} = 2,624) = 29.70$ ,  $p < .05, \underline{V}^* = .11$ . The findings reveal that prosocial violence is less likely to yield no depicted harm (48.5%<sub>a</sub>) than is nonprosocial violence (55.6%<sub>b</sub>). Prosocial perpetrators (11.0%<sub>b</sub>), in contrast, are significantly more likely to inflict extreme depicted harm on their victims than are nonprosocial perpetrators (5.7%<sub>a</sub>) (see Table 4).

Also, a significant difference in unrealistic harm by prosocial status is found,  $\chi^2$ (1, <u>N</u> = 2,350) = 8.20, p < .05,  $\phi$  = .06. When compared to nonprosocial perpetrators (56.5‰), the results show that violence is less likely to result in unrealistically low levels of harm for the targets of prosocial perpetrators (50.6‰) (see Table 4).

Together, children's programs are more likely to show prosocial perpetrators engaging in justified violence using natural means to protect lives. They also are shown most frequently in contexts with more extreme depicted harm but less unrealistic harm, when compared with nonprosocial perpetrators.

#### **Research Question 3**

Research Question 3 asks, "In prime-time programming, does the prevalence and context surrounding violence of prosocial perpetrators differ from those who lack prosocial qualities?" The NTVS researchers defined a prime-time program as any that was aired between 8:00 and 11:00 p.m. (P.S.T.) Monday through Saturday or 7:00 to 11:00 p.m. (P.S.T.) on Sunday. A total of 466.50 prime time hours of programming were captured in third year NTVS sample.

Amount. In terms of rate per hour, the total number of violent interactions featuring prosocial perpetrators is 843. Nonprosocial perpetrators were featured in 1,370 violent interactions. Using these figures and the total amount of prime time hours in the sample, prosocial perpetrators are featured less frequently per hour than are nonprosocial perpetrators (1.81 vs. 2.94, respectively) in prime-time programs. The type of violence characters engaged in also is measured. No significant differences in act type by prosocial status are found. A total of 29.6% of acts are credible threats, 66.0% behavioral acts, only 3.3% are harmful consequences, and 1.0% of acts are accidents.

<u>Contextual Variables.</u> Both character and context variables are examined to answer the second part of Research Question 3. In terms of character-related variables, the only perpetrator variables that vary by prosocial status are type, sex, ethnicity, primary character, and law status (seen Table 3). To illustrate, a significant difference in perpetrator type is observed,  $\chi^2(3, \underline{N} = 2,213) = 60.27$ ,  $\underline{p} < .05$ ,  $\underline{V}^* = .17$ . The findings show that prosocial perpetrators (94.1%) are significantly more likely to be humans than are nonprosocial perpetrators (84.2%). No other differences are found (see Table 3).

Second, a significant difference in perpetrator sex by prosocial status is obtained,  $\chi^2(1, \underline{N} = 1,947) = 63.49, \underline{p} < .05, \phi = .18$ . The results indicate that prosocial perpetrators are significantly less likely to be males (79.5%<sub>a</sub>) but more likely to be females (20.5%<sub>b</sub>) than are nonprosocial perpetrators (91.9%<sub>b</sub> vs. 8.1%<sub>a</sub>, respectively) (see Table 3).

The ethnicity of the perpetrator reveals significant differences by prosocial status as well,  $\chi^2(3, \underline{N} = 1,944) = 55.55$ ,  $\underline{p} < .05$ ,  $\underline{V}^* = .17$ . The findings show that prosocial perpetrators (80.8%<sub>b</sub>) are significantly more likely to be white than are nonprosocial perpetrators (66.8%<sub>a</sub>). No other differences are observed in this analysis (see Table 3).

A chi-square significance in primary character is observed,  $\chi^2(1, \underline{N} = 2,100) =$ 55.49, p < .05,  $\phi = .16$ . As seen in Table 3, the results demonstrate that prosocial perpetrators (83.0%) are significantly more likely to be primary characters than are nonprosocial perpetrators (68.4%).

A final significant difference is found for law status,  $\chi^2(1, N = 2,213) = 237.90$ , p < .05,  $\phi = .33$ . The findings reveal that law enforcers are more likely to be prosocial perpetrators (39.3%) than nonprosocial perpetrators (11.3%) (see Table 3).

On the other hand, almost identical results are observed in victim demographics by prosocial status. That is, the significant differences are found in victim type, sex, ethnicity, primary character, and law status. The results show a significant difference in victim type by prosocial status,  $\chi^2(3, \underline{N} = 2,213) = 22.48$ ,  $\underline{p} < .05$ ,  $\underline{V}^* = .10$ . The findings reveal that humans are less likely to be the target of prosocial violence (85.8%<sub>a</sub>) than of nonprosocial violence (91.0%<sub>b</sub>). No other differences are obtained in the analyses (see Table 3).

The victim sex also varies significantly by prosocial status,  $\chi^2(1, \underline{N} = 1,862) = 62.47$ ,  $\underline{p} < .05$ ,  $\phi = .18$ . The results show that males are significantly more likely to be the victim of prosocial perpetrators (91.6%) than are nonprosocial perpetrators (77.5%). In contrast, females are less likely to be the target of prosocial violence (8.4%) than of nonprosocial violence (22.5%) (see Table 3).

A significant difference is obtained in the ethnicity of the victim,  $\chi^2$  (3, <u>N</u> = 1,963) = 18.38, <u>p</u> < .05, <u>V</u>\* = .10. The findings indicate that victims of prosocial perpetrators (70.2‰) are significantly less likely to be white than are the victims of nonprosocial perpetrators (77.8‰). No other differences are observed in this category (see Table 3).

Primary character is the next victim demographic variable that differs by prosocial status,  $\chi^2(1, \underline{N} = 2, 115) = 7.65$ , p < .05,  $\phi = .06$ . The results show that prosocial perpetrators (62.2%<sub>a</sub>) act violently significantly less against primary character victims than do nonprosocial perpetrators (68.1%<sub>b</sub>) (see Table 3).

Finally, the law status of victims varies significantly by prosocial status,  $\chi^2(1, \underline{N} = 2,213) = 25.40$ , p < .05,  $\phi = .11$ . As seen in Table 5, the findings show that law enforcers are significantly less likely to be the victim of prosocial violence (12.0%<sub>a</sub>) than of nonprosocial violence (20.3%<sub>b</sub>).

All together, prosocial perpetrators are most likely to be portrayed in prime-time shows as humans, males, and white adults. They are more likely to be primary to the plot and possess an occupation as a law enforcer.

In addition to character-related variables, violent contextual variables are measured in the PAT, scene, and program levels. Only differences in reason, justification, consequences are significant (see Table 4). In terms of reasons, the results reveal a significant difference by prosocial status,  $\chi^2(3, N = 2,213) = 883.89$ , p < .05,  $V^*$ = .63. The findings show that protection of life is significantly more likely to be the reason for violence by prosocial perpetrators (64.5%) than by nonprosocial perpetrators (6.9%). However, anger (27.2%), personal gain (45.5%), and other reasons (20.4%) are significantly more likely to be the reasons for violence by nonprosocial perpetrators (see Table 4).

A significant chi-square is observed in justification,  $\chi^2(1, \underline{N} = 2,205) = 1,013.47$ , p < .05,  $\phi = .68$ . The results indicate that prosocial perpetrators (68.4%) are significantly more likely to be shown engaging in justified violence than are nonprosocial perpetrators (5.0%) (see Table 4).

Also, a significant difference in depicted harm by prosocial status is found,  $\chi^2$  (3, <u>N</u> = 1,298) = 34.83, p < .05, <u>V</u><sup>\*</sup> = .07. The findings reveal prosocial violence (39.1%<sub>b</sub>) is more likely to yield no depicted harm to the target than is nonprosocial violence (32.1%<sub>b</sub>). In contrast, extreme depicted harm is less likely to be shown against the targets of violence of prosocial perpetrators (24.1%<sub>b</sub>) than of nonprosocial perpetrators (29.2%<sub>b</sub>) (see Table 4).

As seen in Table 4, although extreme depicted harm shows a 5% difference between prosocial and nonprosocial perpetrators, the chi-square is not significant at the p <.05 level.

Finally, a significant difference in the extended consequences of violence is observed,  $\chi^2(2, \underline{N} = 2,213) = 13.29$ , p < .05,  $\underline{V}^* = .08$ . The findings indicate that prosocial perpetrators (40.8%<sub>a</sub>) are significantly less likely to be shown in settings with long-term harm than are nonprosocial perpetrators (48.5%<sub>b</sub>) (see Table 4).

Together, prime-time programming depicts prosocial perpetrators engaging in justified violence to protect self and others. Further, the violence of prosocial perpetrators is likely to yield little depicted harm to the target.

#### Discussion

Generally, the findings of this study reveal that prosocial status influences the nature and amount of violence a perpetrator engages in. Overall, prosocial perpetrators engage in less violence than their nonprosocial counterparts, yet genre and time of day seem to exert an influence on prosocial perpetrators violent acts. Further, the prototypical violent interaction involving prosocial perpetrators features a human adult that is white engaging in justified violence that is depicted in realistic contexts. These findings are interpreted below in light of the risk that exposure to prosocial violence may pose to viewers.

In terms of Research Question 1, the prosocial status of a perpetrator affects the amount and type of violence shown on television. Across the entire composite week of programming, prosocial perpetrators engage in less violence per hour than do nonprosocial perpetrators. Despite this positive trend, the average child watches roughly three hours of television per day (Nielson Media Research, 2000). Thus, the typical youngster is being exposed to approximately 5.49 violent interactions involving prosocial perpetrators per day or 2,004 depictions per year. Repeated exposure to prosocial violence may teach or reinforce aggressive thoughts, attitudes, and behaviors (Huesmann & Miller, 1994).

Additionally, prosocial status exerts an influence on the type of violence a perpetrator enacts. When compared to their nonprosocial counterparts, prosocial or good characters are more likely to engage in violent behavioral acts. This trend might be particularly problematic for younger children who rely heavily on visual depictions for learning (Huston-Stein et al., 1981; Valkenburg & Cantor, 2000). By actually seeing the

behavior enacted by prosocial perpetrators, younger children may be more likely to attend to and learn such overtly depicted violent actions (Huesmann, Lagerspetz, & Eron, 1984; Liss, Reinhardt, & Fredriksen, 1983).

The second half of Research Question 1 addresses the context of violence surrounding prosocial vs. nonprosocial perpetrators. First, notable differences were found in the types of demographic characteristics assigned to prosocial and nonprosocial aggressors. Prosocial perpetrators are more likely than nonprosocial perpetrators to be human, white, and primary to the plot. Based on the notion of perceived similarity (Hoffner & Cantor, 1991), these findings suggest that white viewers who strongly identify with prosocial perpetrators may be more at risk for learning aggression. Although less frequent in nature, prosocial perpetrators also are more likely than non prosocial perpetrators to be law agents or government authorities, females, and in their teenaged years. When considering victim profiles, prosocial status seems to exert less influence. Victims of prosocial violence tend to be adult males. Because viewers tend to identify and empathize with similar others (Feshbach & Roe, 1968; Jose & Brewer, 1984; von Feilitzen & Linne, 1974), white males may experience more fear when watching the victims of prosocial violence than other subgroups of viewers.

The last aspect of Research Question 1 concerns the context of prosocial violence. A few attributes of prosocial violence may pose risk for learning. For example, a majority of the violent interactions involving prosocial perpetrators are depicted as protecting the self or other from harm and are portrayed as justified. Such socially sanctioned violence may communicate to the viewer that violence is acceptable in certain instances. Indeed, studies show that exposure to justified violence increases the

probability of aggression among children and adults (Berkowitz & Geen, 1966; Berkowitz & Rawlings, 1963; Meyer, 1972).

Another trend that was found is that prosocial violence may be more imitable than nonprosocial violence. This trend was witnessed across three separate variables. First, a full 41% of prosocial violence involves the perpetrator's own body. Violence involving a perpetrator's own body (e.g., punching, karate chops) may pose an increased risk than some other types because the weapon is readily accessible to all viewers, especially children. In fact, at least one study showed that children were significantly more aggressive after viewing episodes of the *Power Rangers* and their emulation of violence was the precise imitation of the character's physical acts, such as flying karate kicks or chops (Boyatzis, Matillo, & Nesbitt, 1995). The second and third variables suggest that prosocial violence is presented in more realistic contexts. That is, prosocial perpetrators are more likely to be shown in contexts that are real in nature and are presented in live action. Numerous studies indicate that realistic portrayals of violence can increase the probability of learning among both child and adult viewers (Atkin, 1983; Berkowitz & Alioto, 1973; Geen, 1975).

It must be noted, however, that there are several similarities between prosocial and nonprosocial violence that may influence risk. First, the findings reveal that violence is sanitized on television. Independent of prosocial status, violence on television shows little or no harm (e.g., injury or blood) and/or pain to the victim. Studies show that presenting pain and suffering can reduce aggressive responding (Baron, 1971a, 1971b). Thus, failing to portray such consequences may increase the learning and enactment of aggression. Second, violence is often not chastised on television. Violent interactions

are most likely to be featured in scenes with no rewards or punishments. Research reveals that these types of depictions can increase the probability of learning (Bandura, Ross, & Ross, 1961, 1963b; Lando & Donnerstein, 1978; Paik & Comstock, 1994). This effect is presumably due to the fact that unpunished violence communicates to the viewer that violence does not have negative repercussions. Third, violence is often trivialized on television. Regardless of prosocial orientation, a little over 40% of violent interactions are featured in contexts that contain humor. Juxtaposing humor and violence has been found to increase aggression (Baron, 1978; Berkowitz, 1970).

In sum, the profile of prosocial violence involves several elements of risk. Prosocial perpetrators are likely to be depicted engaging in justified violence to protect life in realistic contexts. Further, the typical prosocial perpetrator is a human who is white, adult, and male.

Research Question 2 asked if prosocial status influenced the amount and nature of violence in children's programs. Notable differences emerged on both amount variables in kid's shows. First and similar to the overall landscape, prosocial perpetrators are more likely than nonprosocial perpetrators to commit behavioral acts of violence. However, prosocial perpetrators are less likely to threaten their targets. Second, prosocial violence occurs at a lower rate per hour than does nonprosocial violence (3.31 vs. 5.86, respectively). Although this trend is similar to the pattern of rate per hour across the entire composite week, children's shows actually feature more prosocial and nonprosocial aggression. The rate per hour in this specific genre is roughly twice as high as rate per hour in the overall landscape. Thus, a young child who generally consumes

two to three hours of children's shows daily will see roughly 9.93 violent incidents per day or 3,624 violent incidents per year.

The second half of Research Question 2 addressed the context of violence by prosocial status. First, substantial differences were found in the demographic characteristics of prosocial and nonprosocial aggressors/victims. When compared with nonprosocial perpetrators, prosocial perpetrators are more likely to be portrayed as primary characters that are females in their childhood and teenaged years. Although these were significant differences by prosocial status, it is still the case that most prosocial aggressors are males and adults. Given the increase in child and teen prosocial perpetrators, younger children have more role models similar in age in children's programming. As noted earlier, the research on perceived similarity suggests that children attend to and identify with models that are similar to the self (see Hoffner & Cantor, 1991). Thus, this pattern is especially risky for younger viewers who repeatedly consume children's programming. In terms of victims, only two differences were observed. Prosocial perpetrators are more likely to be adults than are nonprosocial perpetrators and they are less likely to attack primary characters.

One other difference in the demographics of characters involved with violence in children's shows must be addressed. Children's shows are more likely to feature anthropomorphized characters. Although anthropomorphized characters may pose little risk to older children, younger viewers who have not mastered the fantasy/reality distinction may be potentially susceptible to such portrayals. Thus, anthropomorphized characters may be potent role models to younger preschool age children who have not yet

mastered the differences between fantasy and reality (Bandura, Ross, & Ross, 1963a; Howard, 1998; Jaglom & Gardner, 1981).

The context of aggression involving prosocial perpetrators involves elements that may both increase and decrease risk. In terms of increasing risk, the findings show that prosocial perpetrators are more likely to use their own physical bodies (e.g., hands, legs, etc.) to protect others violently and their aggression is usually justified. As noted above, these trends illustrate that violence in children's programs – just like the overall landscape – is glamorized. In terms of decreasing risk, prosocial violence in children's shows is more likely to show the consequences of aggression. This was evidenced across two separate measures. First, prosocial violence results in significantly more extreme depicted harm than does nonprosocial violence. Second, the violence involving prosocial perpetrators is less likely to result in unrealistically low levels of harm. These results suggest that prosocial violence in children's shows may actually teach that aggression has negative repercussions, and thus may reduce viewers' likelihood of learning.

Two other points about children's shows are worth noting. First, violence involving prosocial and nonprosocial characters in this type of programming is more likely to feature humor than is the overall landscape. Specifically, violent interactions in children's shows were featured in contexts with humor substantially more often than were violent interactions in the overall landscape. As documented above, the admixture of humor and violence can increase the probability of aggression (Baron, 1978; Berkowitz, 1970). Second, children's shows are more likely to be depicted in fantastic and animated contexts. Although these formats pose less risk for older children, younger

viewers may be especially vulnerable to violence in such contexts (Dorr, 1980; Thomas & Tell, 1974).

Together, the findings from Research Question 2 suggest that prosocial violence in children's shows may be especially risky for younger viewers. Similar to the overall landscape, prosocial violence is justified and intended to protect life. However, children's shows are a unique genre that features prosocial violence involving more younger and anthropomorphized perpetrators in fantastic contexts. The only positive trend is that prosocial violence is more likely to depict the consequences of aggressive behaviors.

The last research question asked about the frequency and context of violence in prime time by prosocial status. Prime time differs very little from the overall landscape in terms of the amount of violence. The only difference observed was for rate per hour. Prosocial perpetrators engage in less violence per hour than do nonprosocial perpetrators (1.81 vs. 2.94, respectively). Interestingly, prime time features less aggression per hour than does children's shows or the overall landscape.

Prosocial status also influences the types of perpetrators and victims shown in prime time. When compared to nonprosocial perpetrators, prosocial perpetrators are more likely to be female, human, white, primary to the plot, and possessing law status. Although most of the prosocial perpetrators are male, it is interesting to note that prime time features more females than children's shows or the overall landscape. Thus, young females may have more aggressive role models in prime time now than ever before. Prosocial status also influences the types of victims shown in prime time. Prosocial aggressors attack individuals that are different from them demographically. That is,

prosocial perpetrators are less likely than nonprosocial perpetrators to attack humans, females, whites, primary characters, and law agents.

In terms of context, only three notable differences were observed. First, prosocial perpetrators are more likely to be shown protecting the self or others than are nonprosocial perpetrators. Again, this pattern may heighten the probability of learning or enacting aggression. Second, the violence of prosocial characters is often depicted as justified which has been shown to increase violent behaviors in adults (Berkowitz & Geen, 1966; Berkowitz & Rawlings, 1963). Third, the violence prosocial perpetrators engage in is more likely to be sanitized. That is, prosocial violence results in more victims showing no depicted harm and in contexts with less extended suffering than does nonprosocial violence. Such sanitized trends, as noted earlier, increase the risk of aggression.

Overall, the aim of this study was to assess the distribution of violence by prosocial status. Every study is not without its limitations, however. First, this analysis only examined prosocial aggression in the overall landscape, children's shows, and prime time. As such, we still know little about the nature and context of prosocial violence in other types of shows, such as dramatic series, reality television, or movies. Future research should examine how often and in what context prosocial perpetrators are shown in such genres.

Second, the present study was a secondary analysis of a large data set. As a result, all aspects of the study were already executed. One potential limitation with the NTVS study is that the authors only captured physical aggression or the threat thereof in

their definition of violence. Future research should also monitor verbal violence and how prosocial status may influence such the context surrounding such aggressive acts.

In spite of these limitations, the results from my thesis suggest that at least two follow up experiments need to be conducted. The first experiment could examine the impact of prosocial violence involving females. In explanation, the findings from this study show that prosocial perpetrators are more likely to be females than are nonprosocial perpetrators. Although less frequent in nature than male perpetrators, this pattern suggests that female youngsters may perceive same sex prosocial perpetrators as role models that are similar to them, and hence inflate the risk of learning. Yet several studies have found that male characters were chosen as role models by girls more often than female characters were chosen by boys, due to the fact that male characters were more plentiful and appeared in more exciting and interesting roles than did female characters (Howitt & Cumberbatch, 1976; Miller & Reeves, 1976). This research was conducted over 25 years ago and needs to be updated. It may be the case that girls now identify with exciting female prosocial perpetrators such as Zena the Warrior Princess or The *Powerpuff Girls*. Or, it may be the case that young girls watching television receive a "double dose" when viewing by identifying with both males and females who are aggressive for prosocial purposes. Clearly, more research is needed on the influence of female perpetrators on television that engage in violence for prosocial motives.

The second experiment could assess the impact of several contextual features in a violent scene on aggressive behavior. That is, most of the previous research in the violence arena have taken a univariate approach and only manipulated one or two variables at a time. Yet, the common prototype for violence involving prosocial

perpetrators also features justified violence in realistic settings. Future research needs to assess how several factors in a violence scene interactively impact the learning of aggression. That is, does adding another factor to a violent scene increase exponentially the risk of aggressive behavior in the audience? Which contextual feature (prosocial status, justification, realism) poses the most risk relative to all others? Answering such questions experimentally will help us to more fully understand the risk that television violence is posing to youth.

#### Footnotes

<sup>1</sup> The focus of Gerbner and his colleagues' research was to determine the relationship between amount of exposure to televised violence and viewers' beliefs about violence in the real world. However, their definition did not distinguish different subtypes of violence within the broad category. That is, the conceptualization of violence included intentional and accidental acts; acts of nature were counted as well. All acts of violence were summed and weighted equally in the analysis. Yet not all of these types of violence may have similar effects in terms of learning aggression (see Wilson et al., 1997). As Greenberg's study was designed to examine a fuller range of negative social behaviors on TV, the categorization of physically aggressive acts accounted for physical control or restraint of others (e.g., grabbing, shoving, pushing, holding), physical invasion of privacy, and elaborated fighting. Although these definitions are not well-suited for the purposes of this research (i.e., a concern about learning physical aggression only), it is important to note that the concept of aggression used by these researchers was appropriate for their areas of inquiry. For example, Gerbner was interested in how exposure to all types of violence (intended or not) contributes to the mean world

syndrome. Greenberg, on the other hand, was interested in how a wide range of behavior may contribute to antisocial behaviors in society.

<sup>2</sup> Per the NTVS contract with the National Cable Television Association, several types of programs were sampled but excluded from the content analysis. These program types include: religious programs, game shows, "infomercials," instructional programs, sports, and hard-breaking news. These program types comprise 14% (n=462) of the shows in the sample. Thus, the total number of programs sampled and coded for violence was 2,750.

<sup>3</sup> In the analysis, four types of violence were examined. First, credible threat refers to the perpetrator demonstrates a clear intent to harm the target physically and has the means ready to do so, but for some reason does not follow through immediately. Second, a behavioral act is any overt behavior or string of behaviors that is intended to harm a target, whether successful or not. Third, harmful consequences are instances in which an injured victim is depicted but the violence itself is not shown on screen. Finally, accidental violence features situations where a character experienced unintentional harm in the context of ongoing violence.

<sup>4</sup> There are time when violent characters aggress individually (e.g., bank robber shoots gun) or in multiple units (e.g., war scene). Typically, demographic and attributive qualities of single characters are easy to assess. However, when a series of characters act violently as a collective group, demographic and attributive characteristics may be difficult to code. For example, it is possible that a group of aggressors may feature both males and females as well as blacks and whites. When a group was not homogeneous in a particular trait or quality, the group or multiple unit was coded as "mixed." Anytime

there was not enough information given in the plot to assess a particular character-related variable, it was coded as "can't tell".

<sup>5</sup>Whenever accessing scene level variables, coders were instructed to watch the entire scene as well as the immediately adjacent scene. In some cases, information about specific scene level variables does not occur until the imminent threat of violence is actually over. For example, a scene may depict a heroic character saving a town from a villain or supernatural creature. In the scene after the hero kills the villain, the town presents him with an award for his bravery and courage. In this case, the hero is rewarded but not until the immediate threat of violence is over. To accurately capture the related frequency of reward and punishment, coders were instructed to watch both the violent scene as well as the scene immediate after.

<sup>6</sup> In a chi-square analysis, Cramer's V is a statistic that measures the strength of the statistical dependence between two and/or more variables. Variables with strong relationships will result in higher Cramer's V values. Cramer's V is used when one of the variables in the analysis features more than two categories.

<sup>7</sup> In all chi-square analyses, variables (e.g., type, ethnicity) with an "other" subcategory are not presented in any of the tables. If any of the "other" subcategories are significant, they are discussed in the results section of my thesis.

**APPENDICES** 

Perpetrator and	l Victim	Profiles by	Prosocial Status

			Not Prosocial	Prosocial
_		Perpetrators		
Type <sup>7</sup>				
	Humans		66.2% <u>a</u>	74.5‰
	Anthropomorphized creatures		22.8	19.0
	Supernatural creatures		6.7	3.2
Gender				
	Males		91.9 <sub>b</sub>	83.4 <u>a</u>
	Females		8.1 <sub>a</sub>	16.6 <sub>b</sub>
Age				
	Children		2.3	5.2
	Teens		3.6 <sub>n</sub>	8.7 <sub>ь</sub>
	Adults		93.1 <sub>b</sub>	<b>84</b> .6 <sub>8</sub>
Ethnicity				
	Whites		71.0	77.0 <sub>b</sub>
	Blacks		5.1	6.1
	Hispanics		4.3	1.0
Primary Ch	aracters		69.0 <sub>a</sub>	<b>88</b> .0 <sub>b</sub>
Law Status			9.2 <sub>a</sub>	<b>20</b> .0 <sub>b</sub>
		Victims		
Гуре	Humans		69.5	69 9
	Anthropomorphized creatures		20.3	19.6
	Supernatural creatures		3.6	5.8
Gender				
	Males		82.6	92.8 <sub>b</sub>
	Females		17.4 <sub>b</sub>	7.2ª
Age				
0 -	Children		5.5	3.1
	Teens		10.5 <sub>b</sub>	5.1.
	Adults		82.4	90.8 <sub>b</sub>
Ethnicity				
· · · · · · · · · · · · · · · · · · ·	Whites		74.7	71.4
	Blacks		6.7	5.8
	Hispanics		2.0	4.0
Primary Ch	aracters		74.7 <sub>b</sub>	63.7 <sub>∎</sub>
Law Status			11.3	9.9

		Not Prosocial	Prosocial
Reasons			
	% of PATs w/protect life	6.0%	56.9% <sub>b</sub>
	% of PATs w/anger	29.5 <sub>b</sub>	23.4
	% of PATs w/personal gain	44.8 <sub>b</sub>	10.9
	% of PATs w/other reasons	19.6 <sub>b</sub>	8.8 <sub>8</sub>
Justificati	on	5.2 <sub>a</sub>	64.1 <sub>b</sub>
Means			
	% of PATs w/use of body	35.7 <sub>a</sub>	40.9 <sub>b</sub>
	% of PATs w/unconventional weapons	8.3	8.7
	% of PATs w/conventional weapons	36.8	34.6
Extent &	Graphicness		
	% of PATs w/one act	37.5	40.4
	% of PATs w/repeated acts	62.5	59.6
	% of PATs w/lethal violence	34.5	33.3
	% of PATs in scenes w/blood & gore	19.0	18.3
Conseque	nces		
	% of PATs w/no pain	48.4	48.9
	% of PATs w/no depicted harm	40.5	41.9
	% of PATs w/extreme depicted harm	20.2	17.2
	% of PATs w/no likely harm	16.3	17.9
	% of PATs w/extreme likely harm	34.6 <sub>b</sub>	<b>28</b> .0
	% of PATs w/unrealistic harm	33.5	32.4
	% of PATs in programs w/long-term harm	29.8	28.8
Reinforce	ment		
	% of PATs in scenes w/rewards	35.3	36.0
	% of PATs in scenes w/punishments	38.9	41.4
	% of PATs in scenes w/no rew. or puns.	57.8	61. <b>2</b>
Humor			
	% of PATs in scenes w/humor	41.4	43.4
Realism o	of Violence		
	% of PATs in programs w/realistic violence	52.1 <sub>e</sub>	57.6 <sub>ь</sub>
	% of PATs in programs w/fantastic violence	47.9 <sub>b</sub>	42.4 <sub>a</sub>
	% of PATs in programs w/live action	60.4	67.7 <sub>ь</sub>
	% of PATs in programs w/some animated aciton	39.6 <sub>b</sub>	32.3
Anti-Viol	lence Theme		
	% of PATs in programs w/anti-violence	2.6	2.4

Perpetrator and Victin	n Profiles in Chi	ildren's and Prime	-Time Programs b	y Prosocial Status

		Children's Programs		Prime Time	
		Not Prosocial	Prosocial	Not Prosocial	Prosocial
	Perpetrators				
Туре					
	Humans	32.8%	34.1%	84.2%	94.1 <b>‰</b>
	Anthropomorphized creatures	47.8	50.5	6.6	4.3
	Supernatural creatures	12.8 <sub>ь</sub>	6.9 <sub>8</sub>	5.1	0.4
Gender					
	Males	92.3 <sub>ь</sub>	85.9 <sub>a</sub>	91.9 <sub>b</sub>	79.5 <sub>a</sub>
	Females	7.7 <sub>a</sub>	14.1 <sub>b</sub>	<b>8</b> .1	20.5 <sub>b</sub>
Δge					
ARC .	Children	3.8.	13.6	1.6	1.4
	Teens	2.8.	17.9	3.9	6.4
	Adults	91.9 <sub>b</sub>	67.1	94.3	90.9
Tab - i - i -		-	-		
Eunicity	Whites	76 7	74 2	66.9	80.8
	Blacks	10.7	74.5 2 A	67	ου.ο <sub>b</sub> ς γ
	Hispanics	25	0.6	56	13
-	Поринов	2.5	0.0	5.0	1.5
Primary	Characters	75.3 <sub>a</sub>	89.2 <sub>ь</sub>	68.4	83.0 <sub>b</sub>
Law Stat	us	3.8	7.1	11.3 <sub>a</sub>	39.3 <sub>b</sub>
	Victims				
Type	Unmone	22.6	21.0	01.0	05 0
	Anthronomorphized creatures	33.3	31.Z	91.0 <sub>b</sub>	83.8
	Supernatural creatures	47.0	49.5	3.0	7.0
	Supermitter or outlines	7.5	11.4	1.2	5.0
Gender					
	Males	90.3	93.9	77.5 <sub>a</sub>	91.6
	remaies	9.7	0.1	22.5 <sub>b</sub>	8.4 <sub>8</sub>
Age					
	Children	11.7	7.5	2.8	1.3
	Teens	16.8 <sub>ь</sub>	6.5 <b>.</b>	8.7	5.5
	Adults	<b>70</b> .1	84.9 <sub>b</sub>	87.7	92.5
Ethnicity					
,	Whites	73.7	76.5	77.8 <sub>b</sub>	70.2 <sub>a</sub>
	Blacks	2.7	2.8	6.1	6.1
	Hispanics	0.7	3.0	3.5	6.1
Primary	Characters	80.0 <sub>b</sub>	72.2 <sub>a</sub>	68.1 <sub>b</sub>	62.2 <sub>a</sub>
Law Stat	us	6.1	4.2	20.3 <sub>b</sub>	12.0 <sub>8</sub>

Violence Variables in Children's and Prime-Time Programs by Prosocial Status

		Children's Programs		Prime Time	
		Not Prosocial	Prosocial	Not Prosocial	Prosocial
Reasons					
	% of PATs w/protect life	4.4%	60.9 <b>‰</b>	6.9%	64.5‰
	% of PATs w/anger	27.1 <sub>b</sub>	18.9	27.2 <sub>b</sub>	18.6
	% of PATs w/personal gain	49.1 <sub>b</sub>	9.7	45.5 <sub>b</sub>	10.1
	% of PATs w/other reasons	19.4 <sub>b</sub>	10.5	20.4 <sub>b</sub>	6.8 <sub>a</sub>
Justificat	ion	4.0 <sub>a</sub>	64.4 <sub>b</sub>	5.0 <sub>a</sub>	68.4 <sub>b</sub>
Means					
	% of PATs w/use of body	40.8	45.8 <sub>b</sub>	35.7	34.9
	% of PATs w/unconventional weapons	25.8	26.6	13.4	16.6
	% of PATs w/conventional weapons	24.1	20.3	45.7	46.0
Extent &	Graphicness				
	% of PATs w/one act	39.5	41.5	36.6	36.8
	% of PATs w/repeated acts	60.5	58.5	63.4	63.2
	% of PATs w/lethal violence	36.3	38.8	33.2	34.2
	% of PATs in scenes w/blood & gore	2.1	1.5	37.3	35.6
Conseque	ences				
-	% of PATs w/no pain	58.8	56.9	39.3	43.5
	% of PATs w/no depicted harm	55.6 <sub>b</sub>	48.5 <u>.</u>	32.1	39.1 <sub>ь</sub>
	% of PATs w/extreme depicted harm	5.7 <u>a</u>	11.0 <sub>b</sub>	29.2 <sub>b</sub>	24.1 <sub>a</sub>
	% of PATs w/no likely harm	16.7	15.6	15.3	17.2
	% of PATs w/extreme likely harm	31.2	28.9	40.3	34.3
	% of PATs w/unrealistic harm	56.5 <sub>b</sub>	50.6 <sub>s</sub>	21.5	25.4
	% of PATs in programs w/long-term harm	10. <b>8</b>	7.8	48.5 <sub>b</sub>	40.8 <sub>a</sub>
Reinforce	ement				
	% of PATs in scenes w/rewards	42.8	45.3	33.0	30.8
	% of PATs in scenes w/punishments	35.8	37.4	41.8	44.4
	% of PATs in scenes w/no rew. or puns.	61.3	65.5	57.5	60.9
Humor					
	% of PATs in scenes w/humor	62.9	<b>63.2</b>	29.3	33.5
Realism	of Violence				
	% of PATs in programs w/realistic violence	9.7	9.1	67.5	70.2
	% of PATs in programs w/fantastic violence	90.3	90.9	32.5	29.8
	% of PATs in programs w/live action	6.3	8.3	87.8	89.1
	% of PATs in programs w/animated aciton	93.7	91. <b>7</b>	12.2	10. <b>9</b>
Anti-Vio	lence Theme				
	% of PATs in programs w/anti-violence	2.1	1.6	3.0	3.4

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