

# Sixth Graders Take on Television: Media Literacy and Critical Attitudes of Television Violence

Erica Scharrer

*This study outlines the effectiveness of a media literacy curriculum in changing attitudes about media violence through critical discussions and analytical viewing exercises. Ninety-three sixth graders participated in a curriculum focusing on “high-risk” ways of presenting violence in the media. Results of a one-group, pre-test post-test design suggest that participation in the curriculum was associated with an increase in critical attitudes about the topic. Open-ended responses also demonstrated enhanced sophistication in analyzing media violence after the curriculum. The study has potentially important implications for media education and media violence.*

*Keywords: Media Literacy; Media Education; Critical Viewing; Critical Thinking; Television Violence*

## Introduction

Media literacy can encourage audiences to engage in critical thinking about media violence, and question media practices, messages, and effects (Cantor & Wilson, 2003). Yet, there are only a handful of previous studies that demonstrate effective media literacy curricula pertaining to media violence (Huesmann, Eron, Klein, Brice, & Fischer, 1983; Robinson, Wilde, Navacruz, Haydel, & Varady, 2001; Rosenkoetter, Rosenkoetter, Ozretich, & Acock, 2004; Voojis & van der Voort, 1993).

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The media literacy curriculum evaluated in this study is based on the analysis of ways of depicting violence that increase the likelihood of negative effects. The National Television Violence Study (NTVS; Smith et al. 1998) identified five “high-risk factors” in violence portrayals that increase the possibility that children and teens will learn aggressive behaviors. Those factors are (i) violence perpetrated by appealing characters, (ii) violence that is justified in the plot (such as revenge), (iii) violence that brings rewards or goes unpunished, (iv) lack of realistic and long-term consequences, and (v) realistic portrayals. The first four are emphasized in the curriculum in the present study; the last is an underlying theme.

Through this study, we seek to encourage more skeptical attitudes about media violence, an important part of critical thinking (Ruminski & Hanks, 1995; Wright, 2002) by fostering understanding of three principles of media literacy identified by Aufderheide (1997) as they apply to the topic of media violence. The media construct reality principle was addressed in the curriculum in a discussion of the ways in which real-life violence and media violence differ, as well as the role of media in shaping conceptualizations that people hold about violence. The embedded values principle was addressed in a discussion of the messages about problem solving and ways to address conflict that are sent via the media. The responses of audiences principle was addressed in a discussion of differing factors in the portrayals of violence that help shape audience responses. The curriculum also raised discussion regarding the social responsibility of media violence depictions.

It is hypothesized that after participation in the media literacy curriculum:

*H1: Attitudes regarding the values embedded in violent media depictions will change.*

*H2: Attitudes regarding the media’s construction of violence will change.*

*H3: Attitudes regarding audience members’ responses to media violence will change.*

*H4: Attitudes regarding the social responsibility of media depictions will change.*

## **Method**

### *Sample*

The sample consisted of 93 sixth graders [1] from five different classrooms in three towns in the Northeast. The towns were chosen because of their proximity to the university and the classrooms were chosen due to the desire of the teachers and principals to participate. Therefore, the sample is a non-random convenience sample [2].

### *The Curriculum*

The media literacy sessions, implemented in four one-hour visits to the sixth-grade classrooms, were led by undergraduate students enrolled in an upper-level seminar on

television violence. A pre-test questionnaire was used to measure pre-existing attitudes about the topic. In the curriculum itself, sixth graders discussed the high-risk portrayal of violence factors, responded to open-ended questions, and critically analyzed selected media clips with emphasis on the presence or absence of the high-risk factors. The clips were short snippets from popular television programs and movies that at least partially targeted a young audience (e.g., “Home Alone,” “Lion King,” “Tom and Jerry”). The post-test questionnaire with duplicated items from the pre-test was administered by the classroom teachers the day after the last media literacy session. The four sessions took place over the same five-week period in all of the participating schools.

### *Measures*

Students’ responses to closed-ended questionnaire items were measured on a scale of 1, “I completely disagree,” to 5, “I completely agree.” All items were written by the author, created to apply to the curriculum, and pre-tested with a small group of sixth graders. Some were reverse-coded, but for most, higher numbers indicate more agreement with a statement considered a more critical attitude toward media violence.

Pre- and post-curriculum responses to the question, “How is television violence different from real-life violence?” were analyzed qualitatively. To identify themes, the author highlighted each major point raised in each written response and compared that point to those raised by others. All responses making largely the same point were grouped and a phrase was created to identify the theme. The unit of analysis was each sentence in a student’s response. Post-curriculum responses were expected to use some of the language introduced in the curriculum and to reflect a more critical point of view.

### *The One-Group Pre-Test Post-Test Design*

Although the one-group pre-test post-test design employed here is not ideal due to the lack of a control group, measures were taken to minimize the threats to internal validity identified by Campbell and Stanley (1963). To minimize the likelihood that an event in history would be a rival explanation for a change from pre-test to post, the teachers agreed to refrain from critical discussions of media in the classroom for the duration of this project. It is difficult to conceive of any other rival source of information that nearly 100 youngsters in three different towns would all have experienced. Maturation is also unlikely to explain differences between the pre- and post-test because the time period for the research was relatively short. The instrumentation threat is also unlikely because no observational measures are made in the study that would have been impacted by prior interactions. Likewise, statistical regression is unlikely because there were no extremely low or high scores on pre-test measures. Finally, the possibility that the pre-test itself affected post-test

responses is alleviated because the introduction of items at the pre-test without the added component of extensive discussion in the curriculum of the concepts underlying those items is unlikely to have changed responses to the post-test.

## Results

### *Principal Component Analysis*

To confirm the proposed relationships among the dependent measures, two separate principal component analyses were run using post-test data, one for the items pertaining to the three media literacy principles and one for the judgments of social responsibility items. For the former, a three-component solution was requested to parallel the three media literacy principles focused upon in the study. Results show that the dependent variables were, indeed, related to one another in the manner predicted (see Table 1).

The principal component analysis (PCA) with oblique rotation revealed three components of critical attitudes with eigenvalues over 1, collectively explaining 50.7% of the variance (see Table 1). The first component, “embedded values about violence in depictions,” consisted of items that measured students’ ideas about the messages implied in particular media portrayals and contributed 24.6% of the variance. The second component, “responses of audience members,” consisted of items that measured students’ attitudes about the conditions under which people may be affected by media violence and contributed 13.4% of the variance. The third component, “media’s construction of reality,” consisted of items that measured students’ attitudes about what constitutes “violence” on television and contributed 12.7% of the variance.

Only one component was identified in the study’s conceptualization to measure judgments of the social responsibility of depictions. Thus, a one-component solution to the PCA was requested. Results show that the two items load cleanly onto one factor, the “social responsibility of portrayals,” explaining 54.6% of the total variance.

The relationships among the components were tested [3], and reliability scores were calculated [4]. Because there were so few items in each component, the Cronbach’s alphas were rather low. Nonetheless, for three of the four components (considered to be somewhat reliable given the small number of items), responses to the individual items comprising the component were added to form a composite measure, an additive index. The means and standard deviations for each index (as well as for the individual items that did not form a reliable index) are located in Table 2.

### *Hypothesis Tests*

To test the hypotheses, a series of 2 (Time 1 vs. Time 2)  $\times$  2 (males vs. females) repeated measures ANOVA tests was run, with classroom in which the curriculum

**Table 1** Factor Loadings for Dependent Variables,  $N=93$ 

	Responses of audience members (Eigenvalue = 1.21)	Media's construction of reality (Eigenvalue = 1.14)	Embedded values about violence (Eigenvalue = 2.21)	Social responsibility of portrayals (Eigenvalue = 1.09)
Audiences are more likely to copy violence when characters get away with it rather than are punished	<b>0.59</b>	-0.02	0.25	
When audiences like characters, they are more likely to learn from them	<b>0.68</b>	-0.38	-0.11	
When characters have good reasons for violence, we are more likely to learn from them	<b>0.73</b>	0.33	-0.17	
The actions heroes use to get rid of bad guys are not really violence because they are used for good*	-0.21	<b>0.44</b>	-0.40	
When fighting occurs between cartoon characters, it is not violence because it is not real*	-0.10	<b>0.70</b>	-0.09	
Many TV programs show violence as a necessary way to solve problems	-0.09	-0.26	<b>0.62</b>	
A lot of violent acts in the media are celebrated/rewarded in the plot	-0.08	0.33	<b>0.83</b>	
People are more likely to copy violence done by "good guys" compared to "bad guys"	0.41	0.02	<b>0.51</b>	
TV shows do a good job of showing the grief and sorrow the loved ones of victims feel*				<b>0.71</b>
TV shows should show people getting punished for being violent more often				<b>0.50</b>

Note. Loadings of .50 or greater are in boldface.

\* These items were reverse-coded.

was administered and students' television exposure as covariates (see Table 2). In each case, the main effect of the within-subjects change from Time 1 to Time 2 was significant and in the direction of more critical attitudes, supporting the hypotheses. In support of *H1*, students' scores on the "embedded values about violence in depictions" index increased significantly after participation in the curriculum,  $F(1, 85) = 10.59, p < 0.01$ . In support of *H2*, scores on the "media's construction of reality" index increased significantly after participation,  $F(1, 88) = 14.40, p < 0.001$ . In support of *H3*, scores on the "responses of audience members" index increased significantly as well,  $F(1, 86) = 16.91, p < 0.001$ . Finally, in support of *H4*, scores on

**Table 2** Pre- Compared to Post-media Literacy Curriculum Responses,  $N = 93$ 

	Time 1 Mean <i>SD</i>		Time 2 Mean <i>SD</i>	
	Males	Females	Males	Females
Embedded values index	10.57 (2.08)	10.29 (2.00)	11.87 (1.94)	12.36 (1.75)
Audience responses index	10.36 (2.51)	10.29 (2.32)	12.06 (1.81)	11.86 (1.63)
Media construction index*	4.49 (2.29)	4.66 (2.07)	3.57 (1.68)	3.22 (1.57)
TV shows should punish violence more often	3.51 (1.44)	3.96 (1.22)	4.17 (0.94)	4.27 (1.07)
TV does a good job of showing pain/ sorrow*	3.37 (1.16)	3.14 (1.09)	2.00 (0.89)	2.41 (1.15)

\*These items were reverse coded.

the two “social responsibility of portrayals” items increased significantly,  $F(1, 91) = 6.26$ ,  $p = 0.01$  and  $F(1, 90) = 22.28$ ,  $p < 0.001$ , respectively. Only one significant interaction between time and gender occurred, for the “TV does a good job of showing pain/sorrow” item ( $F[1, 87] = 4.24$ ,  $p < 0.05$ ; see Table 2).

### *Open-Ended Item Analysis*

The qualitative responses differed somewhat after participation in the media literacy curriculum compared to before (see Table 3). Time 2 responses suggest that the sixth graders thought of new issues related to TV violence and acquired new language to describe them. Indeed, there were 27 mentions of the NTVS high-risk portrayal terms “good guys,” “bad guys,” “rewards,” “punishments,” “consequences,” or “justified” after students had participated compared to just two (“good guys” and “bad guys”) before.

**Table 3** Frequency of Categorized Open-Ended Responses

Category/Theme	Frequency at Time 1	Frequency at Time 2	Change (%)
TV is fake; real life is real	31 (33.3%)	25 (26.9%)	-6.4
People are not actually getting hurt on TV	19 (20.4%)	14 (15%)	-5.4
TV violence is more common	19 (20.4%)	13 (13.9%)	-6.5
TV violence is scripted or planned	5 (5.3%)	0	-5.3
It would hurt more in real life	4 (4.3%)	7 (7.5%)	+3.2
TV violence affects people	4 (4.3%)	0	-4.3
Worse consequences in real life	0	14 (15%)	+15
TV rewards violence	0	5 (5.4%)	+5.4
On TV, punishments are rare	0	3 (3.2%)	+3.2
TV violence is created to entertain	0	3 (3.2%)	+3.2
In real life, emotional effects are present	0	2 (2.1%)	+2.1
Real violence is scary	0	2 (2.1%)	+2.1

Small increases occurred in the frequency of more complex observations after students had participated compared to before. The largest was for mentioning minimized consequences in TV violence, from zero before to 15% of students after participating (e.g., “On TV they don’t really show the consequences”). A smaller increase occurred in mentions that the media minimize pain/harm associated with violence (a +3.2% change; e.g., “Usually they can get back up, or find some sneaky way to avoid being killed;” and “On TV you could fall off a cliff and not get hurt and in real life you would go kersplat.”)

Other Time 2 themes that were completely absent at Time 1 include the presence of rewards for TV violence (e.g., “On TV they sometimes get rewarded for pulling a gun on someone. In real life you usually never get rewarded”), lack of punishments (e.g., “There’s no punishment on TV but there is in real life;” “The bad guy sometimes gets away with it”), the notion that violent television stories are told to attract audiences (e.g., “On TV it’s somebody’s idea of entertainment”), the lack of emotional responses (e.g., “TV violence doesn’t show mourning for a lost person”), and the idea that real violence is frightening. These new themes make up 16% of Time 2 responses. Thus, when also accounting for the lack of consequences theme at Time 2 (15%), 31% of students answered the question differently after participating in the curriculum compared to before.

## **Discussion**

Results suggest that the students made measurable progress, as evident in both their closed- and open-ended survey responses, in their understanding of three principles of media literacy (Aufderheide, 1997), media as constructions of reality, the presence (and absence) of particular values in media, and the responses of audiences to media. The sixth graders demonstrated a mastery of the factors identified in the NTVS as constituting a heightened risk of influencing aggression (Smith et al., 1998). Results indicate that the element of critical thinking that involves the consideration of attitudes about a topic (Ruminski & Hanks, 1995; Wright, 2002) was facilitated through the curriculum.

However, there are important limitations to the study that should be duly noted. First, the results may be threatened by social desirability, alleviated only somewhat by assuring students of anonymity, communicating that there are no right and wrong answers, by the tone of the curriculum in which multiple opinions were invited, and by the fact that the classroom teachers rather than media literacy instructors administered the post-test. Second, the lack of a control group prevents any causal claims. This was a necessary concession because the teachers wanted all of the students to receive the “treatment” (participating in the curriculum). Third, although principal components analysis supported the dimensional structure intended, the small number of items used to operationalize the components and the low Cronbach’s alpha scores threaten reliability. Finally, future research should explore the application of social cognitive theory (Bandura, 2002) in providing an

explanation of the mechanism by which media literacy curricula may teach young people to be critical of the media.

Nonetheless, this study makes a tentative step toward filling a gap in the research by providing a mixed method demonstration of the potential effectiveness of a media literacy curriculum. It joins a small number of past studies in finding evidence for the ability of media literacy to trigger changes in attitudes on the topic of media violence (Huesmann et al., 1983; Rosenkoetter et al., 2004; Voojjs & van der Voort, 1993).

## Notes

- [1] Sixth-grade students were selected because they were considered old enough to have the cognitive and scholastic abilities, including listening, reading, and critical thinking, needed to follow the curriculum (Flavell, Flavell, Green, & Korfmacher, 1990). They were also considered old enough to not be exceedingly frightened or disturbed by the violent images that were critically analyzed in the media literacy curriculum. On the other hand, they were also considered young enough to still be forming important impressions of media that may persist into adulthood.
- [2] Census figures from 1990 indicate that the median yearly household income in the three towns was US \$34,591. The population of the three towns was 1.6% Black or African American, 2.9% Asian or Asian American, 2.1% Latino, and 93.4% White or Caucasian. Since only sixth graders participated in this study, the majority of participating students was 12 years of age. Over a third of the sample (38.7%) was 11. One student was 13. Just over half (51.6%) of the students were male (48.4% female). Students from Town A (with three participating classrooms) comprised 57% of the sample. Students from Town B (one classroom) comprised 24.7%, and Town C (one classroom) comprised 18.3%.
- [3] Tests investigating correlations among the factors reveal significant associations between the media construct reality items at Time 1 and Time 2 ( $r=0.30$ ,  $p < 0.01$ ), the media construct reality items at Time 2 and embedded values items at Time 2 ( $r=0.22$ ,  $p < 0.05$ ), the media construct reality items at Time 2 and the responses of audiences items at Time 2 ( $r=0.24$ ,  $p < 0.05$ ), and the responses of audiences items at Time 1 and the embedded values items at Time 1 ( $r=0.38$ ,  $p < 0.001$ ). No other bivariate combinations of the additive indexes comprising the factors were significantly correlated.
- [4] Cronbach's alpha scores were calculated for the items comprising each of additive index. They were .49 for the embedded values component, 0.45 for the audience response component, and 0.51 for the construction of reality component, respectively. It is not surprising that the Cronbach's alpha values are low, since there are only three items in the first two components and two items in the last, and alpha depends heavily on the number of items (Crano & Brewer, 2002). Finally, the two items in the social responsibility component had a Cronbach's alpha of just 0.20. Therefore, these items were not added together to form an index but rather were used one by one in subsequent analyses.

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