Original Articles and Reviews

Violence and Sex as Advertising Strategies in Television Commercials

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Abstract. Despite several studies investigating the impact of sex and violence in television on consumer behavior and memory for products in commercials, results remain inconsistent and debated. The purpose of the current study was to examine the effects of television violence and sex on memory for commercials and willingness to buy products. Two hundred twelve young adults were assigned to watch either a sexual, violent, combined sexual and violent or neutral television show. Within each show were embedded 12 commercials, four violent, four sexual, and four neutral. Results indicated that violent or sexual content of the television show did not impair memory for commercials or willingness to buy products, and that sexual or violent content in the commercials themselves increased memory for those commercials. Implications for the current study are that violent or sexual shows may adequately function in attracting viewers' attention, with sexual and violent content in the commercials themselves improving viewers memory for products. Use of violent or sexual content in commercials may thus be useful in advertising for brand recall.

Keywords: television, mass media, consumer behavior, advertising, marketing

The ubiquity of sexual and violent content in television programs available to worldwide audiences has produced a great deal of controversy and concern among both the public and scientific communities. Several recent commercials with sexual or violent themes have become the center of controversy. For instance, the 2005 GoDaddy’s US Superbowl add featured a scantily clad woman giving testimony before television censorship hearings and (in reference to Janet Jackson’s breast baring incident during a previous Superbowl) nearly showing her breasts during a wardrobe malfunction. FOX news decided against airing this advertisement a second time during the Superbowl. Similarly, in the United States, adds for the release of the Grand Theft Auto IV game were taken down in 2008 from public transportation terminals and bus stops in some cities due to complaints about the violent content portrayed. Some viral adds skip television altogether, going straight to the Internet. One such example is the “she spilled my coffee” add, purportedly a Canadian public service announcement regarding domestic violence. During the add a male customer violently assaults a female waitress for the coffee spill. Recent research (Bushman, 2005; Fried & Johanson, 2008) has examined whether sex and violence on television is effective in selling products, although it remains unclear that this issue has been fully addressed. The present article seeks to illuminate the effects of sex and violence on television, including violent and sexual content in commercials and their ability to promote products in advertisements.

Sex and Violence on Television

Depictions of violent or sexual acts on television continue to be a common and controversial phenomenon. The National Television Violence Study (1998) suggested that violent content can be found in 60% of television media. A similar study by the Kaiser Family Foundation (2006) found that 70% of television shows included some sexual content. In fairness, it should be noted that these figures are for any content in a show. A show with only a few seconds of violence or sex across an entire 30- or 60-min episode would still be rated in these figures. This ubiquity in television programs has led to concerns among scientists and laypersons that such content may produce deleterious effects on adult and child viewers. Despite decades of research, this proposition remains controversial and debated, with some researchers suggesting that a consensus has been reached (e.g., Anderson et al., 2003; Boxer, Huesmann, Bushman, O’Brien, & Moceri, 2008; Huesmann & Taylor, 2003; Malamuth, Addison, & Koss, 2000), while others assert that the evidence is weak and often misleadingly presented with authors glossing over inconsistent or negative findings in favor of supporting their hypotheses (Ferguson & Kilburn, 2009; Freedman, 2002; Grimes, Anderson, & Bergen, 2008; Olson, 2004; Savage, 2004; Savage & Yancey, 2008; Sherry, 2007).

Regarding sex on television, the possible pernicious effects upon viewers that are of concern to researchers are...
somewhat more diffuse. Such concerns range from the promotion of negative attitudes toward love and sex (Zillman, 2000) to the promotion of rape myths and negative attitudes toward women (Allen, Emmers, Gebhardt, & Giery, 1995). Meta-analyses have generally found few correlational results between viewing erotica and negative outcomes, although experimental studies tend to produce small effects (Allen et al., 1995). It should be noted, however, that many of these studies consider the potential deleterious effects of pornography, not sexual television shows.

Does Sex and Violence in Television Sell Advertised Products

As television stations in many nations exist partially or entirely on advertisement revenue (Bushman, 2005), the “purpose” of television shows is to bring viewers’ attention to the advertisements in order to assist in the sale of products. There are two possible routes in which shows can assist in the sale of advertised products. The first is the direct route, in which the content of the show itself (violent, sexual, or neutral) promotes sale of products. Thus, if sex and violence on television “sells,” then one would expect people to be more likely to buy products, any products (irrespective of the advertisements) that are advertised during the show. Television shows can also promote products via an indirect route. Namely, television shows (violent, sexual, or neutral) can simply fulfill the function of attracting viewers. Once viewers are in front of the television, it is up to the content of the advertisements, not the television program itself, to sell products. This indirect route has not yet been examined through research. Some researchers (Bushman, 2005; Parents Television Council, 2003) have asserted that sex and violent content on television is less popular overall than “neutral” shows. This appears puzzling, however, as a look at the top-20 Nielen ratings for television shows for one recent week (December 8–14, 2008) finds that, along with sports, reality shows such as “Survivor” and news shows (which themselves may contain content of a sexual or violent nature), programs with sexual or violent content dominate the list (Nielen Media Research, 2009). As such, violent or sexual shows appear entirely capable of attracting audiences and are perhaps superior in this regard to nonviolent/sexual shows.

Bushman (2005) examined whether people were more or less likely to wish to buy products after viewing programs with sexual content, violent content, combined violent and sexual content, or neutral content. Three hundred thirty-six adults were randomized to watch a television program with either sexual or violent content, both sexual and violent content, or neither. Embedded within programs were a series of 12 commercials for little-known products. Results indicated that viewing programs with violent or sexual content reduced viewers’ memory for the commercials contained within the program and also reduced the likelihood that participants would want to buy those brands. The author concluded that violent and sexual programs did not “sell” products. Bushman has found similar results in other studies (Bushman, 1998, 2007; Bushman & Bonacci, 2002).

Bushman’s work has not always been replicated by other researchers. Gunter, Fumah, and Pappa (2005) found somewhat mixed results. Although violent programming reduced memory for commercials without violent content, violent programming increased memory for commercials with violent content. In other words, it appears that matching programs with commercials in terms of content may be beneficial. Similarly Shen and Prisens (1999) were unable to replicate Bushman’s findings regarding the alleged impairing effect for violent media on memory for products in commercials. In more recent analyses Fried and Johanson (2008) critiqued Bushman’s studies, claiming that his analyses did not control well for other aspects of the included television shows. When controlling for the content of the show itself Fried and Johanson were unable to replicate Bushman’s findings and found the sexual or violent content did not impair participants’ memory for commercials. Fried and Johanson conclude that Bushman’s claims about the impairing effects of television violence and sex are, at best, tenuous.

Attract/Remember: A Theoretical Perspective

One of the salient aspects of the work of Gunter and colleagues (Gunter et al., 2005; Gunter, Tohala, & Fumah, 2001) was finding memory for commercials is enhanced when those commercials are matched in content with the shows in which they are embedded. It is possible that the content of the television show puts the viewer in a particular cognitive mindset. Maintaining that mindset may help with further memory for products, whereas mismatched products quickly lose viewers’ interest and attention.

A theoretical framework for understanding the effectiveness of television advertised is worth discussion. This paper endorses a model of understanding advertising and marketing in which their influence is more informative than behavior changing per se. In other words, advertising’s power is not in making people buy things they do not already have an inclination to buy, but rather in directing people toward specific brands. The American Marketing Association (AMA) defines marketing as

“Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large” (AMA, 2007).

For example, a person is unlikely to buy cola unless they have tasted it or something similar in the past and enjoyed it. Advertising makes that cola enjoying person more inclined to choose a brand they identify with such as Coke or Pepsi, and eschew lesser known, potentially cheaper brands. Advertising, then, does not create massive behavior change, or shape people’s core personality or beliefs. It does nudge people in the direction of particular product brands the result of which can be windfall profits for those brands (see Kotler & Keller, 2009). Even relatively new products must appeal largely to existing consumer needs or wants.

From this understanding, the purpose of television shows is, essentially, to attract viewers to a time and place from
which advertising messages can be received. Including exciting content, such as sexual or violent content, may be of assistance in attracting viewers, particularly certain demo-
graphics of viewers such as young adults. Generally speaking, viewers are not as compelled by commercials as by the shows themselves (many viewers, after all, use commercial breaks to visit the water closet or to make a snack). As such, advertisers may use similar strategies as the shows themselves, namely injecting sex or violence into the com-
mercials, in order to retain viewer interest and allow their products to be exposed to potential consumers. Research has suggested that violent or sexual elements to commercials to enhance their appeal, although potentially distracting viewers from details of the commercial (Fried & Johanson, 2008; Reichert, Heckler, & Jackson, 2001; Reid & Soley, 1981). Thus, television and television advertisement involves a two-part process. Violent or sexual television attracts the viewers; sexually or violently compelling advertisements keep them in the seats during commercial breaks. These two processes work together to ensure product visibility.

As certain kind of shows (violent or sexual) attract certain viewers, it may be important to match commercial content to show content. Violent or sexual commercials shown during relatively nonviolent, nonsexual programming may come across as inappropriate or shocking. By contrast non-
violent, nonsexual commercials shown during more sexual or violent programming may fail to hold viewers’ interest and attention, resulting in the failure of the commercial. Thus, matching commercial to program content could arguably be an essential component of maintaining viewer engagement. In other words the content of the show “primes” the viewer’s consciousness, helping to set up retrieval cues for commercials with similar content. The “matching” hypothesis could be a moderating influence on the attract/remember theoretical model and is worth examining. The alternate view is that matching is not required and sexual or violent content in commercials is advantageous irrespective of the content of the television show. In such case, viewers are actively linking the products in the commercials with the proximal sex and violence in the commercials themselves. As the sex and violence in the television shows is more “distal” and unrelated to the product, viewers do not link the two and television content does not enhance or impair memory for products.

As noted earlier, the mechanism by which television pro-
grams help to “sell” products may not be through direct influence, but merely by attracting viewers and allowing the advertisements themselves to sell the product. Thus the current study has several goals:

1. The present study will consider the effects of violent and sexual content in the television shows on memory for products in commercials. It is hypothesized that the content of the television show (sexual, violent, both, or neither) will not produce appreciable effects in regard to memory for commercials, or intent to buy the product. In other words, so long as a television show is interest to viewers the show will fulfill the “attract” functioning. Violent or sexual content in television shows will not impede memory per-
formance for commercials.

2. The present study will also consider the effects of violent and sexual content in commercials themselves on memory for products and interest in buying those products. It is hypothesized that violent or sexual content in the commercials themselves will increase both memory for the commercials and intent to buy the product. Since such content in commercials them-
selves is linked directly with the product, they are hypothesized to have greater influence than content of the shows.

3. It is further hypothesized that memory for products in violent commercials will be enhanced when matched with violent shows, and memory for products in sexual commercials enhanced when matched with shows with sexual content.

Method

Participants

The current study included 212 university students from a Hispanic-serving regional comprehensive university in South Texas. Of the participants 79 (37.3%) were men and 133 (62.7%) were women. Regarding ethnicity, 195 (92.0%) were Hispanic, 8 (3.8%) were Caucasian, 2 (1%) were African-American, and 7 (3.3%) identified as “Other” or did not report ethnic background. The mean age of the participants was 23.88 (SD = 5.89), and their average education level was equivalent to a college student of junior standing.

Independent Variables

Television Shows

Three exemplars shows from each show type (violent, sexual, violent and sexual, and neutral) were chosen for this study. For the purposes of this study, violent content was defined as any physical act that included harm or injury to a person, or threatening harm to a person by another person. For the pur-
poses of making a clear contrast, all violent exemplars included intentional physical person to person injury. All nonviolent shows were devoid of personal injury (intentional or otherwise), threatened harm, or intentional damage to property. For the purposes of this study, sexual content was defined as including provocative dress intended for sexual arousal, exposure of primary or secondary sex organs (primarily breasts or buttocks), simulated intercourse or other sexual acts, or explicit discussions of sexual acts. All sexual exemplars included at least two elements of the above definition, wherein all nonsexual shows were chosen so as to have no elements of the above definition. Violent and sexual had been rated equivalent of TV-14 due to their content, whereas the neutral shows had been rated TV-G.
Violent shows included: X-Files, 24, and Band of Brothers. Sexual shows included: Sex and the City, Will and Grace, and Stacked. Shows with both sexual and violent content included: CSI: Miami, Buffy the Vampire Slayer, and VIP. Neutral shows included: Seventh Heaven, Boy Meets World, and Raven. All shows included were a 1-hour presentation, thus for some half-hour sitcoms (i.e., Will and Grace, Raven, Boy Meets World, and Stacked) two episodes were shown. In each show at standardized intervals (~15, 30, and 45 min) the 12 commercials were inserted in standardized blocks of four. All participants saw the same commercials in the same order, despite the television show they were asked to view. The order of these commercials themselves was randomly determined, but each block included at least one commercial of each type (violent, sexual, or neutral).

Commercials

Twelve exemplar commercials were chosen to represent three commercial types (violent, sexual, and neutral). Because most commercials are relatively short, few commercials have time to include both violent and sexual content. All commercials were for products with “brand name recognition,” in contrast to Bushman (2005), as these are the sort of products most likely to be marketed during prime-time television. All commercials were chosen for their attempt to grab the viewers’ attention, thus balancing the often humorous content of the neutral commercials with the sexual or violent content of the other commercials. Violent commercials included those for Nike, Reebok, John West Salmon, and Federal Express. Sexual commercials included those for Victoria’s Secret, Bud Light, Axe, and Microsoft Office XP. Neutral commercials included those for Pizza Hut, Pepsi, Pentium 4, and ESPN (Lance Armstrong on an electricity generating bicycle). All of the neutral commercials were humorous rather than bland in content, in an attempt to match the “impact” of these commercials with those of violent or sexual content. The same definitions for violent and sexual content were used for commercials as for television shows, although it should be noted that commercials are not rated as television shows are.

Covariates

Follow-Up Questionnaire

As a form of manipulation check, to be sure that the television shows functioned as intended, respondents were asked to rate on a 5-point Likert scale, how sexually explicit and how violent they found the television show that they had watched. Violent shows were expected to be rated as significantly more violent, and sexual shows as significantly more sexual than their respective controls. Respondents were also asked to rate how exciting and interesting it was to them, how likely they would be to watch the show of their own free will, and whether they had seen the show before. The three items related to interest, excitement, and desire to watch the show had an internal consistency between them (α = .87) and were thus collapsed into a single variable to be used as a covariate in further analyses.

Dependent Variables

Memory for Commercials

In order to assess for the respondents’ memory for commercials after viewing the television program, respondents were given a piece of paper with 12 empty slots and asked to recall without prompting, as many of the commercials that they had just seen in the television show as they could remember.

Intent to Buy

For each item recalled from memory as described above, participants were also asked to rate on a 5-point Likert scale how likely they were to buy that product in the future. This is designed to measure not only product recall but product interest.

Procedure

Students were approached in a classroom setting and asked to participate in exchange for extra credit. Twelve appointment times were made available at the university theater to view the exemplar shows. Students were randomly assigned to one of the 12 appointment times and each exemplar show was randomly assigned to one of the appointment times.

Prior to the show, students were presented with an informed consent form, which they were asked to read and sign and invited to ask any questions they might have. All students viewed a 1-hour presentation of the exemplar show in which the commercials had been embedded. Following completion of the show students were asked to fill out the study questionnaires. Total completion time for the show and questionnaire was approximately one and a half hours. All study procedures were designed to conform to university IRB requirements and APA ethical standards for research with human subjects.

Power Analysis

G*Power was used to conduct a sensitivity (post hoc) power analysis with our sample. Results indicated that our sample is powerful enough (at 1 – β = .80) to detect effect sizes approximately r = .11 in value. This value is nearly that of Cohen’s (1992) cut-off for a “small” effect, and lower than that suggested by other researchers as a cut-off for evaluating practical significance (Ferguson, in press; Lipsey, 1998). As such, we are confident that the sample provides us with adequate power to address our hypotheses.
Results

Manipulation Check

The impact of sexual and violent shows in relation to nonviolent or nonsexual controls was analyzed by t test to ensure that the programs had the desired impact. As expected, shows with sexual content were rated as more sexual ($M = 2.77, SD = 1.05$) than were shows without sexual content ($M = 1.51, SD = 0.84$) $t(210) = 9.54, p \leq .001$. Similarly, violent shows were rated as more violent ($M = 3.12, SD = 1.13$) than were shows without violent content ($M = 1.13, SD = 0.63$) $t(210) = 14.82, p \leq .001$. These results provide evidence that the exemplars chosen were effective representatives of violent and sexual television shows.

Table 1 presents mean values and standard deviations for outcome variables across the four television show categories.

<table>
<thead>
<tr>
<th>Television show</th>
<th>Vrem</th>
<th>Vbuy</th>
<th>Srem</th>
<th>Sbuy</th>
<th>Nrem</th>
<th>Nbuy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violent (M)</td>
<td>2.04</td>
<td>4.83</td>
<td>2.06</td>
<td>5.56</td>
<td>1.69</td>
<td>5.12</td>
</tr>
<tr>
<td>Violent (SD)</td>
<td>1.24</td>
<td>3.41</td>
<td>1.06</td>
<td>3.30</td>
<td>1.21</td>
<td>4.20</td>
</tr>
<tr>
<td>Violent and sexual (M)</td>
<td>2.09</td>
<td>4.88</td>
<td>2.03</td>
<td>5.54</td>
<td>1.59</td>
<td>4.64</td>
</tr>
<tr>
<td>Violent and sexual (SD)</td>
<td>1.06</td>
<td>3.18</td>
<td>1.19</td>
<td>3.86</td>
<td>1.04</td>
<td>3.92</td>
</tr>
<tr>
<td>Sexual (M)</td>
<td>2.10</td>
<td>4.92</td>
<td>2.29</td>
<td>6.65</td>
<td>1.76</td>
<td>5.24</td>
</tr>
<tr>
<td>Sexual (SD)</td>
<td>1.20</td>
<td>3.59</td>
<td>1.10</td>
<td>4.33</td>
<td>1.23</td>
<td>3.99</td>
</tr>
<tr>
<td>Neutral (M)</td>
<td>2.18</td>
<td>6.34</td>
<td>2.16</td>
<td>6.14</td>
<td>1.32</td>
<td>4.52</td>
</tr>
<tr>
<td>Neutral (SD)</td>
<td>1.17</td>
<td>4.28</td>
<td>1.28</td>
<td>3.99</td>
<td>1.32</td>
<td>4.85</td>
</tr>
</tbody>
</table>

Note. $M = \text{Mean}$; $SD = \text{Standard deviation}$; $Vrem = \text{violent commercials remembered}$; $Vbuy = \text{willingness to buy "violent" products}$; $Srem = \text{sexual commercials remembered}$; $Sbuy = \text{willingness to buy "sexual" products}$; $Nrem = \text{neutral commercials remembered}$; $Nbuy = \text{willingness to buy "neutral" products}$.

Effects of Violent or Sexual Content in Commercials Themselves on Memory of Commercials

The effects of television show type on memory for commercials and intent to buy the product were examined using two mixed-design ANOVAs (since all participants saw all commercials in standardized order, this is a within-subject variable). Independent variables in this analysis included the type of commercial and participant gender. Dependent measures for the first ANOVA were number of commercials remembered for each type of commercial (violent, sexual, or neutral). The dependent measure for the second ANOVA was willingness to buy products from each of these commercial types. As we are examining the impact of commercials, not the shows themselves, the covariates related to show enjoyment, and having seen the show before, were not used in these analyses. Results from the ANOVA on memory for commercials across commercial types found a significant main effect for commercial type, $F(2, 420) = 21.60, p < .001$; $\eta^2_p = .17$. This effect was small but robust $r = .22, .09 \leq r \leq .35$. Specifically, participants had better memory for violent commercials ($M = 2.10, SD = 1.16$) and sexual commercials ($M = 2.13, SD = 1.16$) than they did for neutral commercials ($M = 1.59, SD = 1.15$). No main effect for gender, $F(1, 210) = 1.25, p > .05$, or the gender by commercial interaction, $F(2, 420) = 0.77, p > .05$, was found.
Discussion

Related to the effect of violent and sexual content in television shows on memory for commercials and willingness to buy products, the results of the present study generally find little effect for television content. People generally remembered commercials equally well and were equally willing to buy products independent of the show they had watched. In relation to Bushman’s (2005) study of commercials and television content, the findings of this study do not replicate Bushman’s findings. As such, the first hypothesis of this study was supported.

Perhaps more relevant however, participants were more likely to remember commercials if the commercials had violent content or sexual content. This was true no matter whether the content of the commercial matched the content of the show, and even in comparison to humorous neutral commercials for well-known products. This effect was not large, however, suggesting that other factors in commercials may be more critical in garnering attention. The effect on desire to buy products was negligible. As such, the hypothesis of this study that violent and sexual programs need only attract viewers, and that it is sex and violence in commercials that sell products was partially supported. Sex and violence enhances memory but not necessarily increase interest in buying the product.

The current study is not without weaknesses. One weakness of the current study is that we relied specifically on free recall. It is possible that cued recall or implicit memory testing may have produced different results (Holden & Vanhuele, 1999). Therefore we have not tested all possible avenues for product recall. Further one approach that we did not try in the current study was counterbalancing the order of the commercials. Although we counterbalanced the presentation of violent, sexual, nonviolent, and combined commercials, the commercials themselves were presented in a standardized order. Although we believe that a standardized format such as this is important, it is possible that a counterbalancing approach may have produced somewhat different results. It is also worth noting that our study includes a majority of Hispanic participants. As individuals from differing cultures may respond to sex and violence differently, caution is advised in generalizing the results of this study to diverse groups. One further weakness of this entire line of research is also worth noting. None of the studies discussed, including the present one, give participants the option of disengaging from the commercials altogether. In the laboratory environment, participants may feel that they are expected to stay and watch the commercials. In the “real world,” as noted earlier, viewers may leave the television viewing area altogether during commercial breaks. Whether commercials with sexual or violent content prevent such disengagement remains to be explored. By contrast, the effects of television content on memory for commercials did not vary according to the content of commercials. Thus, the third hypothesis of the study, that matching shows to commercials in regard to content would enhance memory, was not supported.

The current study sought to answer several questions about the effects of sex and violence on television and in commercials. Results indicate that watching sex and violence in commercials can increase memory for products, but does not necessarily help sell them. The memory enhancing effects of violence or sex in commercials are consistent across all shows irrespective of the shows. On the other hand, the belief that violent or sexual content actually impaired memory for advertised products was not supported.

Our results offered preliminary support for the two-part attract/remember theoretical model proposed in the introduction. Our current results examine the second part of the theoretical model, that sex and violence in commercials increases memory for products, to a greater degree than the first part, that sex and violence in the shows themselves attracts viewers. Given the popularity of sexual and violent shows as indicated by Neilson ratings this first element (attraction) may appear as something of a “given,” but it is worth noting that we did not test it in the current study. Future research could examine the “attraction” component of the theoretical model empirically by offering participants a choice between show descriptions in which sexual, violent, or neutral elements were emphasized, with participants allowed to choose which show they preferred to watch. Such research would provide further evidence in evaluation of the attract/remember theoretical model. Sex and violence may not always be necessary to “attract” viewers . . . indeed nonviolent shows such as American Idol have been very successful in attracting viewers with no violence and little sexual content (aside from physically attractive contestants). However, sex and violence certainly is one element in attracting viewers. Once viewers are attracted to a particular show, adding sex or violence into the content of commercials, irrespective of the content of the shows themselves, appears to increase memory for products in those commercials. Thus brand recognition is increased, arguably the primary purpose of advertising.

It is hoped that this study will foster discussion and discourse within the media effects literature.

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References


Bushman, B. (2007). That was a great commercial, but what were they selling? Effects of televised violence and sex on memory for violent and sexual ads. Journal of Applied Social Psychology, 37, 1784–1796.


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