Anticipated Violence, Arousal, and Enjoyment of Movies: Viewers’ Reactions to Violent Previews Based on Arousal-Seeking Tendency

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ABSTRACT. The authors investigated the effects of violent portrayals in movie previews on viewers’ arousal and anticipated enjoyment of movies based on their arousal-seeking tendencies. A total of 159 college students watched 6 movie previews, each in a violent or nonviolent version, and reported their expectations of enjoying watching the movies. The results show that high arousal seekers reported a higher level of anticipated enjoyment after watching the violent previews than the nonviolent previews. In contrast, low arousal seekers did not expect much difference in their enjoyment between the two versions. In line with the theory of optimal stimulation level, the results indicate that viewers’ anticipated enjoyment of movies after watching violent images in previews is moderated by individuals’ arousal-seeking tendencies.

Keywords: anticipated enjoyment, arousal-seeking tendency, movie previews, violence

MOVIE MARKETERS often believe that arousing images in movie previews can enhance viewers’ interest in upcoming films (Adams & Lubbers, 2000). The most eye-catching components of a movie, such as violence and sex, are often included in previews to elicit a target audience’s attention, awareness, and preference for the movie (Burzynski & Bayer, 1977; Eastman, Bradbury, & Nemes, 1985; Oliver, Kalyanaraman, Ramasubramanian, & Mahood, 2003). Previous researchers have demonstrated the alluring effects of violent and sexual portrayals in previews on viewers’ interest in the movies (e.g., Eastman et al., 1985; Oliver...
et al., 2003). However, these findings may have limited implications without further examining individual differences in response to arousing stimuli, as suggested by Funder’s (2001) personality–situation–behavior triad.

Over the past 4 decades, researchers studying arousal-seeking tendency (AST) have identified a unique aspect of stable individual difference in the degree to which individuals prefer arousal (e.g., Berlyne, 1960; Raju, 1980; Zuckerman, 1990). In the present study, we examined the effects of violent portrayals in movie previews on viewers’ (a) expectations of violence in the movies, (b) arousal, and (c) anticipated enjoyment of the movies. Using the theoretical framework of optimal stimulation level (Raju, 1980), we speculated that individuals’ ASTs interact with violent portrayals in movie previews to influence their perceptions and anticipated enjoyment of movies.

Violence in Media Promotion

Social psychologists have studied media violence extensively, and it has been a subject of much interest since the proliferation of television in the early 1950s (Anderson & Bushman, 2001; Walker, 2000). Previous researchers have primarily investigated the relationship between media violence and viewers’ aggressive behaviors, focusing in particular on the antisocial impact of media violence (e.g., Buss & Shackelford, 1997; Gerbner, 1972; Greenberg, Edison, Korzenny, Fernandez-Collado, & Atkin, 1980). One group of researchers has explored the appeal of media violence and the hedonic experience that viewers derive from watching violent images (e.g., Goldstein, 1998; Zillmann, 1991; Zillmann & Vorderer, 2000). However, the internal properties of violence and to what extent these properties influence people’s perceptions and emotions is still not fully understood.

The prevalence of violence in media messages is well documented in the literature (Eastman & Bolls, 2000; Soley & Reid, 1985; Walker, 2000). With technological advances, violence has become pervasive across different forms of media, such as music videos, the Internet, and video games (Oldenburg & Snider, 1999; Provenzo, 1991; Walker & Ferguson, 1998; Wartella, 1996). According to Walker (2000), the most common form of physical aggression in television promotional announcements and print advertisements is physical threat, followed by assault with an object, shooting, and general assault. The National Television Violence Study (1998) defined violence 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” (p. 21). In this study, we adopted an extended definition that includes certain depictions of physically harmful consequences against an animate being or group that occur as a result of unseen violent means. We classified any content containing credible threats, behavioral acts, and harmful consequences of unseen violence as violent portrayals.

Several researchers have been interested in the attractions of violent entertainment such as violent sports, violent TV programs, violent delights in children’s
literature, and horror movies (e.g., Cantor, 1998; Guttman, 1998; Zillmann, 1998). One explanation for the prevalence of violence is that such depictions contain certain properties that are inherently attractive or enjoyable for some viewers. Sparks and Sparks (2000) suggested that individuals may enjoy a violent movie because the violent images themselves evoke pleasure or are related to things that they enjoy. Goldstein (1998) analyzed previous research and concluded that some characteristics of violent images—including unreality, exaggeration, fantasy, predictable outcomes, and just resolutions—could increase their appeal.

More recent studies, however, have produced mixed findings about people’s reactions to violence in media. Sparks, Sherry, and Lubsen (2005) demonstrated that deleting violence in a full-length motion picture did not affect their participants’ enjoyment or perceptions of its quality. Krcmar and Kean (2005) found that several neuroticism personality facets were positively related to watching violent media such as cop dramas and television shows depicting real crimes. Zillmann (1998) acknowledged that a multitude of conditions could partially explain the attractiveness of violence, making it difficult to integrate all into one universal theory.

**Violent Previews in Movie Promotion**

A movie preview, or trailer, highlights in a short clip the most important information about a movie, such as interesting themes, astonishing graphics, funny scenes, popular actors and actresses, and well-known directors. It is typically 1.5–5 min in length and shown to the public weeks or even months before the movie itself is released. Oliver and Kalyanaraman (2002) analyzed the contents of 107 movie previews in video rentals and found that the majority of previews contained violence and that these portrayals were common across the Motion Picture Association of America (MPAA) ratings (G, PG, PG-13, and R). Approximately 76% of the previews in their sample featured at least one act of aggression, with an average of 2.5 aggressive acts per minute.

Experimental psychologists have primarily examined the effects of different movie and preview contents on viewers’ perceptions and anticipated hedonic experiences (e.g., Berry, Gray, & Donnerstein, 1999; Burzynski & Bayer, 1977; Eastman et al., 1985; Oliver et al., 2003). Eastman et al. (1985) conducted an in-theater field experiment with 134 adults, manipulating the length and content of movie teasers and trailers for one particular movie and administering questionnaires before and after the previews. The results showed that previews influenced the strength of viewers’ expectations on four dimensions: (a) suspense, (b) suffering, (c) violence, and (d) romance. A violent preview, in particular, significantly increased the audience’s expectations of the amount of violence in the movie. Berry et al. (1999) cut specific graphic scenes of film violence and measured self-reported arousal, enjoyment, and perception of violence among college students. They found that the participants rated the cut versions as less violent than the
uncut versions, and subtle differences in levels of violence were distinguished.

The arousing properties of violence partially account for the effects of violent images in movie previews. Kagan (1996), among others, argued that one of the primary goals of human behavior is to maximize sensory pleasure. Some viewers can find particular sensory delight at the physiological level by watching and listening to shooting, explosives, and physical-attack scenes with bright colors, symmetry of blasts, special effects, or slow-motion cinematography. Unconscious vocalizations such as “Wow,” “Aha,” and “Cool” may suggest some level of arousal and enjoyment. According to Sparks and Sparks (2000), the enjoyment derived from sensory delight is evidenced by the fact that such sensory experience can be separated from the surrounding context, characters, and plot.

There are also alternative theories in the literature. Allen and Greenberger (1978, 1979) proposed an aesthetic theory of destruction. Essentially, the theory posits that there may be a powerful aesthetic pleasure elicited by acts of destruction, as a result of factors such as complexity, expectation, intensity, and patterning. For example, Tamborini and Stiff (1987) found that people attended horror films partially because they wanted to see the destruction that these films often present. Furthermore, some researchers have argued that violence can be arousing because it can be unusual or novel (Sparks & Sparks, 2000). Carroll (1990) supported the notion of “appealing novelty” (p. 195) in that novelty commands attention and elicits curiosity.

In the present study, we speculated that the viewers of violent previews would report a higher level of arousal than would viewers who watched the same previews without violent images. In turn, those who watched the violent previews would expect a higher level of arousal from the movies than would those who watched the previews without violent images. Accordingly, we hypothesized the following:

**Hypothesis 1 (H₁):** Viewers of violent previews will be more aroused than will viewers of nonviolent previews.

**H₂:** Viewers of violent previews will expect a higher level of arousal from watching the movies than will viewers of nonviolent previews.

**Individuals’ Optimal Stimulation Level**

The goal of movie previews is to persuade potential viewers that the movie will be enjoyable, because viewers’ expectations of enjoyment often contribute to their motivation to watch a movie. Eliashberg and Sawhney (1994) proposed that the desire for emotional stimulation, as a stable personality characteristic, is one determinant of individuals’ hedonic experience. For example, some viewers prefer calm scenes, whereas others prefer more emotionally stimulating scenes. Raju (1980) formalized the notion that individuals desire different levels of stimulation in the theory of *optimal stimulation level* (OSL).
The basic idea behind OSL theory is that people tend to prefer different levels of stimulation, and there are reliable individual differences in the amount of stimulation considered as optimal by a given person (Berlyne, 1960; Mehrabian, 1978; Mehrabian & Russell, 1974). Each individual has a certain level of stimulation with which he or she feels comfortable. When the environment is deficient in providing stimulation at that level, the individual tends to seek complexity or novelty. However, when the environment provides more stimulation than the optimal level, the individual tends to engage in behaviors that reduce stimulation (Wahlers, Dunn, & Etzel, 1986). There is a general agreement among researchers that the higher is the need for stimulation, the greater is the extent to which people engage in exploratory behaviors (Eysenck & Eysenck, 1985; Steenkamp & Baumgartner, 1992; Zuckerman, 1990). Thus, an individual adapts to the environment so as to maintain a balance between actual and optimal levels of stimulation. This theory has been further developed by researchers of sensation seeking. On the basis of more than 30 years of research on individuals’ predispositions to sensation seeking, Zuckerman (1990, 2006) argued that these differences stem from biological mechanisms and that the optimal levels of stimulation for different individuals may depend on these genetically regulated biological traits as well as the possibilities for stimulation provided in their particular environments.

Stimulation (or sensation) seeking as a significant motive of individual behaviors has been well documented in the literature (e.g., Wahlers, Russell, & Etzel, 1990; Zuckerman, 2006). Previous researchers have found that OSL is related to responses and behaviors in listening to music and attending movies (Raju, 1980). Because AST is related to individuals’ preferences for arousing stimuli (e.g., entertainment media) and is known to be positively correlated with preferences for different types of media content (e.g., horror movies), it is logical to speculate that (a) violent portrayals in previews will increase viewers’ arousal levels and (b) individuals’ AST will also affect their expected experiences (e.g., anticipated enjoyment of movies).

Oliver et al. (2003) suggested that both sexual and violent images in a movie trailer increase perceptions of anticipated suspense and enjoyment. However, the theory of OSL predicts that individuals will react differently to violent images. A high level of arousal elicited by violent images may exceed the optimal level of stimulation needed by some viewers (i.e., individuals with low AST), and individuals with high AST may experience more pleasure when watching violent portrayals than do low-AST individuals. Thus, viewers with higher AST are more likely to expect a higher level of enjoyment than are those with lower AST, given the assumption that viewers perceive the content in previews as true reflections of the movies. Accordingly, we hypothesized the following:

\[ H_3: \text{For high arousal seekers, watching violent previews will lead to a higher level of anticipated enjoyment than will watching nonviolent previews, whereas for low} \]
arousal seekers, watching nonviolent previews will lead to a higher level of anticipated enjoyment than will watching violent previews.

Method

Participants

We recruited college students in undergraduate communication classes from a public university in the Northwest United States to participate in this study with compensation of extra credit. The majority of the 159 participants were aged 18–24 years (n = 156, 96%). Fifty-nine percent of participants (n = 94) were women and 41% (n = 65) were men. Approximately 62% were freshmen and sophomores (n = 99), and 37% were juniors and seniors (n = 59). A majority of the participants (n = 105, 65%) said they go to a movie theater less than once per month and spend less than $100 on monthly entertainment expenses, and 80% of participants (n = 126) had watched movies on rental or purchased DVDs or videos during the past 6 months.

Procedure

We randomly assigned two experimental conditions (violent previews vs. nonviolent previews) to eight research sessions scheduled prior to the study. Each session consisted of approximately 18–30 participants and lasted about 40 min. A total of 92 participants watched the violent previews, and 67 participants watched the nonviolent previews. The sessions were conducted in a quiet classroom by a single experimenter.

On arrival, the researcher first described the research protocol briefly. Participants were told they were about to watch six movie previews and answer some questions about their thoughts. They read and signed a written consent form, then watched the six movie previews on a large video projection screen. Immediately after participants watched each preview, the researcher paused the video player and allowed approximately 3 min for the participants to complete a self-report questionnaire about their perceptions and expectations. The order of movie previews was randomly mixed. Participants were also asked whether they had watched the movie for that preview before, and we used their answers to test the success of the random assignment. After viewing all six previews, participants completed an assessment of their AST, followed by demographic questions. The process lasted about 5–8 min. Last, they filled out a questionnaire about their expected arousal level for each movie to ensure the participants differentiated between actual and expected arousal.

Stimuli

In this study, we defined violent portrayals in movie previews as physical aggression and acts that could potentially cause physical harm, including any
depictions that contained credible threats, behavioral acts, and harmful consequences of unseen violence (National Television Violence Study, 1998). Violent scenes were operationalized as any overt behaviors intended to frighten, injure, or damage oneself, another individual, an animal, or property, including any harmful consequences of unseen violence.

After obtaining 112 existing English-language movie previews released between 2003 and 2004, we conducted an initial screening to select previews containing violent images. Initially, we chose approximately 40 previews on the basis of movie genre and proportion of violent images. Then, for the second review, we developed the following guidelines:

1. Violent images: Previews must contain a relatively significant portion of violent images.
2. Narrative and story: Violent images in previews must be separable from the original narratives such that the absence of the violent images does not distort the original story or essential narratives in the previews.
3. Length: Previews must be longer than 2.5 min to maintain the edited versions of the previews in the normal length of 2–3 min.

Ten previews were reselected accordingly. We excluded four previews either because they contained too many violent images, resulting in a fragmented presentation after editing, or because the preview contained violent images mixing with other stimuli such as fast pacing, sound effects, and flashing images.

For the nonviolent version of the same final six previews, we carefully edited out any violent images, resulting in approximately 30 s of deduction in length in each preview. We also removed the denotation of the movie rating (G, PG, PG-13, or R). In the end, the violent previews totaled 13 min and the nonviolent previews totaled 10 min.

**Dependent Variables**

*Previous exposure to movies.* We asked participants whether they watched the actual movie previewed, coding *yes* as 1 and *no* as 0. We created a summed index to measure their previous experience with the movies, which ranged from 0 (never watched any of those six selected movies; \( n = 38; 24\% \)) to 4 (watched four out of six selected movies; \( n = 9; 6\% \)). The average number of movies watched was 1.40 (SD = 1.16).

*Expected violence.* Expected violence refers to the degree of violence that participants expect to see in the movies after watching previews. We used a scale from Oliver et al. (2003) to measure the level of expected violence. That scale asks respondents to rank how (a) violent, (b) disturbing, (c) scary, and (d) aggressive they expect the movies will be on a 7-point Likert-type scale ranging from 1 (not at all)
to 7 (very much). Factor analysis indicated that only two items loaded on one factor: the questions “How violent do you expect the movie will be?” and “How aggressive do you expect the movie will be?” We therefore used only these questions to create a measure for expected violence based on a summed factor score.

Arousal and expected arousal. Arousal is a dimension of emotion that reflects how excited or calm a person feels (Lang, 1985). In this study, we measured participants’ arousal levels after watching the previews with the Self-Assessment Manikin (SAM; Lang, 1985). SAM represents Mehrabian and Russell’s (1974) three dimensions of emotion—pleasure, arousal, and dominance—with a graphic character arrayed along a continuous 9-point scale (Lang, 1985). For arousal, the images in SAM range from “sleepy” with eyes closed and a small explosion inside the character, to “excited” with eyes open and a big explosion inside. SAM is considered a valid and reliable measure of arousal response in the advertising literature (Morris, 1995).

In the present study, expected arousal referred to the degree of excitement or calm that a participant, after watching a preview, expected to experience when watching the movie. The following instruction was printed at the top of the page given to participants: “The following questions ask your ANTICIPATED responses to the MOVIE instead of the preview. Please put a check mark to show how you feel about watching the movie.” We used six semantic differential item pairs to measure expected arousal, which is one dimension of the Pleasure, Arousal, and Dominance (PAD) Scale developed by Mehrabian and Russell (1974). Participants had to choose one item describing their current state out of each of the following pairs: (a) stimulated–relaxed, (b) excited–calm, (c) frenzied–sluggish, (d) jittery–dull, (e) wide awake–asleep, and (f) aroused–unaroused. All six items loaded onto one factor with satisfactory internal consistency (αs = .88–.93 among the six previews). We used responses to all six items to create a summed factor score for each movie and added all factor scores together to create an Expected Arousal scale.

Anticipated enjoyment. In the present study, anticipated enjoyment referred to how enjoyable a participant expected a movie to be on the basis of watching the preview. To measure the level of anticipated enjoyment, we used a scale from Oliver et al. (2003) that asks respondents to rate how (a) enjoyable, (b) exciting, (c) interesting, and (d) boring (reverse coded) they expect the movie to be. Participants responded to each of the four items on a 7-point Likert-type scale ranging from 1 (not at all) to 7 (very much). After an initial factor analysis, we dropped the item “How boring do you expect the movie will be?” because it did not load with the other items. We used the summed factor score of the final three items as our measure of anticipated enjoyment. The internal consistency for this scale was satisfactory (α = .92).

AST. Conceptually, AST refers to the degree to which individuals prefer arousal (Berlyne, 1960). In this study, we measured participants’ AST using Mehrabian and
Russell’s (1973) Arousal Seeking Tendency Scale (AST-I). Participants responded to 40 items on a 9-point Likert-type scale ranging from 1 (strongly disagree) to 9 (strongly agree), with higher scores indicating higher levels of arousal-seeking tendency. Principal component analysis with varimax rotation suggested that 19 items loaded on three factors. We forced them onto one factor to create an Arousal-Seeking Tendency (AST) scale (α = .83) that explained 26% of the variance. Table 1 shows the items’ factor loadings. We used a summed factor score as a measurement of AST.

**Results**

*Manipulation Check*

To determine the success of the manipulation, we asked participants to answer the question “How violent is the preview?” on a 7-point Likert-type scale ranging

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I prefer an unpredictable life full of change to a more routine one.</td>
<td>.71</td>
</tr>
<tr>
<td>2. I sometimes like to do things that are a little frightening.</td>
<td>.69</td>
</tr>
<tr>
<td>3. I like a job that offers change, variety, and travel even if it involves some danger.</td>
<td>.65</td>
</tr>
<tr>
<td>4. I like to experience novelty and change in my daily routine.</td>
<td>.64</td>
</tr>
<tr>
<td>5. I prefer a routine way of life to an unpredictable one full of change.</td>
<td>.63</td>
</tr>
<tr>
<td>6. When things get boring, I like to find some new and unfamiliar experience.</td>
<td>.62</td>
</tr>
<tr>
<td>7. I like to go somewhere different nearly everyday.</td>
<td>.60</td>
</tr>
<tr>
<td>8. I am continually seeking new ideas and experiences.</td>
<td>.54</td>
</tr>
<tr>
<td>9. I feel best when I am safe and secure.</td>
<td>.48</td>
</tr>
<tr>
<td>10. I am interested in new and varied interpretations of different art forms.</td>
<td>.45</td>
</tr>
<tr>
<td>11. I avoid busy, noisy places.</td>
<td>.41</td>
</tr>
<tr>
<td>12. I don’t like to have lots of activities around me.</td>
<td>.41</td>
</tr>
<tr>
<td>13. I like to look at pictures that are puzzling in some way.</td>
<td>.40</td>
</tr>
<tr>
<td>14. I would be content to live in the same house the rest of my life.</td>
<td>.39</td>
</tr>
<tr>
<td>15. I like surprises.</td>
<td>.36</td>
</tr>
<tr>
<td>16. I like to touch and feel a sculpture.</td>
<td>.35</td>
</tr>
<tr>
<td>17. My ideal home would be peaceful and quiet.</td>
<td>.34</td>
</tr>
<tr>
<td>18. Designs and patterns should be bold and exciting.</td>
<td>.33</td>
</tr>
<tr>
<td>19. Shops with thousands of exotic herbs and fragrances fascinate me.</td>
<td>.33</td>
</tr>
</tbody>
</table>

*Reverse coded.

TABLE 1. Factor Loadings of Items on the Arousal-Seeking Tendency Scale (AST-I; A. Mehrabian & J. A. Russell, 1973)
from 1 (not at all) to 7 (very much). There was a significant condition effect on participants’ perceived violence scores, $t(158) = 6.70, p < .01$ (one-tailed), $d = 1.07$. As expected, the participants in the violent preview condition rated the previews as more violent ($M = 26.72, SD = 4.93$) than did those who were in the nonviolent preview condition ($M = 21.45, SD = 4.80$). There was also a significant condition effect on the participants’ expected violence scores, $t(157) = 3.52, p < .01$ (one-tailed), $d = 0.56$. The participants in the violent preview condition expected more violence in the movies ($M = 0.20, SD = 0.85$) than did those in the nonviolent preview condition ($M = -0.28, SD = 0.86$). There was no significant difference between the two groups in terms of how many movies the participants watched prior to the experiment, $t(157) = 0.67, p = .51$ (two-tailed), $d = 0.10$. Therefore, the manipulation of the condition was successful.

**Crosstabulation Among Participants**

We created a summed factor score for the AST scale. On the basis of the frequency distribution of the summed factor scores of AST, we categorized the bottom and top 25% of the participants as low arousal seekers ($n = 37$) and high arousal seekers ($n = 42$), respectively. There was a significant difference on AST scores between the low and high arousal seekers ($M = -1.34, SD = 0.51$, vs. $M = 1.22, SD = 0.41$, respectively), $t(77) = -24.58, p < .01$ (one-tailed), $d = -5.60$. Among those who were categorized as low arousal seekers, 62% ($n = 23$) were women and 38% ($n = 14$) were men. Among those who were categorized as high arousal seekers, 55% ($n = 23$) were women and 45% ($n = 19$) were men. However, the gender difference was not statistically significant, $\chi^2(4, N = 79) = 0.44, p = .51, \eta^2 = .08$.

**Arousal and Expected Arousal**

There was no significant condition effect of watching the preview on arousal, $t(157) = 0.54, p = .30$ (two-tailed), $d = 0.09$, or on anticipated arousal, $t(157) = -0.16, p = .44$ (two-tailed), $d = -0.03$. There was no significant interaction effect between violent portrayals in previews and individuals’ AST, $F(1, 75) = 1.14, p = .29, \eta^2 = .02$. We did not find any significant condition effect, $F(1, 75) = 0.51, p = .61, \eta^2 = .28$, or AST effect, $F(1, 75) = 1.26, p = .47, \eta^2 = .54$, on participants’ arousal after watching the previews. There was no significant interaction effect, $F(1, 75) = 0.006, p = .94, \eta^2 = .00$; no significant condition effect, $F(1, 75) = 52.37, p = .00, \eta^2 = .98$; and a nearly significant AST effect, $F(1, 75) = 110.29, p = .06, \eta^2 = .99$, on anticipated arousal.

**Anticipated Enjoyment and AST**

Figure 1 displays our finding of a significant interaction effect of preview conditions and AST on anticipated enjoyment, $F(1, 75) = 5.01, p < .03, \eta^2 = .06$. 
Although the violent previews produced a higher level of anticipated enjoyment for the movies ($M = 0.40, SD = 0.90; n = 28$) than did the nonviolent previews ($M = -0.80, SD = 1.15; n = 14$) among high arousal seekers, $t(40) = 3.73, p < .01$ (one-tailed), $d = 1.18$, there was no significant difference between the two conditions among low arousal seekers, $t(35) = 1.15, p = .13$ (one-tailed), $d = 0.39$. Furthermore, there was a significant effect of participants’ AST on anticipated enjoyment in the violent preview condition, $t(48) = -1.82, p < .04$ (one-tailed), $d = 0.53$, in that high arousal seekers rated the violent previews higher on anticipated enjoyment ($M = 0.40, SD = 0.90; n = 28$) than did low arousal seekers ($M = -0.02, SD = 0.70; n = 22$). There was no significant effect of AST on anticipated enjoyment in the nonviolent preview condition, $t(27) = 1.37, p = .09$ (one-tailed), $d = 0.53$.

FIGURE 1. Participants’ anticipated enjoyment of movies as a function of preview violence and participants’ arousal-seeking tendency.
Discussion

In this study, we examined the effects of violent images in previews on viewers’ (a) expectations of violence in, (b) arousal from, and (c) enjoyment of movies. We predicted that viewers of violent previews would be more aroused than would viewers of nonviolent previews ($H_1$) and that viewers of violent previews would expect a higher level of arousal from watching the movies than would viewers of nonviolent previews ($H_2$). However, our results do not support either of those hypotheses.

In $H_3$, we predicted an interaction between violent portrayals in previews and participants’ AST on anticipated enjoyment. Among those who watched the violent previews, the high arousal seekers rated the violent previews higher on anticipated enjoyment than did the low arousal seekers. However, there was no significant difference among those who watched the nonviolent previews, even though the results were in the predicted direction. Therefore, $H_3$ was partially supported.

Overall, our results show that, as expected, participants’ AST appeared to moderate the effect of violent images in movie previews on their anticipated enjoyment. More specifically, participants with high AST were more likely to expect enjoyment of the movies from violent previews than nonviolent previews, whereas low arousal seekers did not show any significant difference in anticipated enjoyment between the two conditions.

These findings contribute to the literature not only by testing a personality trait as a moderator in an existing theory, but also by expanding a trait-based theory (OSL) toward a broader person–situation–behavior dynamic framework (Funder, 2001). The initial theoretical prediction, based on OSL theory, was partially supported, but the significant effect of violent images on expected enjoyment was evident only among those who were high in AST. The violent images in this experiment may not have created strong enough emotional responses to pass the OSL threshold of low arousal seekers. Another possible explanation is that college students aged 19–23, who represented the majority of our participants, have higher AST than do older groups. This calls for further investigation with more heterogeneous samples that may exhibit different OSLs with larger variance. Zuckerman (1990) proposed that individuals differ in their need for stimulation rather than having optimal stimulation levels. From this perspective, reactions from those who have a lesser need for stimulation (and, consequently, low AST) may not be affected by adding the violent images in the previews because their need for stimulation may have been met with the nonviolent previews. However, for those who have a greater need for stimulation (i.e., high AST), the violent images may not have met their need for stimulation.

As expected, the viewers of the violent previews anticipated more violence in the movies than did viewers of the nonviolent versions. However, the results did not show any significant differences in arousal or anticipated arousal level between the two experimental groups. The distribution of the raw SAM scale data, clustering with a median level of arousal across both groups, indicates that
the participants in both groups may have felt somewhat aroused regardless of the violent images used in the experiment. Another possibility is that other elements in the previews were more arousing than the violent images and the violent images added in the previews did not substantially change the levels of arousal (or the levels of anticipated arousal).

Expected emotional responses, such as expected enjoyment, could be a function of many other factors, such as knowledge of and preferences for certain types of movies. In addition, there are different types of stimulation and gratification that individuals seek when watching different types of movies. For example, a traditional Western may be perceived as less enjoyable than a fantasy movie, or vice versa, regardless of violent content, depending on viewers’ preferences as well as elements in the movies, such as actors, plot, and music. Future researchers should consider viewers’ preference for other elements in movies besides violence.

Limitations

There are several limitations in this study that call for careful consideration. First, we noticed that some participants—on average, one out of six—had watched or heard about some of the movies. To address this issue, we compared participants’ previous experience in the two experimental conditions and found no significant difference, ruling out the possibility of a confounding effect. However, this by no means suggests that there is no potential threat to internal validity. To avoid this potential problem, future researchers conducting similar studies should use previews of movies that have not yet been released in the theater.

Second, in the present study, the nonviolent previews were edited to remove the violent scenes; they were, therefore, shorter than the violent versions by about 30 s on average. Although there is no strong theoretical or empirical evidence that this time difference would significantly change viewers’ responses in terms of arousal and anticipated enjoyment, future researchers should rule out its potential impact, for example, by using a repeated measures design over each preview and treating time as a covariate.

Third, the measure of violence in this study was not specific toward properties of violent images such as novelty, intensity, loudness, and speed. These factors could differently influence viewers’ psychological and physiological responses toward violent images. Researchers should develop specific measures of each element to distinguish different properties of violent images and their effects. This would be a critical step in understanding why certain violent images create more anticipated enjoyment among high arousal seekers.

Conclusion

Our results show that AST was a moderating factor in the effect of violent images in previews on viewers’ responses to movies. Violent portrayals in movie
previews led to higher levels of anticipated enjoyment only for high arousal seekers, suggesting that such an impact differs across different levels of AST. Future researchers should consider investigating how these two factors interplay to influence other aspects of viewers’ perceptions. More important, researchers should explore what specific properties of violent images influence high arousal seekers’ expected enjoyment of movies.

**AUTHOR NOTES**

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