The Role of Gender and Sensation Seeking in Film Choice
Exploring Mood and Arousal

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Abstract. This study demonstrates the significance of individual difference factors, particularly gender and sensation seeking, in predicting media choice (examined through hypothetical descriptions of films that participants anticipated they would view). This study used a 2 (Positive mood/negative mood) × 2 (High arousal/low arousal) within-subject design with 544 undergraduate students recruited from a large northeastern university in the United States. Results showed that happy films and high arousal films were preferred over sad films and low-arousal films, respectively. In terms of gender differences, female viewers reported a greater preference than male viewers for happy-mood films. Also, male viewers reported a greater preference for high-arousal films compared to female viewers, and female viewers reported a greater preference for low-arousal films compared to male viewers. Finally, high sensation seekers reported a preference for high-arousal films. Implications for research design and importance of exploring media characteristics are discussed.

Keywords: gender differences, movie mood, movie arousal, movie characteristics, sensation seeking

Introduction

Much research now suggests that media preferences are influenced by a host of demographic, personality, social, and psychological variables (e.g., Kraaykamp & van Eijck, 2005; Nabi, Finnerty, Domschke, & Hull, 2006; Sargent, Zillmann, & Weaver, 1998). For instance, Sargent et al. (1998) concluded that when watching televised sports, men extract gratification mostly from seeing athletic confrontations that emphasize combative coordination, whereas women are more gratified when seeing competition that avoids overt aggressiveness and highlights the stylish movement of individual bodies in terms of beauty. Other researchers have concluded that personality factors such as sensation seeking can act as predictors for media preferences (Conway & Rubin, 1991; Krcmar & Greene, 1999). These studies demonstrate the significance of individual difference factors in predicting media choice.

Although the theoretical approaches of these studies often vary, at least one approach has been successfully utilized in linking personality and media preferences (e.g., Greene & Krcmar, 2005; Finn, 1997; Krcmar & Greene, 1999). The uses and gratifications perspective proposes that not only do we utilize media to meet various social and psychological needs, but media use motivations may moderate media effects (e.g., Haridakis, 2002). Specifically, the approach predicts that personality factors may influence individuals’ needs, which further influence individuals’ need for gratification. These gratifications may be obtained from a variety of sources; however, one frequently used source is mass media. One highly researched personality factor is sensation seeking, which has been linked to various forms of media consumption and attraction (e.g., Greene & Krcmar, 2005; Hoffner & Levine, 2005; Slater, 2003). Although several studies have examined the predictive power of gender and sensation seeking, one problem inherent in these studies is that survey research on media preferences cannot surmount the problem of confounds. For example, action films, which may attract high sensation seekers (HSS), not only contain exciting plots, but they feature action stars (e.g., Vin Diesel, Sylvester Stallone) as well. Although these studies point to the importance of researching individual differences in explaining viewer preference of certain genres, they are less well suited to explain which particular media characteristics make these films/television programs so popular. Movies or television programs are popular not only because of the content or genre but also because of the actors, significance, and novelty. Few, if any, studies have manipulated movie characteristics in order to experimentally explore the role of sensation seeking in predicting media choice.

Therefore, in the present study, we utilized an experimental design to explore how gender and sensation seeking may be linked to specific media characteristics. Specifically, movie descriptions were systematically manipulated to...
vary the mood and the arousal level of the film while holding constant descriptions of character and plot. The method of creating hypothetical movie descriptions has been used in prior research (e.g., Oliver, Weaver, & Sargent, 2000) to study the link between other viewer characteristics and media choices.

Film Characteristics

Many aspects of a film may cause it to appeal to certain individuals and not to others. For example, the emotional content of the film (e.g., sad vs. happy films) and/or the story line (e.g., relational or communal themes) may affect viewer preferences. In fact, these characteristics have been examined to explain preference for specific types of films (e.g., Hoffner & Cantor, 1991; Oliver et al., 2000). Despite both the empirical (e.g., Hoffner & Cantor, 1991) and theoretical arguments (see Vorderer, Klimmt, & Ritterfeld, 2004) made to support these claims, a majority of the research with adults has not manipulated film characteristics, particularly film mood and arousal. For the present study, we conceptualized film mood and arousal as based on dimensional models of emotion (e.g., Lang, 1995; Larsen & Diener, 1992). Dimensional models define emotions as a two-dimensional space, as coordinates of valence and arousal. The valence dimension (henceforth termed film mood) refers to the hedonic quality or pleasantness of an affective experience and ranges from unpleasant (sad) to pleasant (happy). The arousal dimension (henceforth termed film arousal) refers to the level of activation associated with the emotional response and ranges from very excited (high-arousal) to very calm (low-arousal) (see Ravaja, 2004).

However, research manipulating the mood and arousal levels of films or film descriptions is scant. Given that particular film characteristics might be important predictors of viewer preference, we begin by asking the following research questions:

- **RQ1a:** Overall, how will viewer preferences vary depending on levels of film mood?
- **RQ1b:** Overall, how will viewer preferences vary depending on levels of film arousal?

Additionally, we wanted to examine viewer preferences based on the interaction between film mood and film arousal. Thus, we asked,

- **RQ1c:** Overall, is there an interaction between film mood and film arousal on viewer preferences?

Gender Differences in Film Preferences

The common wisdom in media production is that men and women enjoy different types of films, and this has been supported by genre and content classification (see Gantz & Wenner, 1991; Tamborini, Stiff, & Zillmann, 1987). Fischhoff, Anton, and Lewis (1998) argue that “women’s films” are films in which the story is told from the woman’s point of view (e.g., The Piano, Muriel’s Wedding), the woman is the clear protagonist or heroine (e.g., Jodie Foster or Kate Winslet movies), or the story centers around women and women’s issues (e.g., The Color Purple, Beaches). “Men’s films,” on the other hand, are films that focus more on action, sex (rather than romance), and competition (Fischhoff, 1994). However, factors other than action vs. romance or male vs. female protagonist must influence film preferences.

Gender Differences and Film Mood

Gender preferences for happy and sad films have been investigated in prior research (e.g., Oliver, Sargent, & Weaver, 1998; Oliver et al., 2000), with men and women reporting different preferences based on content. For instance, Oliver et al. (2000) examined sex and gender identity differences in overall enjoyment and anticipated enjoyment of sad films, particularly when the film theme and character’s gender were varied. Results showed that responses to sad films may in part reflect an interaction of both viewer and film-related characteristics. Females reported enjoyment of sad films, particularly the ones that had a communal theme as well (films focusing on heartache that resulted from relational tragedies such as dissolution of romantic relationships, difficulties in family relationships, or the death of loved ones; Oliver et al., 2000).

Despite the evidence discussed above, the noted studies tended to utilize actual films, which, once again, may confound emotion (e.g., sadness) with female characters (e.g., Steel Magnolias). Hence, it is important to examine the independent effect of gender on movie mood preferences. Therefore, based on past research on gender and preference for sad movies, we hypothesize the following in an experimental design:

- **H1a:** Gender will be related to film preference such that female viewers will report a preference for negative-mood films, and male viewers will report a preference for positive-mood films.

Gender Differences and Film Arousal

Gender of the participant has informed us about viewer preferences such as preference for specific television programs (e.g., Brown & Pardun, 2004), and exposure to realistic crime shows and contact sports (Krcmar & Greene, 1999). In fact, Krcmar and Greene (1999) investigated both gender and sensation seeking, finding that those higher in sensation seeking and males were more likely to prefer certain kinds of violent media. However, they noted that the pattern of results suggested that arousing media, and not violence per se, may be one determining factor in linking these variables to media choice. Other research on gender...
and arousing media that focused on sexual media suggests that not only are men more attracted to arousing media, males are also more likely to experience physiological arousal as a result of exposure (see Grabe & Kamhawi, 2006; Janssen, Carpenter, & Graham, 2003). Therefore, we predict the following:

– **H1b**: Gender will be related to film preference such that female viewers will report a preference for low-arousal films, and male viewers will report a preference for high-arousal films.

### Sensation Seeking and Film Preferences

Sensation seeking is defined as the need for novel, complex, and ambiguous experiences and the willingness to take risks to obtain those experiences (Zuckerman, 1983). As compared to low sensation seekers (LSS), HSS report attraction to heavy metal music (Arnett, 1991), exposure to and preference for violent media (Greene & Krcmar, 2005), contact sports and real crime shows (Krcmar & Greene, 1999), horror films (Hoffner & Levine, 2005), and the use of violent media content and violent website content (Slater, 2003). However, it is unclear if sensation seeking (a viewer characteristic) will affect film choices when media characteristics, particularly levels of mood and arousal, are systematically varied in film descriptions.

### Sensation Seeking and Film Mood

Research has shown that depressed people have lower scores of sensation seeking than nondepressed people (Carston, Jouvent, Bungener, & Widlocher, 1992), suggesting that not only is sensation seeking biologically based, but the construct may be related to individuals’ interactions with their stimulus environment. Furthermore, sensation seeking has been found to be related to perceived message sensation value. Specifically, the formal and content features (audio, visual, and format) of a message contribute to the subjective message sensation evaluations (Morgan, Palmgreen, Stephenson, Hoyle, & Lorch, 2003), with HSS preferring messages with greater sensation value (Donohew, Lorch, & Palmgreen, 1991). Despite this evidence, prior studies do not specify whether HSS or LSS will be drawn more toward sad or happy media content. Therefore, we asked the following research question:

– **RQ2**: Will LSS and HSS report different preferences for films varying in mood levels?

### Sensation Seeking and Film Arousal

HSS have lower arousal levels and require more exciting and novel messages to attract their attention (Zuckerman, 1983). Research has shown that HSS prefer emotionally intense media stimuli, regardless of whether these elicited positive or negative emotions (see Stephenson, 2003); LSS prefer neutral and positive stimuli (see Zuckerman, 1983; Zaleski, 1984). Jager and Bartsch (2006) summarize that the strength of the sensation seeking motive has been shown to influence subjects’ emotional preferences. In particular, research has shown that HSS report exposure to and preference for arousing media content such as violent media (Greene & Krcmar, 2005), contact sports, real crime shows (Krcmar & Greene, 1999), and horror films (Hoffner & Levine, 2005). Based on the preceding discussion, we hypothesize the following:

– **H2**: Sensation seeking will be positively associated with arousing films such that HSS will report a preference for high-arousal films, and LSS will report a preference for low-arousal films.

### Method

#### Participants

The present study was a part of a larger project designed to examine the relationship between media viewing choices and viewers’ moods. In the spring of 2006, 544 participants were recruited from undergraduate communication classes (44% males, 56% females) from a large northeastern university in the United States. Participants’ ages ranged from 18 to 21 years (M = 19.86, SD = .46). In terms of ethnicity, participants were primarily Caucasian (55%), Asian (18%), African American (9%), and other groups = 5% each.

#### Design

This study used a 2 (Positive mood, negative mood) × 2 (High arousal, low arousal) within-subject design to examine viewer preferences for hypothetical film descriptions that the participants anticipated viewing.

#### Measurement Instruments

This study measured the following variables: film preference and sensation seeking.

#### Film Preference

In order to assess film preference, the title and description of each film were created by the authors and designed to vary how exciting and arousing the film would be and also how happy or sad the film would be. During the pretest, participants (N = 79) read ten movie descriptions (randomized order) and rated each one on a series of eight adjectives (e.g., happy, calm) with responses ranging from 1 (de-
Sensation Seeking

A short version of the sensation seeking scale (Hoyle, Stephenson, Palmgreen, Lorch, & Donohew, 2002) based on Form V of Zuckerman’s (1994) sensation seeking scale was used in this study. This measure used a 5-point Likert-type scale with 8 items and responses ranged from 1 (strongly disagree) to 5 (strongly agree). Reliability was moderate (α = .78), and factor analysis indicated a single factor structure (eigenvalue = 3.21, 40.14% variance) with seven items loading greater than 0.5. Participants’ responses were summed and averaged to create a composite score, with higher scores indicating higher levels of overall sensation seeking ($M = 3.33$, $SD = .73$).

Results

Analyses

Analysis of variance (ANOVA) was performed with level of significance set at $p = .05$ to examine the hypotheses/research questions. The results will be organized by hypotheses/research questions and presented next.

Research Questions 1a–c

Research Questions 1a, 1b, and 1c examined variations in viewer preferences depending on levels of film mood, film arousal, and their interaction respectively. A two-way within-subject analysis of variance (ANOVA) was conducted (with follow-up paired sample $t$-tests) to examine the effects of film mood and film arousal on film preferences.

The film mood main effect was significant (Wilks’s $\Lambda =$...
The interaction between film mood and film arousal was also significant (Wilks’ Λ = .99; F(1, 525) = 7.11; p = .001; η² = .11). Six paired sample t-tests were performed to examine the differences between the four films. The happy-mood high-arousal film (M = 3.72, SD = 1.75) was preferred over happy-mood low-arousal (M = 2.51, SD = 1.64) and sad-mood low-arousal (M = 1.54, SD = 1.41) films. Similarly, the sad-mood high-arousal film (M = 3.63, SD = 1.71) was preferred over both happy-mood low-arousal and sad-mood low-arousal films; the happy-mood high-arousal film was not statistically different from the sad-mood high-arousal film. The film that was least preferred was the sad-mood low-arousal film as compared with the other films.

Thus, the results for Research Question 1a showed that happy-mood films are preferred over sad-mood films. Results for Research Question 1b showed that high-arousal films are preferred over low-arousal films. Finally for Research Question 1c, the results showed that the happy-mood high-arousal film and the sad-mood high-arousal film were the most preferred films.

Hypotheses 1a and 1b

Hypotheses 1a and 1b explored the effects of the interactions between film mood and gender as well as between film arousal and gender of the viewer on film preference respectively. A two-way within-subject analysis of variance (ANOVA) was conducted (with follow-up independent sample t-tests) to examine the effects of film mood and film arousal on film preferences with gender as the between-subject variable.4

The interaction between gender and film mood was significant (Wilks’ Λ = .98; F(1, 536) = 12.17; p = .001; η² = .02). Follow-up analyses revealed that women (M = 3.20, SD = 1.12) significantly preferred the happy-mood films (t(536) = –2.49, p = .01) more than men (M = 2.95, SD = 1.18). The difference between men and women with regards to sad-mood films was not significant.

The interaction between gender and film arousal was also significant (Wilks’ Λ = .91; F(1, 536) = 56.26; p = .001; η² = .10). Follow-up analyses revealed that men (M = 3.94, SD = 1.18) significantly preferred the high-arousal films (t(536) = 4.49, p = .001) more than women (M = 3.41, SD = 1.49). However, the trend was reversed for low-arousal films, and results revealed that women (M = 2.29, SD = 1.15) significantly preferred the low-arousal films (t(536) = –5.76, p = .001) more than men (M = 1.69, SD = 1.24).

Thus, the overall results showed that Hypothesis 1a was not supported. In fact the results were in opposite direction of the hypothesis. Female viewers reported a greater preference for happy-mood films compared with male viewers. There were no gender differences for sad-mood films. Hypothesis 1b was supported; male viewers reported a greater preference for high-arousal films than female viewers, and female viewers reported a greater preference for low-arousal films than male viewers.

Research Question 2 and Hypothesis 2

Research Question 2 and Hypothesis 2 explored the effects of the interactions between film mood and sensation seeking as well as between film arousal and sensation seeking trait of the viewer on film preference respectively. A two-way within-subject analysis of variance (ANOVA) was conducted (with follow-up independent sample t-tests) to examine the effects of film mood and film arousal on film preferences with sensation seeking as the between-subject variable (see Note 3). In order to carry out the ANOVA, the sensation seeking scale was median split to create two categories: LSS and HSS.5

The interaction between sensation seeking and film mood was not significant (Wilks’ Λ = 1.00; F(1, 530) = .05; p = .82; η² = .00), while the interaction between sensation seeking and film arousal was significant (Wilks’ Λ = .96; F(1, 530) = 20.93; p = .001; η² = .04). Follow-up analyses revealed that HSS (M = 3.95, SD = 1.23) significantly preferred high-arousal films (t(530) = –4.66, p = .001) more than LSS (M = 3.39 SD = 1.47). The difference between HSS and LSS with regards to low-arousal films was not significant.

Overall, the results for Research Question 2 were inconclusive. Hypothesis 2 was partially supported. HSS reported a preference for high-arousal films, but LSS did not report a preference for low-arousal films.6

4 ANOVA results for the film mood main effect, film arousal main effect, and interaction between film mood and film arousal were similar to results reported for Hypotheses 1a, 1b, and 1c and are thus not repeated in this section.

5 We examined the effect of sensation seeking (M = 3.33, SD = .73) by exploring two methods. We created HSS and LSS groups by (a) using the median split method and (b) focusing only on lower and upper quartiles. The patterns of results with the two procedures were similar, and thus we reported results that were obtained using the median split method.

6 In addition, a two-way within-subject analysis of variance (ANOVA) was conducted to examine the effects of film mood and film arousal on film preferences with participant gender and sensation seeking as the between-subject variables. The interaction between gender, sensation seeking, and film mood was not significant (Wilks’ Λ = .99; F(1, 525) = .71; p = .40; η² = .00). Similarly, the interaction between gender, sensation seeking, and film arousal was not significant (Wilks’ Λ = .99; F(1, 525) = 1.16; p = .28; η² = .00).
Discussion

This study utilized a within-subject experimental design to explore how gender and sensation seeking may be useful in predicting media choice, particularly for films differing in levels of mood and arousal. Specifically, movie descriptions were systematically manipulated to vary the mood of the films and the arousal level of the films while holding constant the descriptions of characters and plots.

First, consistent with prior research (e.g., Goldberg & Gorn, 1987; Murry & Dacin, 1996), the results showed that happy films and high-arousal films were preferred over sad films and low-arousal films, respectively. Goldberg and Gorn (1987) reason that positive emotions influence evaluations via simple decision heuristics, while negative emotions motivate detailed analyses of the emotion evoked by the stimulus. Therefore, it follows that when faced with a choice between happy and sad media, people will lean toward the happy stimulus; the experience with happy media is expected to generate similar emotions in them. Similarly, high-arousal films were preferred over low-arousal films because of anticipated positive feelings that were generated.

Second, contrary to expectations and contradicting prior research (see Oliver et al., 2000), female viewers reported a greater preference for happy-mood films as compared to their male counterparts. There were no gender differences for sad-mood films. Oliver et al. (2000) have reasoned that gender difference in enjoyment of sad films is more pronounced when the films feature relational themes rather than agentic or less relational themes (loss of resources, unattained goals, etc.). In the hypothetical descriptions that we used, there was a mix of relational and agentic themes in movie descriptions. Because the happy film descriptions focused on bonding, growing relationships, and family survival in a haunted place, females reported greater preference for them. Therefore, theme could be a confounding issue in the present study. However, by focusing on hypothetical movie descriptions, we accounted for several other confounds present in past research of “real” movies or television programs such as popularity, star appeal, or novelty. For instance, Krcmar and Greene (2000) presented participants with a list of television programs in seven different genres and asked them to indicate how frequently they watched each of the programs. Similarly, Eyal and Rubin (2003) presented participants with a list of television programs with a V (violent rating) and asked them to indicate the frequency of exposure. Although these studies indicate the importance of studying individual differences in explaining viewer preference, the use of survey data makes it difficult to examine the exact characteristic of media programs that make them so popular. By using hypothetical movie descriptions, this study has taken a different approach to exploring the mood and arousal aspects of films. However, the findings of this study indicate that movie themes and mood clearly interact with gender in complex ways and thereby affect movie viewing preference.

Third, male viewers reported a greater preference for high-arousal films compared to female viewers, and female viewers reported a greater preference for low-arousal films compared to male viewers. This finding was not surprising, given that male viewers are attracted to arousing media and experience physiological arousal as a result of exposure to arousing fare (e.g., Grabe & Kamhawi, 2006; Janssen et al., 2003). Thus, this finding was consistent with prior research and adds to research on gender and media preference.

Fourth, HSS reported a preference for high-arousal films, but LSS did not report a preference for low-arousal films. This finding is consistent with prior research that demonstrates HSS’ preference for exciting and novel messages (e.g., Stephenson, 2003). High sensation value messages typically reflect some combination of the following characteristics: novel, unusual format, unusual uses of formal features such as extreme close-ups and sound effects, a greater frequency of editing, faster and more frequent movement, more intense music, and higher levels of suspense and drama. Overall, HSS prefer ads that contain these characteristics, while LSS generally prefer messages with lower levels and fewer of these features (Donohew et al., 1991). However, because in the present study we did not look at specific characteristics (such as sound, effects, etc.) that would make the film more or less arousing, the low-arousal film was not perceived as such by LSS. Possibly for this reason, we expect that LSS did not report a preference for low-arousal films.

Limitations, Future Research, and Conclusions

Whereas the present study offered insight into gender and personality differences in preference for films differing in mood and arousal, several limitations of the study should be kept in mind. Data were collected from a large northeastern university in the United States and do not represent the perfect description of an average North American moviegoer (Motion Picture Association, 2007). Although movie descriptions were pretested and care was taken to incorporate varying levels of moods and arousal, movie themes were not manipulated. Therefore, it is possible that these themes were attended to more by the participants and choices were made based on them. Future research could use hypothetical movie descriptions with similar themes and present them to participants in a between-subject experimental design. This would allow for even greater control over confounds, a limitation of the present study. Also in the present study, the four film descriptions provided one exemplar in each category (i.e., high-arousal sad-mood or low-arousal happy-mood). Future research could utilize more exemplars in each category to further validate the findings.

The present study sought to examine gender and a personality characteristic (sensation seeking) as they related to movie choice, but we did not systematically examine other psy-


Krcmar, M., & Greene, K. (2000). Connections between violent...


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