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EDITOR'S REMARKS

I have been privileged to serve as the founding editor of the American Journal of Media Psychology (AJMP). This issue marks my last as editor. This has been an exciting journey! I am very grateful to the members of the editorial board and to the numerous ad-hoc reviewers without whom AJMP would have never launched and grown. Below is a list of the ad-hoc reviewers who gave of their valuable time to provide their expert feedback to the authors who submitted manuscripts to AJMP since 2007. Best wishes for continued success for all and for AJMP!

Michael G. Elasmar
Boston, December 2012

PUBLIC DIPLOMACY IN PRIME TIME: EXPLORING THE POTENTIAL OF ENTERTAINMENT EDUCATION IN INTERNATIONAL PUBLIC DIPLOMACY

SHEILA T. MURPHY, HEATHER J. HETHER,
LAUREL J. FELT AND SANDRA DE CASTRO BUFFINGTON

Can stories succeed where traditional forms of diplomacy have faltered? This study examined whether a primetime drama could impact American viewers' knowledge, attitudes, and behavior with respect to U.S. foreign policy and funding by surveying 173 viewers of an episode of Law & Order: SVU ("Witness"). Additionally, this study sought to uncover which theoretical construct — involvement with a specific character or involvement with the narrative more generally (transportation) — best predicted impact. The fictional character in question was Nardelie, a woman forced to flee the Democratic Republic of the Congo after repeated rape by militias vying for "conflict minerals," so named because control of these valuable minerals has triggered numerous conflicts. Separate regression analyses suggested a positive relationship between impact of the storyline and both theoretical constructs. However, when both constructs were entered into a single regression, involvement with Nardelie was the stronger predictor of knowledge (e.g., conflict minerals, sexual violence, and asylum issues) and current or future behavior (i.e., discussing global health) while transportation was the stronger predictor of attitudes (i.e., support for aid). This suggests that, while correlated,

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these constructs do not completely overlap. Implications of these results and the use of entertainment education in public diplomacy are discussed.

Keywords: identification, transportation, entertainment education, international public diplomacy, narrative.

A review of the relevant literature will reveal no single, agreed upon definition of public diplomacy. Cowan and Cull (2008) describe public diplomacy as “an international actor’s attempt to advance the ends of policy by engaging with foreign publics” (p. 6). Historically, this was achieved by governments tightly controlling and disseminating messages deliberately constructed to shape their respective images. Critics of this form of public diplomacy have labeled such government-controlled messaging “propaganda.”

But the terrorist attacks of September 11th, 2001, catalyzed an expansion of this narrow, state-based conception of public diplomacy as the key international players and their objectives shifted. “The current struggle against transnational terrorism is a struggle to win hearts and minds...” declared former U.S. Assistant Secretary of Defense and Harvard University scholar Joseph Nye (2008, p. 108). This new task calls for new tools. The components of “the new public diplomacy” include: listening; advocacy; cultural diplomacy; exchange and international broadcasting (Cull, 2010). Accordingly, this “new public diplomacy” is not confined to sovereign actors, but also allows non-governmental actors to “promote public diplomacy policies and practices of their own” (Cull, 2010, paragraph 3). In fact, Nye (2010) recommended building relationships with civil-society actors in other countries and facilitating networks between non-governmental parties at home and abroad (paragraph 13) in an effort to promote U.S. interests. Why? Because of these entities’ ability, superior to that of sluggish, bureaucratic governments’, to engage in decentralized, flexible, networked communication. Advocates of this new public diplomacy argue that new media and communication technologies have empowered non-state actors and legitimized their role in international relations¹ (Cull, 2010).

The present research examines the diplomatic potential of a media product designed for the purposes of entertainment by Hollywood scriptwriters and producers. “Witness,” an episode of *Law & Order: SVU* that first aired on March 17, 2010, depicted the ongoing conflict in the Democratic Republic of the Congo via the fictional character of Nardelie. Nardelie was forced to flee the Democratic Republic of the Congo after being repeatedly raped by local militias vying for “conflict minerals,” so named because control of these minerals (necessary for manufacturing products such as cell phones and computers) fuels the ongoing conflict in the Congo.

The primary objective of *Law & Order: SVU* is not to engage in international public diplomacy. Rather, this program aims to tell the most compelling stories possible. However, the authors of this article submit that when an entertainment program tells a compelling story involving a social issue that captivates viewers’ attention, it can educate its audience.

Accordingly, the present research examines whether exposure to a storyline depicting an international issue can serve a diplomatic role by influencing viewers' knowledge, attitudes, and behavior and increase support for intervention and international funding. Before presenting our research, however, we will provide a brief overview of the related concept of entertainment education, or EE, and the theoretical constructs most commonly associated with a successful EE intervention – involvement with a particular character and involvement with the narrative more generally (known in scholarly circles as “transportation,” (see Green & Brock, 2000; Green & Brock, 2002).

ENTERTAINMENT EDUCATION

Singhal and Rogers (2002) defined entertainment education (EE) as “the intentional placement of educational content in entertainment messages” (p. 117). One of the earliest examples of entertainment education was *Simplemente María*, a telenovela (Spanish language “soap opera”) broadcast from 1969-1971 in Peru and subsequently aired across Latin America. Still considered one of the most popular telenovelas of all time, this program spurred audience members to embrace sewing and adult literacy education (Singhal, Obregon, & Rogers, 1994; Singhal, Cody, Rogers, & Sabido, 2002). *Simplemente María* also motivated Mexican writer-director Miguel Sabido to design additional telenovelas for social change. His 1978 telenovela, *Acompañame*, was associated with a half a million more Mexican women going to family planning clinics (a 32% increase over the prior year (Slater, 2002, p. 159)) and a 23% increase in sales of over-the-counter contraception such as condoms (Poindexter, 2004, p. 28). In the year following *Acompañame*'s airing, Mexico's birthrate dropped from 3.1% to 2.7% (Poindexter, 2004, p. 28). While other factors may have played a role, population shifts of this magnitude put EE on the map and inspired its practice, particularly in developing contexts (Poindexter, 2004).

Whereas EE approaches convey information via narratives on television shows, radio programs, comic books, and other forms of entertainment, traditional public service campaigns convey information via reports on public service announcements and posters. Two meta-analyses examining 120 public health campaigns that featured public service announcements, posters, and brochures (Snyder & Hamilton, 2002; Derzon & Lipsey, 2002) concluded that, on average, 5% of individuals exposed to these traditional campaigns change their behavior in the expected, positive direction (Noar, 2006).² Those most at risk tend not to be exposed to these campaigns, and bringing the message to them can be difficult and costly. In light of these findings, it is not surprising that in the public health arena, EE has been embraced as a cost-effective means to share information with a mass audience (Brodie, Foehr, Rideout, Baer, Miller, Flournoy, & Altman, 2001; Valente, Murphy, Huang, Greene, Gusek, & Beck, 2007; Bouman, 2004).

Indeed, a growing body of evidence suggests that EE messages conveyed in popular television programming can produce significant change in viewers' knowledge, attitudes,

and behavior (Brodie et al., 2001; Collins, Elliot, Berry, Kanouse & Hunter, 2003; Hether, Huang, Beck, Murphy, & Valente, 2008; Green, Strange & Brock, 2002; Keller & Brown, 2002; Kennedy, O'Leary, Beck, Pollard, & Simpson, 2003; Murphy, Frank, Moran & Woodley, 2011; Sharf & Freimuth, 1993; Sharf, Freimuth, Greenspan, & Plotnick, 1996; Slater, Rouner, & Long, 2006; Valente et al., 2007). Entertainment education also may boast an advantage in terms of longevity. Appel and Richter (2007) suggests that "fictional narratives can have a persistent implicit influence on the way we view the world, and that these effects may last longer than the effects of typical explicit attempts to change beliefs by presenting claims and arguments" (p. 129).

What might explain narratives' superior impact? Prior research suggests that information delivered by engaging storytelling and associated with characters whom the viewer already "knows" and cares about is more likely to attract viewers' attention than context-less information, such as the facts delivered by traditional health campaigns (Singhal, Cody, Rogers, & Sabido, 2004; Singhal & Rogers, 1999; Slater & Rouner, 2002; Lang, 2000). Audiences also may harbor less resistance to content from narrative rather than didactic sources (Brown & Walsh-Childers, 2002; Singhal & Rogers, 1999; Slater, 1997; Slater, 2002; Slater & Rouner, 2002). Moyer-Gusé (2008) proposed that the "narrative structure of entertainment-education messages can overcome reactance by diminishing the viewer's perception that the message is intended to persuade" (p. 415).

Additionally, information conveyed in a narrative format may be processed differently than the same information conveyed in a nonnarrative format. Lang's (2000) Limited Capacity Model of Mediated Message Processing, as well as other dual-process models (for a review, see Chaiken & Trope, 1999), argues that the brain handles emotional and nonemotional stimuli differently (Epstein & Pacini, 1999). Specifically, research suggests that emotion-eliciting material is more easily encoded, stored, and retrieved (Lang, 2000), and less subject to counterarguing because it is processed peripherally (Petty & Cacioppo, 1986). In fact, in their construct of transportation, Green and Brock (2000) note the early and essential role played by heightened emotions and motivations; viewers become absorbed in the dramatic elements in a narrative largely due to the elements of suspense, romance, conflict, comedy and triumph over tragedy. As Dillard and Peck (2000) point out, narratives that involve a series of emotions have been shown to be particularly gripping and persuasive.

Entertainment education also may trigger systemic, or "second order" change (Singhal, Rao, & Pant, 1996, p. 267). For example, multiple South African communities embraced a method of responding to domestic violence that had been modeled by the EE drama *Soul City* (Singhal, Usdin, Scheepers, Goldstein, & Japhet, 2004). As depicted on the television show, when neighbors overheard domestic violence, they banged pots and pans in order to bear witness and signal their disapproval (Singhal et al., 2006; Usdin, Singhal, Shongwe, Goldstein, & Shabalala, 2004). In addition to this fictional storyline significantly impacting viewers' knowledge, attitudes, and sense of self-efficacy, South Africa's ratification of the Domestic Violence Act was largely attributed to *Soul City* (Usdin, Scheepers, Goldstein, &

Japhet, 2005; Samuels, Mollentz, Olusanya, Claassens, Braehmenr, & Kimmie, 2000; Smith, 2001).

Some government officials have openly recognized the potential of entertainment to support international public diplomacy objectives. For instance, in 2006, the British government charged its national broadcaster, the British Broadcasting Company (BBC), with the tasks of “Sustaining citizenship and civil society; Promoting education; Stimulating creativity; Reflecting the identity of the UK's nations, regions and communities; *Bringing the world to the UK and the UK to the world*; and Building digital Britain” (BBC News, 16 March 2006, paragraph 7; emphasis added). The public diplomacy potential of the BBC's programming – which reaches an estimated 188 million viewers (Preston, Insua, & Ciolek, 2010) – is not lost on the British government. As Lord Carter of Coles asserted in December 2005's *Public Diplomacy Review*, “Public diplomacy is arguably not the primary objective [of the BBC], but it is inevitable that in providing an internationally renowned and highly valued service, there will be positive public diplomacy gains for the country associated with that brand” (cited in Wilding, 2010, paragraph 3). This phenomenon was anecdotally observed in a 2009 U.S. diplomatic cable sent from the U.S. embassy in Saudi Arabia to the U.S. Department of State (Booth, 2010). Titled “David Letterman: Agent of Influence,” this cable alleged that satellite broadcasts of popular U.S. television shows, such as *Desperate Housewives* and *The David Letterman Show*, have cultivated viewers' interest in the West and more effectively “persuade Saudi youth to reject violent jihad” (Booth, 2010, paragraph 1) than the US-funded al-Hurra TV news channel.

Supporting this link between exposure to entertainment programming and public diplomacy, Elasmr (2008) found a direct and positive correlation between consumption of U.S. entertainment media and Muslim's attitudes towards both the United States and the U.S.-led war on terror. But in certain quarters, this phenomenon raises the specter of cultural imperialism (Schiller, 1969). Some argue that the flow of media products from more to less developed nations can have systematic negative effects on indigenous cultures and values. Gooneskara (1987) contends, “in the face of this media invasion, the indigenous cultures of the Third World disintegrate consistently and without resistance” (p. 11). Such cultural imperialist fears persist despite evidence that cross-border television shows produce only modest effects on indigenous populations. A meta-analysis of 27 studies by Elasmr and Hunter (2003) revealed weak, positive correlations between exposure to foreign television (primarily from the U.S. and Canada) and viewers' knowledge, attitudes, beliefs, and behaviors about the country featured. In interpreting their results, Elasmr and Hunter (2003) point to the possibility that this low correlation may be due, in part, to unexplained variability among viewers. The current study examines whether some of this unexplained individual level variability may be due to viewers' ability or inability to identify with a narrative set in a foreign context featuring culturally dissimilar characters. In other words, if it is difficult for a viewer to identify with a fictional foreign character or their plight, is the influence of cross-border entertainment programs diminished?

The present study seeks to address these issues by examining the impact of a storyline depicting a foreign fictional character and culture on domestic U.S. audiences. Can exposure to an episode of *Law & Order: SVU* that depicts Nardelie, a woman who was forced to flee the Democratic Republic of the Congo after being repeatedly raped by local militias vying for "conflict minerals," significantly alter the knowledge, attitudes, and behavior of domestic viewers? And, if so, what theoretical mechanisms might account for this shift? Below we review two theoretical mechanisms – involvement with a particular character and involvement with the narrative more generally (also known as transportation) – that have been shown to predict entertainment education effects, and explore their potential to sway public perceptions of international issues.

INVOLVEMENT WITH A PARTICULAR CHARACTER

Successful EE efforts tend to feature characters with whom viewers identify. "According to the elaboration likelihood model, identification increases involvement with messages, which, in turn, increases the elaboration of messages (Petty & Cacioppo, 1984) and their potential persuasive effects. Another explanation for the effects of identification is that it increases the intensity of, and involvement with, the exposure to mediated texts and makes their meaning more memorable" (Cohen, 2001, p. 260). Research has found that character involvement is positively related to increased attention, mental rehearsal of the arguments presented, and modeling of behavior (Sharf & Friemuth, 1993; Sharf et al., 1996; Sood, 2002). This explains why white female viewers of the same age as the fictitious character Nancy in *thirtysomething* were more strongly moved by her cancer experiences (Sharf & Friemuth, 1993; Sharf et al., 1996) than older or younger viewers, and why young Latinas are particularly influenced by telenovelas' portrayals of young Latina characters (for other examples of identity-related EE effects see Lee, Salmon, & Witte, 2009; Murphy, Hether, Huang, & Beck, 2006; Papa et al., 2000; Singhal & Rogers, 1999; Sood, 2002; Wilkin, Valente, Murphy, Cody, Huang, & Beck, 2007).

Viewers appear to learn more from models — in this case, fictional television characters — that they identify with, like, feel as if they know, or perceive to be similar to themselves (Bandura, 1977; 1986; 2002; 2004). But scholars disagree on how to define and differentiate between these related constructs. For instance, identification has been conceptualized in different ways by different researchers. Definitions of identification include: a viewer's perceived similarity to a character (Basil, 1996; Eisenstock, 1984; Liebes & Katz, 1990; Maccoby & Wilson, 1957; Slater & Rouner, 2002); a viewer's liking of a character (Basil, 1996; Eisenstock, 1984; Liebes & Katz, 1990; Maccoby & Wilson, 1957); a viewer's desire to be like a character (Basil, 1996; Eisenstock, 1984; Eyal & Rubin, 2003; Giles, 2002; Hoffner, 1996; Liebes & Katz, 1990; Maccoby & Wilson, 1957); the extent to which a viewer relates to a character (Wilkin, Valente, Murphy, Cody, Huang, Beck, Alban, & Bright, 2007); and an emotional and cognitive process whereby one takes the perspective

of a character (Cohen, 2001; 2006; Eyal & Rubin, 2003).³

As evidenced by this brief summary of the extant literature, there is at present no universally agreed upon conceptual or operational definition of identification. Consequently, we follow Moyer-Guse's (2008) lead and use the phrase *involvement with a specific character* to refer to the overarching category that incorporates the four related constructs of identification, wishful identification (a viewer's wish to be like the character), similarity, liking, and parasocial interaction.

The extent to which character involvement circumscribes entertainment education effects is important to consider as it may determine EE's efficacy as a tool of international public diplomacy. For example, if character involvement significantly predicts EE effects, characters who are perceived as dissimilar or strange may produce low or no impact on viewers' attitudes and beliefs. The present study examines an episode of popular primetime TV drama *Law & Order: SVU* in which a Congolese woman, Nardelie, explains her illegal immigration to the United States as a means of escaping both repeated rape and the subsequent ostracism she had experienced in her native country. Through her story, viewers learn that rape has been exploited in the Democratic Republic of Congo as a weapon of war in an ongoing struggle for control of "conflict minerals," or elements such as tin, tungsten, and tantalum that are used in the manufacture of cell phones and computers. Thus, our first research question:

RQ1: To what extent does involvement with the character Nardelie predict shifts in knowledge, attitudes and behavior relevant to supporting U.S. intervention and funding in the Congo?

INVOLVEMENT WITH THE NARRATIVE MORE GENERALLY

Various scholars have noted that humans are innate storytellers (Schank & Abelson, 1995; Fisher, 1987). Less attention has been paid to the logical counterpart of this proposition – that humans are innately prepared to be influenced by stories (Green & Brock, 2000). But not all narratives are equally influential to all audience members. Research by Green and Brock (2000) has revealed greater attitude change among readers who were “transported” into the narrative world. To the extent that individuals are absorbed into a story or transported into a narrative world, they may show effects of the story on their real-world beliefs. “We conceptualize transportation into a narrative world as a distinct mental process, an integrative melding of attention, imagery and feelings” (Green & Brock, 2000, p. 701). In Green and Brock's theoretical framework, when an audience member is transported, he or she becomes part of the narrative he or she is viewing, hearing, or reading. According to these authors, several processes occur when one is fully transported. First, the audience member loses awareness of his or her surroundings — all cognitive facilities are focused entirely on the mediated world. Second, transported viewers feel heightened “emotions and

motivations” (Green & Brock, 2000, p. 702). A transported viewer is so completely immersed in the media world that his or her responses to narrative events are strong, as though he or she were actually experiencing those events. Third, when viewers emerge from the transported state, they are often changed as a result of being so deeply engrossed in the narrative. Moyer-Gusé (2008) distinguishes transportation from identification by noting that transportation pertains to absorption within the storyline overall while identification pertains to absorption with a specific character (p. 410).⁴

Green & Brock (2000) propose that transportation can be an important predictor of persuasive effects. They contend that because a person in a transported state is engrossed, having devoted his or her cognitive resources to the events playing out in the narrative, he or she may be less likely to counter-argue or to critically assess the messages in the narrative. Slater and Rouner (2002) similarly note that engagement with narrative storylines in entertainment-education programs can suppress counter-arguing by viewers. Transported individuals are also more likely to view a narrative as similar to an actual experience and, consequently, the lessons of the narrative may hit them harder (Green & Brock, 2000). In a series of experiments where participants were asked to read various stories, Green and Brock (2000) found that an individual’s level of transportation predicted subsequent beliefs consistent with the story’s messages. Green (2004) likewise found that transportation was positively associated with story-related beliefs.

But will the unfamiliar, Congo-related subject matter make it difficult for U.S. viewers to become “transported” into the narrative? If so, will this substantially limit the public diplomacy potential of this and other cross-border EE attempts? This leads us to our second research question:

RQ2: To what extent does transportation or involvement in the storyline more generally predict shifts in knowledge, attitudes and behaviors relevant to supporting U.S. intervention and funding in the Congo?

In addition to testing the potential of entertainment education as a public diplomacy tool, the present research also attempts to contribute to the general entertainment education literature by comparing the relative impact of involvement with a specific character and transportation. Thus our final research question:

RQ3: What is the relative impact of involvement with a specific character and transportation on viewers’ relevant knowledge, attitudes and behaviors?

Cumulatively, answers to these research questions will shed light on entertainment media’s potential as a tool for international public diplomacy. Can an EE strategy alter the knowledge, attitudes, and behavior of viewers in one country, such as the United States, with respect to issues in a remote country, such as the Democratic Republic of Congo?

METHODS

This study focuses on a storyline that aired on *Law & Order: SVU* on March 17, 2010. *Law & Order: SVU* was the 17th most popular show in primetime in Spring 2010, reaching an estimated audience of 57 million U.S. viewers on a weekly basis. In the episode entitled “Witness,” Detectives Olivia Benson and Elliott Stabler investigate a rape that occurred in an apartment stairwell. The witness to the crime, Nardelie, is from the Democratic Republic of Congo and a rape victim herself. Nardelie is initially unwilling to testify against the defendant for fear of being deported to her country where sexual violence and war over conflict minerals still prevail. During the investigation, the initial rape victim dies from a MRSA staph infection that she contracted in the hospital. The story concludes with Nardelie testifying against the rapist and receiving permission to stay in the United States. The Assistant District Attorney of New York, Alexandra Cabot, resigns her position and joins the International Criminal Court to prosecute crimes of sexual violence in areas of conflict.

Sample

This sample was gathered by a private research company, Frank N. Magid & Associates, from their registered panel of respondents. This non-nationally representative panel has approximately 22,000 participants, each of whom is compensated to participate in four or fewer Internet-based surveys yearly (M. Curran, personal communication, August 23, 2010). Although an attempt was made to collect both pretest and posttest data from the same respondents in order to measure change at the individual level, attempts to retest a sufficient number of pretest respondents after the show aired were unsuccessful. Consequently, only post-test data will be presented.

Post-test data were collected after the March 17, 2010, airing of “Witness.” Data collection was open from March 18–March 31, 2010. Magid panel members were notified of this research opportunity via an email sent March 18, 2010, and a reminder email sent March 23, 2010. Only respondents who self-identified as regular viewers of *Law & Order: SVU* (operationalized as watching at least two episodes per month) and who had seen the episode “Witness” were invited to participate in the survey. One hundred and eighty-seven (187) unique respondents completed the post-test survey. After the data were cleaned to remove any respondents who were missing large amounts of data, there remained 173 cases.

It is difficult to calculate an accurate response rate because it is unknown whether all recipients actually received the email solicitations. The research firm Magid estimates that at least 20% of email addresses are no longer valid, reducing the sample to 17,600 at most. With the increased use of spam filters over the past few years, a considerable portion of the pool may never have seen the email solicitations. Moreover, there is the issue of whether an email solicitation that arrives in an individual’s inbox but is not opened should be counted as a refusal. The largest loss of respondents, however, was due to the fact that they had not

seen the specific episode “Witness.” Regardless, we fully acknowledge that this sample of *Law & Order: SVU* viewers is not representative of the general population and suffers from self-selection bias.

Sample Characteristics

The analytic sample was primarily Caucasian/white (80%), with an age range of 24 to 76 years old and mean age of 47 years old. Sixty-one percent (61%) of the sample was female, and 30% reported having prior experience, either directly or indirectly, with sexual violence. Approximately one-third (34%) of the sample had some college/trade school experience and a similar amount identified as college graduates (33%).

Measures

The outcome variables included: respondents’ knowledge about sexual violence and specific health issues addressed in the storyline; attitudes towards global health; and behavior related to global health. Due to space constraints, only the survey items that were used in the current analyses are described in detail below.

Knowledge

Using a 10-point Likert scale with response options that ranged from (one) “I know nothing” to (ten) “I know a great deal,” knowledge was measured through respondents’ self-reports of how much they knew about the following three topics addressed in the storyline: 1) immigration and asylum; 2) sexual violence; and 3) conflict minerals. A knowledge index was also created that summed respondents’ scores on the three previous items.

Attitudes

Seven questions assessed respondents’ attitudes towards global health and funding global health programs. The first two questions used a 10-point Likert scale where (one) was “not at all” and (ten) was “extremely important” in order to discover how important respondents considered health care in the U.S., global health, and four other decoy variables. The decoy variables measured attitudes towards other current geo-political events; however, since they were primarily intended to disguise the true intent of the study, they were not included in the analysis.

Respondents used similar 10-point scales to indicate how important they thought it was to prevent and treat the global spread of HIV/AIDS, tuberculosis, and malaria. Principal components factor analysis was conducted with these items and they all loaded strongly on one factor with high reliability ($\alpha=.95$), resulting in the creation of a single dependent

⊕ Table 1. Characteristics of the sample

	%	N
Total		173
Experience with sexual violence	30%	52
Female	61%	106
Ethnicity/race		
Caucasian/White	80%	138
African American/Black	5%	9
Asian-American/Pacific Islander	4%	7
Hispanic/Latino	2%	3
Marital status		
Single	20%	35
Married/co-living with partner	56%	97
Divorced/separated	14%	24
Highest education level		
Completed high school or less	15%	26
Some college/trade school	34%	59
College graduate	33%	57
Graduate school	10%	17
Annual household income		
Less than \$19,999	11%	19
Between \$20,000 and \$39,999	24%	42
Between \$40,000 and \$59,999	23%	40
Between \$60,000 and \$79,999	11%	19
Between \$80,000 and \$99,999	12%	21
Between \$100,000 or more	12%	21

variable.

Using a six-point scale where (one) was “strongly disagree” and (six) was “strongly agree,” respondents also indicated their agreement with the following statements: 1) “Global health issues currently impact my life”; 2) “Global health issues currently impact other Americans” and 3) “Global health issues will impact me at some point during my lifetime.” Principal components factor analysis showed that these three items also loaded strongly onto a single factor with high reliability ($\alpha=.87$). Therefore, responses to these three items were averaged into a single dependent variable measuring the extent to which global health issues impact them and other Americans.

Using a five-point scale where (one) = strongly disagree and (five) = strongly agree, respondents were also asked to indicate their agreement with a series of five statements related to global health funding specifically on funding by the United States (U.S.) to the United Nations (U.N.). These statements included items such as “By aiding the U.N., the U.S. government can impact global health” and “I support U.S. government aid to the U.N. for global health.” These variables were analyzed with principal components factor analysis and they all loaded strongly onto a single factor with high reliability ($\alpha=.90$); therefore, a

scale variable was created reflecting respondents' support for U.S. and U.N. aid for global health.

Lastly, using a 10-point scale where (one) was "has absolutely no impact on global health" and (ten) was "can have an impact on global health," respondents were asked to indicate the extent to which they thought seven various organizations and entities could impact global health. Principal components factor analysis yielded two factors, each with high reliability. The first factor, consisting of five items, ($\alpha=.92$), reflected the perceived impact of outside organizations (i.e., those outside the Congo) such as the U.S. government, the U.N., and non-governmental organizations like the Gates Foundation on global health issues. A second factor ($\alpha=.93$), consisting of two items, was created that reflected respondents' support for the notion that negative processes, such as war and terrorism, could impact global health.

Behavior and Behavioral Intent

Behavior was measured with two sets of questions. First, using a five-point Likert scale with response options ranging from (one) "never" to (five) "more than once a week," respondents were asked, "How frequently do you discuss (in spoken or written form) the following issues?" "U.S. health care" and "global health" were among the six items listed. Next, using a 10-point Likert scale with response options that ranged from (one) "not at all likely" to (ten) "extremely likely," respondents were asked "In the next year, how likely is it that you will speak or write to someone about each of the following topics?" The same topics as those provided in the previous question, e.g., "U.S. health care," "global health," and four others, were listed.

Involvement and Transportation

Similar to Moyer-Gusé (2008) and Murphy et al. (2011), we combined liking, perceived similarity, wishful identification, and parasocial interaction into a single index of involvement with Nardelie, the Congolese main character ($\alpha=.87$). This index consisted of a four- to 40-point scale, with a mean of 19.66 and a standard deviation of 9.87. Transportation was measured with items from Green and Brock's (2000) transportation scale. Ten of the original 13 items were summed to create a transportation index ($\alpha=.94$). Three original items that required reverse-coding were omitted from the final scale because, when initial factor analysis was conducted, these three items consistently did not load in the same direction as the other items, even when they were reverse-coded. The transportation index was a 10- to 70-point scale (the sum of 10 seven-point Likert scales), with a mean of 39.94 and a standard deviation of 15.45.

Table 2. Standardized betas indicating the association of involvement and transportation with knowledge

	Involvement	Transportation	Full
Immigration and asylum			
Sexual violence	-.03	-.02	-.04
Female	-.08	-.11	-.09
Involvement	.42**		.34**
Transportation		.37**	.12
Adjusted R ²	.16	.12	.17
Sexual violence			
Sexual violence	.23**	.24**	.22**
Female	.05	.03	.04
Involvement	.42**		.34**
Transportation		.36**	.11
Adjusted R ²	.25	.21	.25
Conflict minerals			
Sexual violence	.17*	.18*	.16*
Female	-.11	-.13+	-.11
Involvement	.46**		.44**
Transportation		.35**	.03
Adjusted R ²	.26	.18	.26

+p<.10 *p<.05 **p<.01

RESULTS

Analysis Strategy

Preliminary analyses were conducted with the demographic variables in Table 1. All except two variables – having prior experience with sexual violence and being female – were found to be unrelated to the outcome variables and therefore were not included in subsequent analyses. Next, a series of sequential multiple linear regression models examined the individual associations between identification and transportation with the individual and summary outcome variables (assessing story-related knowledge, attitudes and behavior). Finally, full models were tested that included both predictor variables. All models included the two control variables mentioned above: sexual violence experience and gender.

Research question 1. Multiple regression analyses showed that identification with Nardelie was strongly associated with most outcome variables. As the first column in Table 2 indicates, involvement with this character strongly predicted respondents' self-reported knowledge of immigration and asylum ($\beta=.42$, $p<.01$), sexual violence ($\beta=.42$, $p<.01$), and

Table 3. Standardized betas indicating the association of involvement and transportation with attitudes

	Involvement	Transportation	Full
Importance of U.S. health care			
Sexual violence	-.13+	-.14+	-.15+
Female	.07	.04	.05
Involvement	.38**		.19+
Transportation		.39**	.25*
Adjusted R ²	.13	.14	.15
Importance of global health			
Sexual violence	-.01	.00	-.01
Female	.24**	.21	.23**
Involvement	.38**		.32**
Transportation		.33**	.10
Adjusted R ²	.19	.15	.19
Importance of the prevention & treatment of global spread of disease			
Sexual violence	.01	-.00	-.01
Female	.18*	.15*	.16*
Involvement	.37**		.16
Transportation		.41**	.29**
Adjusted R ²	.16	.19	.19
Global health issues impact me & other Americans			
Sexual violence	.05	.04	.03
Female	.20**	.17*	.18*
Involvement	.35**		.19+
Transportation		.36**	.22*
Adjusted R ²	.15	.16	.17
Support US & U.N. aid for global health			
Sexual violence	.14+	.12	.11
Female	.18*	.15*	.15*
Involvement	.33**		.07
Transportation		.41**	.36**
Adjusted R ²	.16	.22	.21
Outside organizations can impact global health issues			
Sexual violence	.03	.02	.01
Female	.20**	.17*	.18*
Involvement	.38**		.18+
Transportation		.41**	.27*
Adjusted R ²	.18	.20	.20
War & terrorism can impact global health issues			
Sexual violence	.15*	.15*	.14+
Female	.12+	.10	.11
Involvement	.39**		.27*
Transportation		.36**	.17
Adjusted R ²	.20	.18	.20

+ p < .10 *p<.05 **p<.01

Table 4. Standardized betas indicating the association of involvement and transportation with behavior

	Involvement	Transportation	Full
Currently discuss U.S. health care			
Sexual violence	.19*	.20*	.19*
Female	-.11	-.11	-.10
Involvement	.08		.16
Transportation		.01	-.11
Adjusted R ²	.04	.03	.04
Will discuss U.S. health care			
Sexual violence	.08	.08	.07
Female	.02	-.01	.00
Involvement	.34**		.14
Transportation		.37**	.27*
Adjusted R ²	.12	.14	.14
Currently discuss global health			
Sexual violence	.11	.12	.11
Female	.00	-.01	.00
Involvement	.30**		.30*
Transportation		.22**	.00
Adjusted R ²	.10	.06	.09
Will discuss global health			
Sexual violence	.07	.07	.06
Female	.10	.07	.09
Involvement	.44**		.30**
Transportation		.42**	.20+
Adjusted R ²	.21	.18	.22

+ p < .10 *p < .05 **p < .01

conflict minerals ($\beta=.46$, $p<.01$) — three issues that were central to Nardelie's storyline. Among the control variables, experience with sexual violence was significantly associated with knowledge of sexual violence and conflict minerals, while being female was not significantly associated with any of the knowledge outcomes.

As the first column in Table 3 shows, involvement was also strongly associated with all of the attitude items. Of the control variables, experience with sexual violence was significantly associated with one outcome variable only: those with sexual violence experience were more likely to agree that war and terrorism can impact global health issues. Being female was significantly associated with five attitudes. Women were more likely to agree that 1) global health is important; 2) the prevention and treatment of the global spread of disease is important; 3) global health issues impact them and other Americans; 4) they support U.S. and U.N. aid for global health; and 5) outside organizations can impact global health issues.

Table 5. Summary indices indicating the association of involvement and transportation with knowledge, attitudes, and behavior

	Involvement	Transportation	Full
Knowledge Index			
Sexual violence	.14*	.15*	.13+
Female	-.06	-.09	-.07
Involvement	.50**		.43**
Transportation		.42**	.10
Adjusted R ²	.28	.21	.28
Attitude Index			
Sexual violence	.02	.02	.01
Female	.23**	.19**	.20**
Involvement	.50**		.28**
Transportation		.51**	.30**
Adjusted R ²	.30	.30	.33
Behavior Index			
Sexual violence	.12	.12	.11
Female	.05	.02	.03
Involvement	.41**		.28**
Transportation		.39**	.19+
Adjusted R ²	.19	.17	.20

+p<.10 *p<.05 **p<.01

The first column in Table 4 shows that involvement was also strongly associated with three of the four behavior-related outcomes: future discussion of U.S. health care ($\beta=.34$, $p<.01$), current discussion of global health ($\beta=.30$, $p<.01$), and future discussion of global health ($\beta=.44$, $p<.01$). Only current discussion of U.S. health care was not significantly associated with involvement. Of the control variables, only respondents with experience with sexual violence were more likely to currently discuss U.S. health care.

Three summary variables of knowledge, attitudes, and behavioral intent were created and regressed on involvement. As the first column in Table 5 shows, involvement was strongly associated with all three of these variables: the knowledge index ($\beta=.50$, $p<.01$), attitude index ($\beta=.50$, $p<.01$), and behavior index ($\beta=.41$, $p<.01$). Experience with sexual violence was significantly associated with knowledge, while being female was significantly associated with attitudes toward global health.

Research question 2. Similar to involvement, multiple regression analyses were conducted that regressed outcome variables on transportation, while controlling for the effects of experience with sexual violence and being female. As the second column in Table 2 shows, transportation was significantly associated with all of the knowledge items, although the associations were slightly weaker than with involvement. Transportation by the storyline predicted respondents' self-reported knowledge of immigration and asylum ($\beta=.37$, $p<.01$), sexual violence ($\beta=.36$, $p<.01$), and conflict minerals ($\beta=.35$, $p<.01$). Of the control variables, experience with sexual violence predicted knowledge of sexual violence and

conflict minerals.

The second column of Table 3 indicates that transportation was also significantly associated with all of the attitude items. Of the control variables, experience with sexual violence was significantly associated with agreeing that war and terrorism can impact global health issues ($\beta=.15$, $p<.05$), while being female was significantly associated with agreeing that the prevention and treatment of global health are important ($\beta=.15$, $p<.05$), global health issues impact them and other Americans ($\beta=.17$, $p<.05$), they support U.S. and U.N. aid for global health ($\beta=.15$, $p<.05$), and outside organizations can impact global health ($\beta=.17$, $p<.05$).

Table 4 shows that, like involvement, transportation was also significantly associated with three of the four behavior variables: future discussion of U.S. health care ($\beta=.37$, $p<.01$), current discussion of global health ($\beta=.22$, $p<.01$), and future discussion of global health ($\beta=.42$, $p<.01$). Of the control variables, only experience with sexual violence was significantly associated with current discussion of U.S. health care ($\beta=.20$, $p<.05$).

Not surprisingly, the second column of Table 5 shows that transportation was significantly associated with all of the summary variables: the knowledge index ($\beta=.42$, $p<.01$), attitude index ($\beta=.51$, $p<.01$), and behavior index ($\beta=.39$, $p<.01$). Of the control variables, experience with sexual violence was significantly associated with knowledge ($\beta=.15$, $p<.05$), while being female was significantly associated with attitudes toward global health ($\beta=.19$, $p<.01$).

Research question 3. The sequential regression models that separately tested involvement and transportation showed that both constructs were associated with the outcome variables, and the pattern of the associations was consistently strong and positive across knowledge, attitudes, and behaviors. Full regression models were also tested that included both involvement and transportation in a single model, while simultaneously controlling for prior experience with sexual violence and gender. These models were then used to predict the outcome variables.

As the third column in Table 2 shows, while transportation was significantly associated with all of the knowledge outcomes in the separate sequential models, in the full models only involvement was consistently associated with knowledge. In fact, one item reflecting knowledge about conflict minerals indicates that the standardized beta for transportation dropped from $\beta=.35$, $p<.01$ in the sequential model to $\beta=.03$, NS in the full model, while the standardized beta for involvement stayed fairly consistent at $\beta=.46$, $p<.01$ in the sequential model and $\beta=.44$, $p<.01$ in the full model. For the control variables, as with the individual models, experience with sexual violence was significantly associated with knowledge of sexual violence and conflict minerals, while being female was not significantly associated with any of the knowledge outcomes.

As the third column in Table 3 suggests, the full models examining attitudes revealed a different pattern of results. While involvement was significantly associated with all of the attitude outcomes in the sequential models, in the full models involvement was significantly

associated with only with two of the seven outcomes: 1) the importance of global health ($\beta=.32$, $p<.01$) and 2) the perception that war and terrorism could impact global health ($\beta=.27$, $p<.05$). In contrast, transportation remained significantly associated with five of the seven attitude variables. Of the control variables, being female was significantly associated with five of the attitude variables, while experience with sexual violence was not significantly associated with any attitudes (at the level of $p<.05$).

The associations between involvement and transportation and behaviors are less robust for both of these constructs. As the third column of Table 4 shows, in the full models, involvement remained significantly associated with two outcomes: 1) currently discussing global health ($\beta=.30$, $p<.05$) and 2) future discussion of global health ($\beta=.30$, $p<.01$). Transportation, on the other hand, was significantly associated with one behavior: future discussion of U.S. health care ($\beta=.27$, $p<.05$).

In the full models that examined the associations among involvement, transportation, and the summary outcome variables of overall story-related knowledge, attitudes, and behavior, involvement was more strongly associated with these outcomes than transportation. As Table 5 shows, involvement with the character of Nardelie was significantly associated with all three of the summary outcome variables: knowledge, ($\beta=.43$, $p<.01$); attitudes, ($\beta=.28$, $p<.01$); and behavioral intent, ($\beta=.28$, $p<.01$). Transportation was significantly associated with only the attitude summary variable ($\beta=.30$, $p<.01$) and marginally associated with behavior ($\beta=.19$, $p<.10$).

DISCUSSION

As noted previously, the “new public diplomacy” is not confined to sovereign states but also includes non-governmental actors who can “promote public diplomacy policies and practices of their own” (Cull, 2010, paragraph 3). The present research examined the potential for a televised entertainment program to influence how viewers in one country perceive another country, its people, and its problems. This particular episode of *Law and Order: SVU*, “Witness,” shared information about the ongoing atrocities in the Congo involving conflict minerals through the fictional character of Nardelie, who had left the Congo after being repeatedly raped by factions warring over conflict minerals. Moreover, the present research compared the ability of two theoretical mechanisms previously suggested to underlie the power of narratives – involvement with a specific character (measured by combining liking, perceived similarity, wishful identification, and parasocial interaction into a single construct of “involvement with Nardelie”) and involvement with the narrative more generally (measured using Green and Brock's (2000) construct of transportation) – to predict viewers' subsequent knowledge, attitudes, and current or future behavior vis-à-vis the Democratic Republic of Congo, global health, and international intervention and funding (see also Murphy, Frank, Moran & Woodley, 2011, for a review).

Background Factors Associated with Congo-related Knowledge, Attitudes and Behaviors

Prior to testing these constructs of interest, we examined whether any demographic variables (including but not limited to age, race, income, gender, and education level) interacted with the impact of the storyline. Regression analysis revealed that females generally rated the importance of global health and its funding higher than their male counterparts. Regression analysis also showed that having personally experienced sexual violence predicted a stronger impact of Nardelie's storyline on certain outcome measures. After seeing the episode, viewers who reported having experienced sexual violence, either directly or indirectly, had higher levels of knowledge regarding sexual violence and conflict minerals, were more likely to feel that war and terrorism can impact global health issues, and were more likely to currently discuss U.S. health care. These findings support Slater and Rouner's (2002) argument that, while personal or issue involvement is not necessary for persuasion to occur, it can increase attention and either increase or attenuate the persuasive effects of a narrative.

Knowledge

The present study assessed knowledge gains in three areas: immigration and asylum; sexual violence; and "conflict minerals." Of the two theoretical constructs under consideration, involvement with Nardelie was more predictive of having an increased level of storyline-related knowledge. In fact, involvement with Nardelie was significantly related to all three knowledge items both in separate regressions and in the full models, even after controlling for prior experience with sexual violence, gender, and transportation.

Transportation, on the other hand, while significant to all three knowledge items prior to adding character involvement into the equations, dropped in significance in the full models. We suspect that this drop is due to multicollinearity between involvement and transportation. As has been noted elsewhere, although these constructs can be highly correlated, they do not completely overlap and still independently predict different outcomes (see also, Murphy et al., 2011, for a review) which argues for keeping both constructs.

Attitudes

In contrast, transportation was more likely to predict viewers' storyline-related attitudes. These attitudes refer to viewers' feelings towards the following: the importance of healthcare in the U.S. and globally; the importance of treatment to prevent the global spread of disease; the personal impact of global health issues; the impact of outside organizations and war on global health issues; and the degree of support for U.S. and U.N. aid for global health. Relatively high ratings on both Green and Brock's (2002) construct of transportation and involvement with Nardelie predicted elevated importance ratings on each of the seven

attitudes measures when examined separately. However, in the full models, transportation remained a significant predictor in five of the seven models, whereas involvement with Nardelie was significant in only two models. We suspect that, as argued by Green (2006), transportation into a narrative may reduce counter-arguing and, as a consequence, increase the likelihood that viewers will process the information conveyed in a less critical manner. Thus, higher levels of transportation should be related to more storyline consistent attitudes.

Behavior and Behavioral Intent

When examined separately, both involvement with Nardelie and level of transportation predicted viewers' intent to discuss: global health care currently; global health care in the future; and U.S. health care in the future. In the full model, however, involvement predicted only discussing global health both currently and in the future. Transportation into the narrative predicted future discussions of U.S. and global healthcare. This result both supports Green and Brock (2000; 2002) and furthers these scholars' work by demonstrating a relationship between transportation and current behavior and behavioral intent (whereas other studies (e.g., Green, 2004) have found only a relationship between transportation and beliefs and attitudes).

How do these findings advance our understanding of entertainment education effects produced by involvement with a specific character and transportation into the narrative more generally? First, our analyses suggest that, although these constructs may be correlated, they do not entirely overlap. Rather, our results hint that transportation into the narrative may be more likely to sway attitudes, whereas involvement with a specific character may be superior with respect to knowledge acquisition. Of course, this is speculative and this particular pattern may not hold up with other narratives and audiences. Second, because the current study involves regular viewers' reactions to an episode of one of their favorite prime time programs, it may provide accurate insights into the processes that fans or more invested individuals undergo when watching a narrative. This speaks to Slater and Rouner's (2002) call for further investigations into the effects of ongoing relationships that audience members form with beloved characters in their preferred programs, as opposed to the reactions to novel characters and narratives employed in many lab-based studies. Third, this work provides empirical support to claims that entertainment programming can play a role in international diplomacy by shaping viewers' attitudes and actions with respect to a foreign country.

Limitations and Implications for Public Diplomacy

While this work represents another step forward in the understanding of entertainment education effects and its impact in terms of public diplomacy, there are limitations that must be acknowledged. Because we were concerned about potential survey fatigue, we did not include certain items that could have added further depth and insight to the study. For

example, we were unable to include other measures of character involvement, such as those recommended by Cohen (2001). Also, the present study examined impacts from a single episode of an entertainment program rather than an entire serial (see Singhal & Rogers, 1994; 1999). Only regular viewers of *Law & Order: SVU* were invited to participate in this study. Non-regular viewers who saw the same storyline may have showed a different pattern of effects due to lower levels of involvement and transportation. On a related note, we did not control for variables such as strength of feelings about the show *Law & Order: SVU*, or prior knowledge about the Congo. And although the sample was initially recruited using a random procedure by the research firm, there was self-selection in both who viewed the episode and who agreed to participate in the survey. It may be the case that individuals who were more involved in the storyline were more likely to participate in the survey (although our data show a wide distribution on the transportation and involvement with Nardelie variables). Additionally, although an attempt was made to collect both pretest and posttest data of the same respondents in order to measure change at the individual level, attempts to retest a sufficient number of pretest respondents after the show aired were unsuccessful. Moreover, since involvement and transportation could only be measured after the storyline aired, we cannot shed any light on the ongoing debate regarding the causal and temporal relationships between identification and transportation (see Murphy et al., 2011, for a review of this debate). Finally, we measured only behavioral intent vis-à-vis support for institutions and funding priorities and goals for communication. While intent has been found to be highly predictive of future behavior (Armitage & Conner, 2001; Sutton, 1998; Ajzen, 1991), it is still an imperfect proxy.

Thus, future research that uses a pre-test post-test design, controls for prior knowledge, and measures behavior as opposed to behavioral intent would provide a superior test of a narrative's influence. Moreover, the present research examined the impact of a single episode. As Slater and Rouner (2002) note, additional research is needed to understand the effects of serial programming. Furthermore, this study focused on the impact of a specific storyline about a specific country, namely the Democratic Republic of Congo. Obviously, we must use caution in extrapolation as these results may heavily depend on both the country and the topic (e.g., rape and conflict minerals). For instance, it may be much harder to change viewers' opinions regarding an issue or area of the world they are more familiar with. Finally, we agree with Moyer-Gusé's (2008) suggestion that further research is needed to fully evaluate the ways in which cognitive processes (particularly narrative involvement and identification with characters) produce entertainment education effects.

Despite these potential shortcomings, our findings do suggest that entertainment media can play a part in shaping viewers' perceptions of foreign countries, their people and their problems. We hope that these constructs' (e.g., involvement with a specific character and transportation into a narrative more generally) potential to sway audiences with respect to public policy and diplomacy-related issues serve as both encouragement and as a warning. Careless manipulation of these constructs could result in increased support for aid to a country or region in the short term, at the cost of long-term stigma (i.e., the perception that

the Congo is lawless and hopeless). Overuse of such storylines could also lead viewers to experience desensitization to the plight of others, or even provoke the opposite of the desired effect, such as decreased public support for humanitarian aid.

Moreover, these findings may shed some light on why studies examining the impact of imported or cross-border television have revealed only weak, positive correlations between exposure to foreign television on domestic viewers' knowledge, attitudes, beliefs and behaviors (see a meta-analysis of 27 studies by Elasmr and Hunter, 2003, for a review). It may be the case that exposure to foreign programming is too blunt a measure to accurately predict influence. Our results suggest that knowing an individual's level of involvement with both the characters depicted and with the narrative more generally may provide a better predictor of impact.

These results also have direct relevance to public diplomacy. Elasmr (2008) showed a direct and positive correlation between consumption of U.S. entertainment media and Muslim's attitudes toward the United States and their support for the U.S. led war on terror. Similarly, U.S. diplomatic cables from Saudi Arabia observed that consumption of U.S. entertainment media fueled locals' appreciation of Western culture (Booth, 2010). These results could be used to further sensitize media producers to the power and potential unintended consequences of their fictional depictions.

Obviously, these results could also be used in order to craft negative or inaccurate characterizations of other cultures. One way to mitigate negative outcomes might be to pair compelling storylines with an interactive component. This approach has already been appropriated in certain public diplomacy circles. According to Nye (2010), "the evolution of public diplomacy from one-way communications to a two-way dialogue treats publics as co-creators of meaning and communication" (paragraph 14). Providing multimedia spaces⁵ for viewers to "connect, create, collaborate, and circulate" (Felt, Vartabedian, Literat, & Mehta, 2012) – in other words, to actively engage with material and one another – may reduce the impact of inaccurate portrayals and propaganda. Voluntary fact-checkers may help audiences to distinguish between truth and fiction, and compel producers to renounce unsubstantiated claims, as in bloggers' successful 2004 challenge to CBS News/Dan Rather (Gillmor, 2006, p. xiv). Individuals' engagement with accurate, productive storylines is also valuable, as participation enriches learning outcomes (Jenkins, Purushotma, Clinton, Weigel, & Robison, 2006) and interpersonal communication regarding a narrative magnifies entertainment education effects (Chatterjee, Bhanot, Frank, Murphy, & Power, 2009). Finally, in addition to the careful construction and prudent use of narratives for public diplomacy purposes, it is essential to reserve a seat at the storytelling table for the citizens themselves, so that they may tell their own tales.

REFERENCES

- Appel, M. & Richter, T. (2007). Persuasive effects of fictional narratives increase over time. *Media Psychology, 10*, 113-134.

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Armitage, C.J. & Conner, M. (2001). Efficacy of the Theory of Planned Behaviour: A meta-analytic review. *British Journal of Social Psychology*, 40, 471-499.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (2002). Social cognitive theory of mass communication. In J. Bryant & D. Zillman (Eds.), *Media Effects: Advances in Theory and Research* (2nd ed.) (pp 121-153). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Bandura, A. (2004). Social cognitive theory for personal and social change by enabling media. In A. Singhal, M. J. Cody, E. M., Rogers, & M. Sabido (Eds.), *Entertainment-education and social change: History, research, and practice* (pp. 75-96). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Basil, M.D. (1996). Identification as a mediator of celebrity effects. *Journal of Broadcasting & Electronic Media*, 40, 478-495.
- BBC News. (2006, March 16). Entertainment 'key' to BBC future. *BBC News*. Retrieved from http://news.bbc.co.uk/2/hi/uk_news/4804044.stm.
- Booth, R. (2010, December 7). WikiLeaks cables: Jihad? Sorry, I don't want to miss *Desperate Housewives*. *The Guardian*, Retrieved from <http://www.guardian.co.uk/world/2010/dec/07/wikileaks-cables-letterman-housewives-saudi>.
- Bouman, M. (2004). Entertainment-education television drama in the Netherlands. In Singhal, A., Cody, M.J., Rogers, E.M., & Sabido, M. (Eds.), *Entertainment education and social change: History, research, and practice* (pp. 225-242). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Brodie, M., Foehr, U., Rideout, V., Baer, N., Miller, C., Flournoy, R., & Altman, D. (2001). Communicating health information through the entertainment media: A study of the television drama *ER* lends support to the notion that Americans pick up information while being entertained. *Health Affairs*, 20, 192-199.
- Brown, J.D., & Walsh-Childers, K. (2002). Effects of media on personal and public health. In J. Bryant and D. Zillman (Eds.), *Media effects: Advanced in theory and research* (pp. 453-488). Mahwah, NJ: Lawrence Erlbaum Associates.
- Chatterjee, J.S., Bhanot, A., Frank, L.B., Murphy, S.T. & Power, G. (2009). The importance of interpersonal discussion and self-efficacy in knowledge, attitude, and practice models. *International Journal of Communication*, 3, 607-634.
- Cohen, J. (2001). Defining identification: A theoretical look at the identification of audiences with media characters. *Mass Communication & Society*, 4, 245-264.
- Cohen, J. (2006). Audience identification with media characters. In J. Bryant & P. Vorderer (Eds.), *Psychology of Entertainment* (pp. 183-197). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Collins, R.L., Elliott, M.N., Berry, S.H., Kanouse, D.E., & Hunter, S.B. (2003). Entertainment television as health sex educator: The impact of condom efficacy information in an episode of *Friends*. *Pediatrics*, 112(5), 1115-1121.
- Cowan, G. & Cull, N.J. (2008). Public diplomacy in a changing world. *The ANNALS of the American Academy of Political and Social Science*, 616(1). 6-8, doi:10.1177/0002716207312143.

- Cull, N.J. (2008). Public diplomacy: Taxonomies and histories. *The ANNALS of the American Academy of Political and Social Science*, 616(1), 31-54.
- Cull, N.J. (2010). *What is public diplomacy?* Retrieved August 29, 2010, from http://uscpublicdiplomacy.org/index.php/about/what_is_pd.
- Dale, H. (2009). Public diplomacy 2.0: Where the U.S. government meets “new media.” Retrieved from <http://www.heritage.org/Research/Reports/2009/12/Public-Diplomacy-2-0-Where-the-US-Government-Meets-New-Media>.
- Derzon, J. H. & Lipsey, M. W. (2002). A meta-analysis of the effectiveness of mass communication for changing substance-use knowledge, attitudes, and behavior. In W. D. Crano & M. Burgoon (Eds.), *Mass media and drug prevention: Classic and contemporary theories and research* (pp. 231–258). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Eisenstock, B. (1984). Sex-role differences in children’s identification with counterstereotypical televised portrayals. *Sex Roles*, 10, 5/6.
- Elasmar, M.G. & Hunter, J.E. (2003). A meta-analysis of cross-border effect studies. In M.G. Elasmar (Ed.), *The Impact of International Television: A Paradigm Shift*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Elasmar, M.G. (2008). *Through Their Eyes: Factors Affecting Muslim Support for the U.S.-led War on Terror*. Spokane, WA: Marquette Books.
- Epstein, S. & Pacini, R. (1999). Some basic issues regarding dual-process theories from the perspective of cognitive-experiential self-theory. In S. Chaiken & Y. Trope (Eds.), *Dual Process Theories in Social Psychology* (pp. 462-482). New York: The Guilford Press.
- Eyal, K., & Rubin, A.M. (2003). Viewer aggression and homophily, identification, and parasocial relationships with television characters. *Journal of Broadcasting & Electronic Media*, 47, 77–98.
- Felt, L.J., Vartabedian, V., Literat, I. & Mehta, R. (2012). Explore Locally, Excel Digitally: A Participatory Learning After-school Program for Enriching Citizenship On- and Offline. *Journal of Media Literacy Education*, 4(3), 213-228.
- Fisher, W. (1987). *Human Communication as Narration: Toward a Philosophy of Reason, Value, and Action*. Columbia, SC: University of South Carolina Press.
- Giles, D.C. (2002). Parasocial interaction: A review of the literature and a model for future research. *Media Psychology*, 4, 279-305.
- Gillmor, D. (2006). *We the Media: Grassroots Journalism By the People, For the People*. Sebastopol, CA: O’Reilly Media, Inc.
- Goonasekara, A. (1987). The influence of television on cultural values – with special reference to Third World countries. *Media Asia*, 14, 7-12.
- Green, M. C. (2004). Transportation into narrative works: The role of prior knowledge and perceived realism. *Discourse Processes*, 38(2), 247-266.
- Green, M. C. (2006). Narratives and cancer communication. *Journal of Communication*, 56 (Suppl 1), S163-S183.
- Green, M.C. & Brock, T.C. (2000). The role of transportation in the persuasiveness of public narratives. *Journal of Personality and Social Psychology*, 79(5), 701-721.
- Green, M. C., & Brock, T. C. (2002). In the mind’s eye: Imagery and transportation into narrative worlds. In M. C. Green, T. C. Brock, & J. J. Strange (Eds.), *Narrative impact: Social and cognitive foundations* (pp. 315-341). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc..

- Green, M.C., Brock, T.C., & Kaufman, G.F. (2004). Understanding media enjoyment: the role of transportation into narrative worlds. *Communication Theory Special Issue: Media Enjoyment*, 14(4), 311-327.
- Greenberg, B.S., Salmon, C.T., Patel, D., Beck V., & Cole, G. (2004). Evolution of an E-E research agenda. In A. Singhal, M.J. Cody, E.M. Rogers, & M. Sabido (Eds.) *Entertainment education and Social Change: History, Research, and Practice* (pp. 191-206). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Hether, H.J., Huang, G., Beck, V., Murphy, S.T., & Valente, T.W. (2008). Entertainment-education in a media-saturated environment: Examining the impact of single and multiple exposure to breast cancer storylines on two popular medical dramas. *Journal of Health Communication*, 13(8), 808-823.
- Hoffner, C. (1996). Children's wishful identification and parasocial interaction with favorite television characters. *Journal of Broadcasting & Electronic Media*, 40, 389-402.
- Hoffner, C. & Buchanan, M. (2005). Young adults' wishful identification with television characters: The role of perceived similarity and character attributes. *Media Psychology*, 7(4), 325-351.
- Horton, D. & Wohl, R.R. (1956). Mass communication and parasocial interaction: Observations on intimacy at a distance. *Psychiatry*, 19, 215-229.
- Jenkins, H., Purushotma, R., Clinton, K., Weigel, M., & A.J. Robison. (2006). *Confronting the challenges of participatory culture: Media education for the 21st century*. Chicago: The John D. and Catherine T. MacArthur Foundation.
- Keller, S. N. & Brown, J.D. (2002). Media interventions to promote responsible sexual behavior. *Journal of Sex Research*, 39(1), 67-92.
- Kennedy, M.G., O'Leary, A., Beck, V., Pollard, K., Simpson, P. (2004, June). Increases in calls to the CDC National STD and AIDS hotline following AIDS-related episodes in a soap opera. *Journal of Communication*, 287-301.
- Lang, A. (2000). The limited capacity model of mediated message processing. *Journal of Communication*, 50, 46-70.
- Lee, B., Salmon, C.T. & Witte, K. (2005, May). *The Effectiveness of entertainment-education as media health campaigns: The Effects of entertainment narrative and identification on HIV/AIDS preventive behavior*. Paper presented at the annual meeting of the International Communication Association, Sheraton New York, New York City.
- Liebes, T. & Katz, E. (1990). *The export of meaning: Cross-cultural readings of "Dallas."* New York: Oxford University Press.
- Maccoby, E.E. & Wilson, W.C. (1957). Identification and observational learning from films. *Journal of Abnormal Social Psychology*, 55, 76-87.
- McPherson, M., Smith-Lovin, L. & Cook, J.M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27, 415-444.
- Moyer-Gusé, E. (2008). Toward a theory of entertainment persuasion: Explaining the persuasive effects of entertainment education messages. *Communication Theory*, 18, 407-425.
- Murphy, S.T., Frank, L.B., Moran, M., & Woodley, P. (2011). Involved, transported or emotional? Exploring the determinants of change in knowledge, attitudes, and behavior, in entertainment education. *Journal of Communication*.
- Murphy, S. T., Hether, H. J., Huang, G. & Beck, V. (2006, May). *An analysis of health content in popular primetime television programs*. Paper presented at the International Association of Communication Annual Conference, Dresden, Germany.

- Noar, S.M. (2006). A 10-year retrospective of research in health mass media campaigns: Where do we go from here? *Journal of Health Communication*, 11(1), 21-42.
- Nye, J.S. (2008). Public diplomacy and soft power. *The ANNALS of the American Academy of Political and Social Science*, 616(1), 94-109, doi:10.1177/0002716207311699
- Nye, J.S. (2010, 10 February). The new public diplomacy. *Project Syndicate*. Retrieved from <http://www.project-syndicate.org/commentary/nye79/English>.
- Petty, R.E. & Cacioppo, J.T. (1986). The elaboration likelihood model of persuasion. *Advances in Experimental Social Psychology*, 19, 123-205.
- Poindexter, D.O. (2004). A History of Entertainment-Education, 1958-2000. In Singhal, A., Cody, M.J., Rogers, E.M., & Sabido, M. (Eds.), *Entertainment education and social change: History, research, and practice* (pp. 21-37). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Preston, M. Insua M.G. & Ciolek, M. (2010, Summer). *Public Diplomacy Magazine*, 4. Retrieved from <http://publicdiplomacymagazine.com/pd-by-the-numbers/>.
- Samuels, T., Mollentz, J., Olusanya, R., Claassens, M., Braehmenr, S. & Kimmie, Z. (2000). An Evaluation of *Soul City* 4. Community Agency for Social Enquiry (CASE).
- Schank, R. C. & Abelson, R. P. (1995). Knowledge and memory: The real story. *Advances in Social Cognition*, 8, 1-85.
- Sharf, B.F., & Freimuth, V.S. (1993). The construction of illness on entertainment television: coping with cancer on *thirtysomething*. *Health Communication*, 5, 141-160.
- Sharf, B. F., Freimuth, V. S., Greenspan, P., & Plotnick, C. (1996). Confronting cancer on *thirtysomething*: Audience response to health content on entertainment television. *Journal of Health Communication*, 1, 157-172.
- Schiller, H.I. (1969). *Mass Communications and American Empire*. Boston: Beacon Press.
- Singhal, A., Obregon, R. & Rogers, E.M. (1994). Reconstructing the story of *Simplemente Maria*, the most popular *telenovela* in Latin America of all time. *Gazette*, 54, 1-15.
- Singhal, A., Rao, N., & Pant, S. (2006). Entertainment-Education and possibilities for second-order social change. *Journal of Creative Communications*, 1(3), 267-283.
- Singhal, A. & Rogers, E. (1994). Persuasion and planned social change. In E.P. Bettinghaus & M.J. Cody (Eds.), *Persuasive Communication*. 5th edition. New York: Harcourt Brace.
- Singhal, A. & Rogers, E.M. (1999). *Entertainment education: A communication strategy for social change*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Singhal, A., Cody, M.J., Rogers, E.M., Sabido, M. (2004). (Eds.), *Entertainment education and social change: History, research, and practice*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Singhal, A., Usdin, S., Scheepers, E., Goldstein, S. & Japhet, G. (2004). Entertainment-education strategy in development communication. In C. Okigbo & F. Eribo (Eds.), *Development and communication in Africa* (pp. 141-156). Lanham, MD: Rowman & Littlefield.
- Slater, M. D. (1997). Persuasion processes across receiver goals and message genres. *Communication Theory*, 7, 125-148.
- Slater, M. (2002). Entertainment Education and the Persuasive Impact of Narratives. In M. Green, J. Strange, & T. Brock (Eds.), *Narrative Impact: Social and Cognitive Foundations* (pp. 157-182). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Slater, M. D., & Rouner, D. (2002). Entertainment education and elaboration likelihood: Understanding the processing of narrative persuasion. *Communication Theory*, 12, 173-191.
- Slater, M. D., Rouner, D. & Long, M. (2006). Television dramas and support for controversial public policies: Effects and mechanisms. *Journal of Communication*, 56 (2), 235-252.

- Smith, M.J. (2001). Impact of the *Soul City*/NNVAW Partnership on Policy Implementation and Provincial Government. Strategy and Tactics.
- Snyder, L.B. (2001). How effective are mediated health campaigns? In R.F. Rice & C.K. Atkins (Eds.), *Public communication campaigns*, (pp. 181-190). Thousand Oaks, CA: Sage.
- Snyder, L. B. & Hamilton, M. A. (2002). A meta-analysis of U.S. health campaign effects on behavior: Emphasize enforcement, exposure, and new information, and beware the secular trend. In R. C. Hornik (Ed.), *Public health communication: Evidence for behavior change* (pp. 357-384). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Sood, S. (2002). Audience involvement and Entertainment Education. *Communication Theory*, 12, 153-172.
- Sutton, S. (1998). Predicting and explaining intentions and behavior: How well are we doing? *Journal of Applied Social Psychology*, 28(15), 1317-1338.
- Usdin, S., Scheepers, E., Goldstein, S., & Japhet, G. (2005). Achieving social change on gender-based violence: A report on the impact evaluation of *Soul City*'s fourth series. *Social Science & Medicine*, 61, 2434-2445.
- Usdin, S., Singhal, A., Shongwe, T., Goldstein, S. & Shabalala, A. (2004). No short cuts in entertainment-education: Designing *Soul City* step-by-step. In A. Singhal, M.J. Cody, E.M. Rogers & M. Sabido (Eds.), *Entertainment-Education and Social Change History, Research, and Practice* (pp. 153-176). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Valente, T. W., Murphy, S.T., Huang, G., Greene, J., Gusek, J. & Beck, V. (2007). Evaluating a minor storyline on *ER* about teen obesity, hypertension and 5 a day. *Journal of Health Communication*, 12(6), 551-566.
- Wilding, C.M. (2010). International broadcasting. *Public Diplomacy*, 4. Retrieved from <http://publicdiplomacymagazine.com/international-broadcasting-2/>.
- Wilkin, H.A., Valente, T.W., Murphy, S.T., Cody, M.J., Huang, G.C., Beck, V., Alban, M., Bright, M.A. (2007). The effects of a telenovela storyline on breast cancer knowledge and behaviors among Hispanic/Latino audiences. *Journal of Health Communication*, 12(5), 455-469.
- Zimmerman, R.S., Palmgreen, P.M., Noar, S.M., Lustria, M.L.A., Lu, H-Y, & M.L. Horosewski. (2007). Effects of a televised two-city safer sex mass media campaign targeting high-sensation-seeking and impulsive-decision-making young adults. *Health Education & Behavior*, 34, 810-826.

ENDNOTES

1. Although this development is not unreservedly celebrated, as governments now must negotiate the challenge of respecting free speech while protecting the integrity of national image and testimony (Dale, 2009).
2. It is important to note, however, that although many mass media health campaigns, particularly early ventures, have delivered insignificant results (Flay & Sobel, 1983; Rogers & Storey, 1987), well designed initiatives can be effective (Snyder, 2001; Hornik, 2002). For example, a formative research-enriched campaign utilizing targeted public service announcements delivered a 13% success rate in terms of motivating condom use (Zimmerman, Palmgreen, Noar, Lustria, Lu, & Horosewski, 2007).
3. This situation is complicated further by researchers who combine some of the elements mentioned above but not others. For example, definitions stemming from Bandura's (1977, 1986, 2004) social cognitive theory treat identification as consisting of perceived similarity to a character, liking a character, and wanting to be like a character. Hoffner and Buchanan (2005), however, take issue with the conflation of perceived similarity

and liking with identification, noting they are “related but distinct” concepts (p. 326). These researchers argue that while wishful identification, or wanting to be like a character, is a valid way to conceptualize identification, perceived similarity and liking are not. Eyal and Rubin (2003) contend that wishful identification is valid while perceived similarity is not. In contrast, Slater and Rouner (2002, p. 178) include both similarity and parasocial interaction, the pseudorelationship that can form between an audience member and performer (Horton & Wohl, 1956), in their definition of identification as a process “in which an individual perceives another person as similar or at least as a person with whom they might have a social relationship” (p. 178). Cohen (2001) defines identification as “a mechanism through which audience members experience reception and interpretation of the text from the inside, as if the events were happening to them” (p. 245). This conceptualization of identification transcends liking, similarity, and homophily (MacPherson, Smith-Lovin & Cook, 2001). According to Cohen (2006), when a viewer identifies with a character they view the events happening to the character as if they were happening to them. Consequently, in Cohen’s (2006) view, constructs thought to be antecedents of identification, such as perceived similarity and liking, need to be sufficiently high in order for identification to occur, but do not constitute identification in and of themselves.

4. For example, is the potential for identification with a peripheral or cameo character (in the case of the episode in question, Nardelie), by definition, lesser than the potential for identification with a principal character (Detectives Stabler or Benson, or Assistant District Attorney Cabot)?

5. It should be noted, however, that the conceptual relationship between identification or involvement with a character and the construct of transportation is murky. For example, Slater and Rouner (2002) understand identification as a combination of perceived similarity and liking whereas transportation involves engagement or absorption. They note that if an audience member’s motivations for viewing include vicarious social relationships and experiences, then identification could predict transportation. However, Slater and Rouner (2002) also argue that identification may actually be an outcome of transportation, stemming from emotional involvement with a character, which is an effect of absorption (Slater & Rouner, 2002). Cohen (2006), in contrast, conceives of identification as involving a loss of awareness as an audience member and an entrance into the fictional world of the characters. When identification is conceptualized in this way, it becomes increasingly difficult to differentiate it from transportation. Cohen (2006) acknowledges the complex relationship between these two constructs noting that identification could both precede and come after transportation. In other words, while viewers are more likely to become absorbed in the worlds of characters they care about, identification may be impossible without a reduction of distance between the viewer and the narrative more generally (Cohen, 2006). Green has likewise grappled with the temporal order between these constructs suggesting both that identification is a possible outcome of transportation and that transportation may be a necessary condition for involvement with characters to occur (Green, 2006; Green, Brock & Kaufman, 2004). In sum, it has been argued by different researchers that involvement with a character may be an antecedent to transportation (Cohen, 2001; Green et al., 2004; Slater & Rouner, 2002), an outcome of transportation (Cohen, 2001; Green, 2004; Slater & Rouner, 2002), or a component of transportation (Sood, 2002).

Definitions of involvement with characters that conceptualize it as entering the world of a character and experiencing things from his or her point of view are more in line with what is traditionally thought of as transportation; the main difference being that transportation occurs when an audience member is absorbed into *a general narrative* and involvement occurs when an audience member is engaged in *a particular character’s narrative*. Transportation, in other words, is not character specific, whereas involvement with a character is.

⁶Hollywood Health & Society embraces this opportunity by supporting the diffusion of accurate health formation across a variety of media—Facebook, Twitter, blogs, websites of both TV shows and credible health institutions—and, crucially, linking everything together via the context of a television show and its ability to move viewers emotionally.

BEYOND SIMPLE HEDONISM: PREDICTING ENTERTAINMENT PREFERENCE AS A FUNCTION OF DISCRETE AFFECTIVE STATES

JINHEE KIM

This study examines how sadness and anger distinctly influence the formation of entertainment preference. Both affective states represent the same negative valence, yet discrete emotion perspectives predict that their different cognitive origins, appraisal determinants, and action readiness may not lead individuals to form similar entertainment preferences as valence-focused views of emotion predict. To examine this possibility, an experiment was conducted in which sad, angry, and neutral feelings were manipulated and preferences for four entertainment genres (i.e., sad life drama, action, comedy, and game show) were measured. Results suggest that sadness in particular plays a distinct role in forming entertainment preference. Specifically, individuals in the sad condition preferred comedies and sad life dramas over the two alternative genres, whereas individuals in the angry condition preferred comedies alone over the three alternative genres. Results are discussed in terms of the importance of considering discrete affective states elicited from close relationships and different cognitive appraisal dimensions underlying the same discrete affective state to predict entertainment consumption precisely.

Keywords: selective exposure, mood management, discrete emotion, coping, entertainment preference

Current media environments characterized by easy and immediate access to enormous entertainment offerings provide media consumers with an unprecedented number of selections. Along with this increased choice, media scholars have explored numerous

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variables that determine individuals' entertainment selections and/or enjoyment. Among the variables, transient affective states (vs. enduring personality traits) have been recognized as an important predictor of the entertainment selections made by individuals at different times. The majority of the entertainment literature conceptualizes these affective states in terms of their "valence." For example, Zillmann's mood-management theory (Zillmann, 1988; Zillmann & Bryant, 1985) predicts viewers' entertainment selections as a function of prevailing "positive," "negative," or "neutral" affective states and claims that hedonic motives (i.e., seeking pleasure over pain) constitute a vital driving force in determining these selections.

Reflecting valence-focused views of emotion, Zillmann's scholarship provides parsimonious explanations for the role of affect in predicting entertainment selections. Specifically, his explanations assume somewhat one-dimensional hedonic motives in which viewers in negative affect states are motivated to escape from the unpleasant situations by making either distracting or entertaining media selections. If this is the case, then, why do some viewers select negatively valenced content (e.g., aggression-laden or sadness-evoking media content) particularly when they are experiencing negative affective states? These selections are puzzling because they may not allow viewers to escape from prevailing negative states. Rather, such selections may exacerbate distressing situations. Consequently, valence views of emotion may not provide adequate theoretical explanations regarding these counter-hedonic selections and their underlying motives.

With these potential flaws of the valence views in mind, discrete emotion perspectives may strengthen the predictive power of entertainment choices by differentiating specific types of affective states within the same valence (e.g., sadness, anger, anxiety, regret, etc.) that may lead to these counter-hedonic media selections. That is, the valence perspectives would claim that viewers experiencing specific negative affective states (whatever the specific negative state) choose the similar entertainment genres that fulfill their hedonic motives. The discrete emotion perspectives, however, would claim that viewers experiencing specific negative affective states may choose different entertainment genres (including negatively valenced ones) that fulfill distinct motives primed by each of the specific negative states, acknowledging the multi-faceted nature of motives that cannot always be equated with hedonic motives (e.g., Raghunathan & Corfman, 2004; Raghunathan & Pham, 1999).

The present study treats different negative affective states, such as sadness and anger, as discrete and examines each state's underlying cognitive meaning structures to more precisely predict entertainment choices. The study first identifies the distinct goals that each discrete state triggers, and then presents specific entertainment genres that are structurally similar to these respective salient goals. It is expected that the discrete perspectives will allow us to expand the one-dimensional hedonic motives in an entertainment-consumption context by identifying other types of motivations that go beyond or even contradict pleasure-seeking.

RE-CONCEPTUALIZING NEGATIVE AFFECT: FROM VALENCE TO DISCRETE STATE

Most prior studies that examine the role of affect in predicting entertainment choices employ Zillmann's mood-management theory that reflects the valence perspectives. Therefore, they conceptualize the viewer's prevailing affective state as either globally positive or globally negative. The valence-focused conceptualization leads to two types of operationalization. First, one type of negative affect (e.g., anger) which is often manipulated is considered to be a global negative affect (e.g., Biswas, Riffe, & Zillmann, 1994). Second, different types of negative affects (e.g., depression, anxiety, irritation) which are often measured are lumped together as constituting a global negative affect (e.g., Meadowcroft & Zillmann, 1987).

Based on the valence-focused conceptualization and operationalizations, Zillmann's theory claims that viewers experiencing negative feelings are motivated to terminate negative feelings and maximize positive feelings. The theory further identified several characteristics of media messages that ultimately fulfill viewers' escape and/or diversionary desires. They include positive (vs. negative) hedonic value, strong cognitive-intervention (vs. monotonous) potential, and little (vs. strong) semantic affinity with the sources of prevailing negative feelings (Zillmann, 1988; Zillmann & Bryant, 1985). For example, research has shown that individuals experiencing negative moods are more likely than those experiencing positive moods to opt for media messages that present pleasant values with little semantic affinity, such as novel comedies (Meadowcroft & Zillmann, 1987) or energetic/joyful music (Knobloch & Zillmann, 2002).

Although hedonic motivations may be prevalent in an entertainment consumption context, other types of motivations may also be plausible. For example, it is common for viewers to choose entertainment content that includes strong semantic affinity (e.g., message topics that remind viewers of their negative experience) or a negative hedonic value (e.g., sadness-evoking content). In order to explore these possibilities, recent relevant literature has started looking at specific affective states instead of global ones in order to strengthen the predictive power of entertainment selections. For example, a recent study (Nabi, Finnerty, Domschke, & Hull, 2006) treated regret as a discrete emotion and reported that viewers experiencing regret resulting from cheating on their partner chose media content featuring cheating-related storylines. The authors interpreted this finding as suggesting that although the negative experience-related storylines may not allow the viewers to escape from a given distressful situation, stories with high semantic affinity may provide viewers with information value and insight that ultimately help alleviate their regret. Similarly, Oliver (2008) conceptualized tenderness as a specific affect and reported that viewers experiencing tenderness (e.g., warmth, sympathy, or understanding) selected sadness-evoking media content (e.g., sad life dramas). The author claims that such selection also allows viewers to experience a sense of meaningfulness by contemplating the joys and sorrows of human life,

though this type of entertainment genre has a negative hedonic value.

In line with these discrete affect views, the present study focuses on sadness and anger as two discrete states and directly compares them to test whether these specific negative states are likely to yield distinct entertainment preferences. Specifically, do sadness and anger each prime distinct motive that is different from hedonism? If so, what are they? In order to predict these motives, the next section addresses the notion of functional matching motivations relevant to sadness and anger respectively.

PREDICTING DISCRETE AFFECT-BASED ENTERTAINMENT PREFERENCE: EXPLORING PLAUSIBLE MECHANISMS

Predicting functional matching motives. Although both anger and sadness can be subsumed as common and basic negative affect states, the discrete emotion perspectives conceptualize each of them as a distinct state. The kinds of life events that are likely to induce these states are different. Sadness is elicited from an irrevocable loss of or separation from valuable people or resources under circumstances that the person is unable to control (Barr-Zisowitz, 2000; Lazarus, 1991). In contrast, anger is elicited when a person experiences demeaning offense or injustice produced by a blameworthy target object (Averill, 1983; Lazarus, 1991). In addition to these core meanings, cognitive appraisal theories of emotion suggest that among various cognitive appraisal dimensions that determine discrete affect states, judgments about causal agency are crucial to differentiating sadness and anger (Lazarus, 1991; Ortony, Collins, & Clore, 1988; Roseman, 1991; Smith & Ellsworth, 1985). Specifically, sadness arises when the causal agency is attributed to impersonal/situational responsibility, increasing a sense of uncontrollability over the situation. In contrast, anger arises when the causal agency is attributed to the target person's responsibility/control, increasing a sense of changeability over the situation. Finally, these different appraisals also elicit different states of action readiness (Frijda, Kuipers, & Schure, 1989). Specifically, sadness with its accompanying sense of helplessness and lack of control may signal withdrawal and inactivity. In contrast, anger with its appraisal of unfairness and attribution of responsibility to a blamable target person may signal an antagonistic tendency and the potential for moving against the target agency.

With these clear differences in cognitive origins, appraisal determinants, and felt action readiness across sadness and anger in mind, the present study focuses on predicting distinct matching motives in regard to regulating sadness and anger via entertainment choices that may trump hedonic motives. The nature of motivations primed by the two states can be inferred from functional emotion theories that are based on psychoevolutionary perspectives (Darwin, 1872/1965). According to such theories, an individual's response to any given negative discrete emotion is ultimately adapted to fighting that emotion (Frijda, 1986; Plutchik, 1980; Smith & Lazarus, 1990). Indeed, Roseman, Wiest, and Swartz (1994) argued that sadness and anger trigger each of adaptive emotional goals that help individuals

survive and thrive. Specifically, individuals experiencing anger are motivated to be verbally, even physically, aggressive toward the target person who violates social norms, whereas individuals experiencing sadness are motivated to be nurtured and recover a lost or separated loved one through alternative means. These distinct motivations, then, are important to survival in their own ways, though they may not guarantee pleasant experiences at least in an immediate situation or a short-term period.

If this reasoning is correct in the context of selective exposure to entertainment genres, the following predictions are plausible. Anger would motivate us to seek entertainment stimuli that fulfill the goal of retaliating against provokers, whereas sadness would motivate us to seek entertainment stimuli that fulfill the goal of substituting for the lost or separated one alternatively through a rewarding experience and/or a sense of being nurtured. In sum, anger and sadness represent the same negative valence, yet each is characterized by unique cognition properties that may prime distinct matching motives for regulating each of them. Therefore, individuals may form distinct patterns of entertainment preference based on the particular affective state rather than solely based on the valence (see also Izard & Ackerman, 2000).

Predicting plausible entertainment genres. Which type of entertainment genre(s) is capable of fulfilling these distinct matching motives to regulate sadness and anger respectively? The present research predicts that viewers experiencing anger will choose action movies because their action-packed scenes and vengeance-related narratives may match well with such viewers' desire to retaliate against the provoker and restore a sense of ego identity as well as virtues of justice. This prediction is also consistent with previous relevant literature, which reported that when manipulated affect states are akin to anger, individuals prefer reading bad news (e.g., terror) or viewing aggression-laden videos (see Biswas et al., 1994; Knobloch-Westerwick & Alter, 2006; O'Neal & Taylor, 1989). Furthermore, angry viewers' anticipated "identification" processes with leading protagonists (see Cohen, 2006) who are often characterized by anger (e.g., those who are motivated to restore social justice) may facilitate the selection of action movies. The perceived psychological similarity between viewers and protagonists in their attitudes, feelings, and thoughts may justify viewers' angry feelings and expression of them.

Similarly, viewers experiencing sadness will choose sad life dramas because their inactive tone and thought-provoking narratives may match well with such viewers' desire to withdraw themselves, think about the lost/separated loved one, and so acquire alternative substitutions (e.g., renewed values and meanings). In support of this idea, recent theoretical development in coping theory pertaining to loss and bereavement (e.g., Folkman, 2001; Nolen-Hoeksema & Larson, 1999) further acknowledges that sad individuals involve sense-making (e.g., causal thinking such as "Why does this happen to me?") and value-creating (e.g., drawing benefits from sad events such as "It made me have a new appreciation for life") processes. Through such meaning-based coping, individuals recognize the vulnerabilities of human life, accept sad events as a significant part of life, and regain a sense

of control over life. Then, sad life dramas may aid these coping processes because, in addition to sadness, they portray the vicissitudes of human life and deliver profound, meaningful, and inspiring life lessons (Greenwood, 2010; Oliver, 2008). Furthermore, sad viewers' anticipated downward social comparison (Wills, 1981) with unfortunate leading protagonists may facilitate the selection of sad life dramas. By comparing their situations with those (often worse ones) of the protagonists, sad viewers may be able to facilitate cognitive transforming processes and restore their self-esteem (e.g., "My problem is not the worst possible"). With these cognitive benefits, sad viewers may ultimately experience solace or comfort, not necessarily pleasure (see also Gibson, Aust, & Zillmann, 2000; Knobloch & Zillmann, 2003; Mares & Cantor, 1992).

RESEARCH HYPOTHESES

The present research compares valence-focused views of emotion that predict hedonic motives with discrete emotion views that predict functional matching motives (e.g., Izard & Ackerman, 2000) to determine which entertainment genres match sadness regulation and anger regulation respectively. If the valence views (particularly Zillmann's theory) are correct, (a) individuals in a sad condition and individuals in an angry condition will form *similar* entertainment preferences for each of the genres provided and (b) their preference estimates for certain genres that fulfill hedonic movies will be higher than those of individuals in a neutral condition. Several message characteristics would fulfill the hedonic motives. First, the messages should not remind individuals of sad- or angry-related experiences respectively (i.e., low semantic affinity). Second, the messages should present a positive hedonic value (e.g., joyful comedy) and/or strong cognitive-intervention potential (e.g., playoff quiz show). It is expected that humor (here, non-hostile one) will increase tolerance for both sadness and anger (Zillmann, 2000). Similarly, cognitively demanding quizzes are expected to effectively disrupt the cognitive rehearsals that keep intruding individuals by reminding them of sad events and angry events (see Bryant & Zillmann, 1977). The distinction between comedies and game shows allows us to consider the possibility that humor has a unique effect that could be either compatible or incompatible with sadness regulation or anger regulation. With the valence views and Zillmann's theory in particular in mind, the following hypothesis was drawn:

H1: Individuals in a sad condition and individuals in an angry condition will be more likely than individuals in a neutral condition to prefer entertainment genres that present positive hedonic value (e.g., comedies) and/or strong absorbing potential (e.g., game shows).

On the other hand, if the discrete views are correct, viewers in an angry condition and viewers in a sad condition will choose *different* entertainment genres that fulfill functional matching motives primed by each of the two discrete states. Specifically, anger motivates

us to confront and/or retaliate against the provoker who has violated social norms and threatened our ego identity. Therefore, action-packed entertainment genres likely to have vengeance-related topics (e.g., action movies) may fulfill such desires. In contrast, sadness motivates us to involve sense- and meaning-making processes and seek comforting and rewarding experiences. Therefore, entertainment genres that present profound life lessons and emotional nurturance (e.g., sad life dramas) may fulfill such needs. With these discrete views in mind, the following hypotheses were drawn:

H2: Individuals in an angry condition will be more likely than individuals in a sad condition or in a neutral condition to prefer entertainment genres that present action-packed and retaliation-type scenes (e.g., action movies).

H3: Individuals in a sad condition will be more likely than individuals in an angry condition or in a neutral condition to prefer entertainment genres that present cognitive gains and emotional rewards (e.g., sad life dramas).

METHODS

Overview

A three (Affect: Sad, Angry, or Neutral) X four (Genre: Sad Drama, Action, Comedy, or Game Show) mixed-design experiment was conducted to examine entertainment preferences as a function of viewers' discrete negative states. The participants' gender was not included as another between-subjects factor because examination of gender differences was not a main goal of the study. Instead, gender was used as a covariate to increase the power of test significance. The initial inclusion of gender as another independent variable showed that it did not interact with the manipulated affect states for the preferences. However, gender significantly influenced the preference for the four genres. Consistent with the previous literature (for review Oliver, 2000), females showed a significantly stronger preference for sad life dramas than did males and males showed a significantly stronger preference for action movies than did females; however, both of them showed an equal preference for comedies and game shows (statistical information involving the gender variable is available upon request from the author).

Participants

One-hundred fifty undergraduate students (43 males and 107 females) from a large Northeastern university in the U.S. participated in the present study in exchange for extra credit for their courses. Participants' ages ranged from 18 to 42 ($M=20.71$, $SD=2.46$).

Manipulation of Discrete Affective States

The three discrete affective states were manipulated using two different hypothetical scenarios (or vignettes) per each state, resulting in a total of six scenarios. For the two scenarios designed to manipulate sadness, participants were asked to read/think about either (a) an inevitable separation from a close campus friend due to his or her mother's serious illness or (b) an unavoidable separation from a trusted boyfriend or girlfriend who has taken a job in another state. For the two scenarios designed to manipulate anger, participants were asked to read/think about either (a) receiving an unfair grade from a teaching assistant or (b) having a conflict with a roommate due to his or her inconsiderate behavior. Finally, for the two scenarios designed to manipulate neutral feelings—defined as not too cheerful and not too depressed—participants were asked to read/think about daily routines, such as grocery shopping or doing laundry. These scenarios were adapted in part from other studies that employed similar manipulation procedures (Keltner, Ellsworth, & Edwards, 1993; Rivers, 2005; Rusting & Nolen-Hoeksema, 1998)

Pre-testing the scenarios. These six scenarios were pre-tested to ensure that the intended specific affective states and similar comprehension levels would prevail across the three conditions. A total of 185 undergraduate students (79 males, 105 females, and one unreported) participated in this pre-test as a part of a large questionnaire designed for another study. One of the six scenarios was randomly presented with a series of feeling adjectives to each participant. After reading the assigned scenario without involving a writing task, participants were asked to indicate the extent to which they felt “sad,” “angry,” “ordinary,” “ashamed,” “fearful,” or “guilty” using a 7-point Likert-type scale ranging from one (*Not At All*) to seven (*Very Much*). Additionally, to gauge their comprehension of the six scenarios, participants were also asked to rate the extent to which the given scenario was “easy to imagine,” was “easy to understand,” or “could happen” to them or someone whom they know using a 7-point Likert-type scale ranging from one (*Not At All*) to seven (*Very Much*).

A three (Manipulated Affective States) X six (Self-Reported Feelings) repeated-measures analysis of variance employing a multivariate approach was conducted, with ratings of the six different self-reported feelings served as a repeated-measured variable. Holm's sequential bonferroni post-hoc tests were used to compare mean scores across the three conditions. As expected, a significant Manipulated Affective States X Self-Reported Feelings interaction was obtained, Wilks' $\Lambda = .16$, $F(10, 350) = 53.05$, $p < .001$, $\eta_p^2 = .63$. This significant interaction result revealed that the two scenarios to induce sadness ($M = 5.67_a$, $SE = .18$) obtained significantly higher *sadness* rating than did the two scenarios to induce anger ($M = 3.82_b$, $SE = .21$) or the two scenarios to induce neutral feelings ($M = 1.32_c$, $SE = .19$). Likewise, the two scenarios to induce anger ($M = 6.20_a$, $SE = .19$) obtained significantly higher *anger* rating than did the two scenarios to induce sadness ($M = 4.19_b$, $SE = .16$) or the two scenarios to induce neutral feelings ($M = 1.29_c$, $SE = .17$). Finally, the rating of *ordinary* feeling for the two scenarios designed to induce neutral feelings ($M = 5.05_a$, $SE = .21$) was significantly

higher than for the two scenarios designed to induce sadness ($M=3.16_b$, $SE=.20$) or the two scenarios designed to induce anger ($M=2.86_b$, $SE=.23$). The average ratings of the other three feelings—*ashamed*, *fearful*, and *guilty*—were approximately equally low across the scenarios designed to induce these three affective states. The ratings ranged from 1.31 to 3.04.

A one-way multivariate analysis of variance (MANOVA) was also conducted with the three measured items of scenario comprehension as dependent variables and the three manipulated affective states as an independent variable. This analysis revealed a significant main effect for the three affective states, Wilks' $\Lambda=.81$, $F(6, 358)=6.67$, $p<.001$, $\eta_p^2=.10$. Further three univariate tests showed that this main effect occurred because the scenarios designed to induce neutral feelings ($M_{\text{imagine}}=6.29_a$, $SE=.18$; $M_{\text{understand}}=6.48_a$, $SE=.16$; $M_{\text{happen}}=6.48_a$, $SE=.16$) were perceived as significantly easier to *imagine*, $F(2, 181)=13.18$, $p<.001$, $\eta_p^2=.13$, easier to *understand*, $F(2, 181)=15.99$, $p<.001$, $\eta_p^2=.15$, and more capable of *happening* to participants or someone they know, $F(2, 181)=11.24$, $p<.001$, $\eta_p^2=.11$ than were either the scenarios designed to induce sadness ($M_{\text{imagine}}=5.14_b$, $SE=.17$; $M_{\text{understand}}=5.37_b$, $SE=.16$; $M_{\text{happen}}=5.49_b$, $SE=.15$) or the scenarios designed to induce anger ($M_{\text{imagine}}=5.21_b$, $SE=.19$; $M_{\text{understand}}=5.31_b$, $SE=.18$; $M_{\text{happen}}=5.77_b$, $SE=.17$). These results did not show exactly equal levels of comprehension across the scenarios designed to induce each of the three affective states. Yet, overall, it can be concluded that the level of scenario comprehension was successfully manipulated given the nature of the daily routine characteristics of the neutral scenarios and the non-significant differences in overall comprehension between the sad scenarios and the angry scenarios with both above mid-point average ratings. For the purpose of the subsequent analysis, two different scenarios that represent each of the three affective conditions respectively were collapsed across participants.

Stimulus Materials

Three descriptions for each entertainment genre—sad life drama, action movie, comedy, and game show—were devised, resulting in a total of 12 descriptions. Short descriptions, rather than descriptions with detailed storylines or video materials, were used as stimulus materials because several potential confounding factors across the four genres were concerned. Specifically, sad life dramas, action movies, and comedies have a variety of storylines, whereas game shows unfold with repetitive rules and without narrative. Therefore, the present experiment controlled for the presence or absence of storylines and different types of narratives across the genres by using short descriptions without detailed plots. These descriptions were modeled after the types of descriptions commonly employed in the “What’s on TV” section in newspapers or on DVD/VHS covers and therefore, these stimulus materials have ecological validity.

In order to devise the stimulus, various descriptions representing each genre were collected from blurbs on existing DVD/VHS covers (e.g., “unforgettably powerful and heart felt drama”) and users’ short comments (e.g., “the most spectacular and competently crafted

action scenes I've ever seen!") on Internet Movie/TV Databases (www.imdb.com). All 12 descriptions directly indicated the name of the respective genres—drama, action, comedy, or game/quiz show. The descriptions also included phrases relevant to the tone and mood-altering characteristics of each genre, such as “inner anguish” for sad life drama, “adrenaline-pumping explosive action” for action movie, “big fat laughs” for comedy, and “twist with surprising wins” for game show. Several caveats should be noted for the descriptions used. First, the descriptions of the comedy did not feature any characteristics related to hostility. Second, the descriptions of the sad life drama did not specify the direction of their endings with respect to whether they were uplifting/hopeful or tragic/pessimistic. Third, the descriptions of the game show specified a traditional question-and-answer format (e.g., *Who Wants to Be a Millionaire?*), rather than a recent gamedoc format (e.g., *Survivor*).

Procedures

The experiment was conducted at a campus lab using an online questionnaire that was administered to small groups of up to ten students. Upon being seated in front of computers, participants were told that they would be given a hypothetical scenario to imagine and asked to indicate their media preferences using a series of entertainment program descriptions. Subsequently, participants were randomly assigned (via a javascript) to one of the six scenarios, each of which was intended to manipulate one of the three affective states. They were asked to read the assigned scenario without involving a writing task and to imagine spending the evening watching a television show. The participants were not given any specific time limits for reading and imagining the assigned scenario. A total of 12 entertainment descriptions (three descriptions for each of the four genres) were presented, and the participants indicated their preference ratings.

Unlike the pre-test procedure, specific affect-state ratings such as the manipulation check items were not included in the questionnaires in order to prevent participants from becoming consciously aware of the kind of feelings that the experimenter was trying to manipulate and then correcting subsequent preference estimations (DeSteno, Petty, Wegener, & Rucker, 2000). Instead, after reading the assigned scenario, participants immediately filled out the questionnaires designed to measure their preferences.

Dependent Measures

Preference for each genre was measured with the following two items. First, the participants were asked how much they would be interested in selecting each of the 12 descriptions using a 7-point Likert-type scale ranging from one (*Not At All Interested*) to seven (*Very Much Interested*), keeping in mind the given hypothetical situation. Second, the participants were asked to indicate how much they would enjoy each of the 12 descriptions using a 7-point Likert-type scale ranging from one (*Definitely Would not Enjoy*) to seven (*Definitely Would Enjoy*), keeping in mind the given hypothetical situation. The order of the

list of program descriptions was varied among participants. Enjoyment and selection variables were measured separately to tap into media preference because the relevant literature suggests that although these two concepts are positively correlated with each other, they are distinct concepts (see Oliver, Kim, & Sanders, 2006). Specifically, selected media are not always perceived as enjoyable and enjoyable media are not always selected. Ratings of the selection and anticipated enjoyment respectively were averaged for each genre.

RESULTS

Selection

To examine how selection of the four genres varied as a function of discrete affective states, a three (Discrete Affective States) X four (Genre) repeated-measures analysis of covariance employing a multivariate approach was conducted, with affective states as a between-subjects factor, genre as a within-subjects factor, and gender as a control factor. This analysis revealed that gender was a significant covariate, Wilks' $\Lambda = .85$, $F(3,144) = 8.40$, $p < .001$, $\eta_p^2 = .15$. This analysis also revealed a significant main effect for Genre, Wilks' $\Lambda = .75$, $F(3,144) = 15.91$, $p < .001$, $\eta_p^2 = .25$, indicating that individuals across the three conditions were significantly more interested in selecting comedies ($M = 5.06_a$, $SE = .13$) over sad life dramas ($M = 3.85_b$, $SE = .14$), action movies ($M = 2.90_c$, $SE = .13$), and game shows ($M = 3.01_c$, $SE = .12$).

However, this main effect should be interpreted in light of a significant Affective States X Genre interaction, Wilks' $\Lambda = .91$, $F(6,288) = 2.31$, $p < .05$, $\eta_p^2 = .05$. Table 1 shows the means and standard errors associated with this interaction. As shown in the difference within rows, only the selection of comedies differed significantly across the three conditions. Post-hoc tests show that individuals in the sad condition were significantly less interested in viewing comedies than were individuals in the neutral condition. Individuals in the angry condition fell in between the two conditions, though they were not significantly differentiated from those in either of the other two conditions. As shown in the difference within columns, individuals in the angry condition (like those in the neutral condition) were more interested in selecting comedies alone over the other three genres, whereas individuals in the sad condition were more interested in selecting both comedies and sad life dramas over the other two genres.

Anticipated Enjoyment

To examine how anticipated enjoyment of the four genres varied as a function of discrete affective states, a three (Discrete Affective States) X four (Genre) repeated-measures analysis of covariance employing a multivariate approach was conducted, with affective states as a between-subjects factor, genre as a within-subjects factor, and gender as a control

Table 1

Adjusted Marginal Means and Standard Errors of Entertainment Selection as a Function of Discrete Affect States

	Sad (<i>N</i> = 45)	Angry (<i>N</i> = 56)	Neutral (<i>N</i> = 49)
Sad drama	4.21 (.25) _B	3.71 (.22) _A	3.65 (.24) _A
Action	2.58 (.24) _A	3.11 (.21) _A	3.00 (.23) _A
Comedy	4.48 (.25) _{abB}	5.07 (.22) _{abB}	5.63 (.23) _{bB}
Game show	2.56 (.22) _A	3.09 (.19) _A	3.37 (.21) _A

Wilks' $\Lambda = .91$, $F(6, 288) = 2.31$, $p < .05$, $\eta_p^2 = .05$

Note. Using Holm's sequential bonferroni post-hoc comparison, within rows, means with no lower-case subscript in common differ at $p < .05$; within columns, means with no upper-case subscript in common differ at $p < .05$.

factor. Again, this analysis revealed that gender was a significant covariate, Wilks' $\Lambda = .83$, $F(3, 144) = 9.64$, $p < .001$, $\eta_p^2 = .17$. Similar to the previous analysis, this analysis also revealed a significant main effect for Genre, Wilks' $\Lambda = .71$, $F(3, 144) = 9.64$, $p < .001$, $\eta_p^2 = .29$, indicating that individuals across the three conditions anticipated significantly more enjoyment from viewing comedies ($M = 4.96_a$, $SE = .14$) as compared to sad life dramas ($M = 3.78_b$, $SE = .14$), action movies ($M = 3.02_c$, $SE = .13$), and game shows ($M = 2.92_c$, $SE = .12$).

However, this main effect should also be interpreted in light of a significant Affective States X Genre interaction, Wilks' $\Lambda = .91$, $F(6, 288) = 2.22$, $p < .05$, $\eta_p^2 = .04$. Table 2 shows the means and standard errors associated with this interaction. As the differences within the rows show, the estimated scores of anticipated enjoyment from viewing each of the two genres—comedies and game shows—were significantly different across the three conditions. Post-hoc tests show that individuals in the sad condition anticipated significantly less enjoyment from viewing each of the two genres than did individuals in the neutral condition. Individuals in the angry condition fell in between the two conditions, though they were not significantly differentiated from those in either of the other two conditions. Similar to the previous analysis, as the differences within columns show, individuals in the angry condition

Table 2

Adjusted Marginal Means and Standard Errors of Anticipated Enjoyment as a Function of Discrete Affect States

	Sad (N = 45)	Angry (N = 56)	Neutral (N = 49)
Sad drama	4.01 (.25) _B	3.48 (.22) _A	3.85 (.24) _A
Action	2.54 (.23) _{aA}	3.10 (.21) _{abA}	3.42 (.22) _{bA}
Comedy	4.26 (.25) _{aB}	4.92 (.22) _{abB}	5.72 (.24) _{bB}
Game show	2.34 (.22) _{aA}	2.87 (.19) _{abA}	3.55 (.20) _{bA}

Wilks' $\Lambda = .91$, $F(6, 288) = 2.22$, $p < .05$, $\eta_p^2 = .04$

Note. Using Holm's sequential bonferroni post hoc comparison, within rows, means with no lower-case subscript in common differ at $p < .05$; within columns, means with no upper-case subscript in common differ at $p < .05$.

(like those in the neutral condition) anticipated significantly more enjoyment from viewing comedies over the other three genres, whereas individuals in the sad condition anticipated significantly more enjoyment from viewing both comedies and sad life dramas over the other two genres.

Summary of Results

The results show that individuals in the sad condition and individuals in the angry condition did not reveal a significantly stronger preference for comedies and/or game shows than did individuals in the neutral condition. Rather, individuals in the neutral condition show the highest selection estimate for comedies and the highest anticipated enjoyment estimates for comedies and game shows respectively; however, these estimates were not significantly higher than those of individuals in the angry condition. Therefore, H1 (compared to the neutral condition, stronger preference for comedies and/or game shows in the angry condition and the sad condition) that reflects Zillmann's prediction (i.e., the

valence views) was not supported. Rather, the results from the post-hoc tests within each of the three manipulated affect conditions indicated the distinct role of discrete emotion (particularly sadness) in determining entertainment preference. Specifically, individuals in the sad condition preferred both sad life dramas and comedies over the two alternatives, whereas individuals in the angry condition (like those in the neutral condition) preferred comedies alone over the three alternatives. Therefore, H3 (compared to the angry condition or the neutral condition, stronger preference for sad life dramas in the sad condition) was supported, whereas H2 (compared to the sad condition or the neutral condition, stronger preference for action movies in the angry condition) was not supported.

DISCUSSION

Findings and Implications

The present study explored whether sadness and anger as two specific and distinct negative states would lead individuals to (a) form similar entertainment preferences that fulfill hedonic motives or (b) form distinct entertainment preferences that fulfill functional matching motives. The findings suggest that hedonic motives were not significantly heightened among individuals in the sad condition and those in the angry condition compared to those in the neutral condition. Therefore, the valence views (specifically, Zillmann's prediction) were not supported. Instead, the functional matching motive was triggered among individuals in the sad condition. Namely, these individuals preferred sad life drama (as well as comedy) over the two alternative genres, whereas those in the angry condition and those in the neutral condition preferred comedy alone over the three alternative genres. Therefore, the preference for sad life dramas indicates the distinct motive primed by sadness that reflects meaning-seeking through cognitive transformation and emotional reward.

However, it is also plausible that individuals in the sad condition preferred sad life dramas because they may consider "inactivity" as an appropriate or desirable choice (Rucker & Petty, 2004). To determine the most influential property of sadness (situational control appraisal vs. low arousal level) that leads to the preference of sad life dramas, future research would benefit from including media stimuli that have calm tones (e.g., documentaries featuring natural scenery) or alternatively, measuring relevant mediators (e.g., cognitive and emotional benefits separately from viewing sad life dramas) specifically. Additionally, given that the two motives (i.e., hedonic vs. functional matching) seem to co-exist in regulating sadness, future research would benefit from identifying potential moderators that may determine this divergent preference. These variables may include great variations in sadness (e.g., expected death of old people vs. unexpected death of young people, which may tap into the different level of certainty appraisal) and viewers' enduring personality traits (e.g., self-esteem, optimism vs. pessimism, or locus of control).

Additional noteworthy findings suggest that sadness has further distinct characteristics in determining entertainment preference. First, individuals in the sad condition showed significantly less preference (both selection and anticipated enjoyment) for comedy than did individuals in the neutral condition (see also Greenwood, 2010). Why did some sad viewers avoid comedies, a genre that is generally assumed to have strong universal appeal? Perhaps, such viewers perceive this genre as providing negative feedback on the relevant self-defining dimension. Specifically, they may feel frustrated and discouraged due to a dramatic contrast between characters depicted in safe and normal environments and themselves under distressful situations, which motivates them to dissociate the relevance of relationships with the outperforming characters (Aspinwall & Taylor, 1993; Lockwood & Kunda, 1997; Salovey & Rodin, 1984). Additionally, sad viewers may consider prescriptive beliefs about the social meanings of sadness learned from emotion-socialization processes. Specifically, they may believe that it is not appropriate to experience exuberant joy and express it with unrestrained laughter (Erber, Wegner, & Theriault, 1996). Therefore, humor may not always function as an effective mood palliative; however, it may be speculated that if the present experiment had included “dark” comedies, some individuals in the sad condition may have preferred this genre because of its capacity to maintain a humorous tone yet support meaning seeking (see Greenwood, 2010).

Second, individuals in the sad condition also reported a significantly lower level of anticipated enjoyment for game shows than did individuals in the neutral condition. This finding may be attributable to the shows’ competition-oriented content and format. Specifically, game shows feature cognitively challenging characteristics that may be effective in disrupting sad viewers’ intrusive thoughts; however, sad viewers may feel uncomfortable watching this genre due to its great emphasis on achieving material value (cash, goods, services, etc.) through a highly competitive process. Individuals in the sad condition accord greater value to human relationships (e.g., family and close friends) than to material goods from the sudden recognition that some of these important people are unavailable (Janoff-Bulman & Berger, 2000). Therefore, sad viewers may perceive competition for money as selfish, insignificant, and further disturbing because of its incompatibility with their increased appreciation for close other people. As the finding indicating sad viewers’ preference for sad life dramas suggests, media stimuli that focus on profound human connectivity may be more desirable for sad viewers.

Although these findings indicate that sadness may have a distinct effect in forming entertainment preference, no possible distinctive characteristics of anger were observed. Instead, the preference estimates in the angry condition and in the neutral condition were very similar. We can speculate on the possible reasons for these similar estimates as follows. First, the two scenarios designed to manipulate anger feature less intimate relationships (i.e., teaching assistant and roommate) and therefore, the activated angry feelings from these scenarios may be akin to “frustration” or “interference” rather than “betrayal of trust.” Consequently, strong revenge or punishment motivations that guide preference for action movies may have not been triggered among the participants as predicted. In contrast, the two

scenarios designed to manipulate sadness feature intimate relationships (i.e., romantic partner and close friend) and therefore, sad feelings activated from these scenarios may have triggered the functional matching motive as predicted, leading the participants to prefer sad life dramas. Second, negative feelings may have been activated in the two scenarios designed to manipulate neutral feelings because it is very rare for most people to experience or imagine purely neutral feelings. Therefore, if the two neutral scenarios primed negative feelings that can be shared with anger (e.g., tired, annoyed, or stressed), the obtained similar preference patterns between angry condition and neutral condition may be explained by these common negative elements across the two conditions.

Third, in addition to this possible negative feeling element shared, the angry condition and the neutral condition also have a cognitive appraisal dimension in common (i.e., certainty). Specifically, individuals in these two conditions (compared to sadness) are certain about their current situations (e.g., why does this event happen?). This certainty appraisal tends to trigger heuristic information processing, whereas its comparable uncertainty appraisal tends to trigger systematic information processing (Tiedens & Linton, 2001). If this is the case, when individuals were asked to rate their preferences, those in the angry condition and those in the neutral condition may have used their prevalent media-use schema (e.g., pleasure-seeking behavior or leisure activity) as a heuristic device (Fiske & Taylor, 1991) and may have relied on salient cues (e.g., fun, laugh, or joy) in the provided genre descriptions due to the common certainty dimension; however, those in the sad condition may have been more conscious when asked to rate their preferences due to the uncertainty dimension. This explanation is particularly plausible because the present study measured media preferences using a self-reported rating scale instead of an unobtrusive recording tool (e.g., actual time to view specific genres).

Overall, these findings suggest that individuals in various discrete affective states may form entertainment preferences that reflect both hedonic motives and functional matching motives. Therefore, future research would benefit from exploring specific situations that may determine these divergent motives. Findings from the present results suggest that various discrete states elicited from intimate relationships (vs. less intimate or impersonal) are important in explaining the nature of the situations that lead to distinct preferences (e.g., hedonic vs. counter-hedonic choices). Also, equally important are different cognitive appraisal dimensions within the same discrete state (e.g., sadness with high certainty appraisal vs. sadness with low certainty appraisal, anger with high perceived control appraisal vs. anger with low perceived control appraisal). Therefore, by further elucidating the nature of these thoughts patterns, we may be able to go beyond valence-focused and specific category-focused approaches of emotion in order to predict entertainment consumption precisely.

Limitations and Suggestions for Future Research

Given the preliminary and exploratory nature of the present study, several limitations

should be taken into account when interpreting the findings. First, notably, this study employed hypothetical scenarios that were designed to manipulate discrete affective states. There may be discrepancies between imagined feelings and actual feelings, which could lead to different estimates of the dependent variables. If this is the case, individuals' estimated preferences in the present study may represent their (erroneous) beliefs about their entertainment selection behaviors. However, the relevant literature has also employed hypothetical scenarios as a tool of affect manipulations (Gibson et al., 2000; Oliver, 2008) and furthermore, substantial convergence between imagined feelings and actual feelings has also been reported (Robinson & Clore, 2001). Given the contradictory notion regarding the role of hypothetical scenarios, future research would benefit from manipulating actual discrete affect to determine media choice behaviors in context-rich settings.

Second, the present study also measured the relevant dependent variables in a hypothetical context immediately after presenting the scenarios assigned randomly without employing any decoy procedure (e.g., a plausible cover story), which may have presented demanding characteristics. If this is the case, participants may have attempted to guess and conform to the experimenter's intention by drawing on their lay theories wherein particular entertainment genres are considered as appropriate choices in certain circumstances. Therefore, future research would benefit from measuring the relevant dependent variables in an unobtrusive way (e.g., actual viewing time), rather than self-reported ratings, with more carefully developed experimental protocols and updated techniques.

Third, this study used short descriptions of entertainment genres as stimulus materials. However, given that each genre has more than one mood-impacting element inherently, it is challenging to determine exactly which element actually influences individuals' decision-making. For example, if viewers prefer sad life dramas, it is unclear whether meaningfulness combined with sad feelings or meaningfulness regardless of its valence plays the more salient role in forming the preference. Similarly, action movies are characterized by action-packed sequences as well as by depictions of strong violence. Finally, game shows present strong cognitive-intervention potential; however, at the same time, they have loud, intense, or dramatic features and amplify material value. Game shows also represent a reality-based format, which may explain the generally low preference for this genre in the obtained results because some people tend to disdain reality TV shows because of their contrived, cheap, or stupid characteristics (Nabi, Stitt, Halford, & Finnerty, 2006). Thus, even if viewers seek distracting stimulus in order to dissipate sadness or anger, they may avoid this genre due to its negative reputation, arousing characteristics, or focus on money. Future research would, therefore, benefit from devising media stimulus with more clearly defined mood-altering features, rather than basing examinations on genres. The media stimulus should also be pre-tested carefully in order to ensure the intended manipulated features before they are presented in a main study.

Despite these limitations, the present research shows that individuals may form different media preferences depending on their prevailing discrete affective states (particularly sadness). Hedonic motives seem to take precedence over retaliation motives

among individuals in the angry condition; however, both hedonic and functional matching motives are salient among individuals in the sad condition, which leaves open the question with respect to whether possible moderating variables may determine these two divergent motives. Therefore, by understanding discrete affective states and their underlying cognitive meaning structures or dimensions, researchers may be able to predict viewers' entertainment preferences more precisely, explain distinct motives that may go beyond simple hedonism, and explore more diverse therapeutic benefits from entertainment consumption.

REFERENCES

- Aspinwall, L. G., & Taylor, S. E. (1993). Effects of social comparison direction, threat, and self-esteem on affect, self-evaluation, and expected success. *Journal of Personality and Social Psychology*, 64, 708-722.
- Averill, J. R. (1983). Studies on anger and aggression: Implications for theories of emotion. *American Psychologist*, 38, 1145-1160.
- Barr-Zisowitz, C. (2000). "Sadness"—Is there such a thing? In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed., pp. 607-622). New York: Guilford.
- Biswas, R., Riffe, D., & Zillmann, D. (1994). Mood influence on the appeal of bad news. *Journalism Quarterly*, 71, 689-696.
- Bryant, J., & Zillmann, D. (1977). The mediating effect of the intervention potential of communications on displaced aggressiveness and retaliatory behavior. In B. D. Ruben (Ed.), *Communication Yearbook 1* (pp. 291-306). New Brunswick, NJ: Transaction-ICA Press.
- Darwin, C. R. (1872/1965). *The expression of the emotions in man and animals*. Chicago: University of Chicago Press.
- DeSteno, D., Petty, R. E., Wegener, D. T., & Rucker, D. D. (2000). Beyond valence in the perception of likelihood: The role of emotion specificity. *Journal of Personality and Social Psychology*, 78, 397-416.
- Erber, R., Wegner, D. M., & Theriault, N. (1996). On being cool and collected: Mood regulation in anticipation of social interaction. *Journal of Personality and Social Psychology*, 70, 757-766.
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). New York: McGraw-Hill.
- Folkman, S. (2001). Revised coping theory and the process of bereavement. In M. S. Stroebe, R. O. Hansson, W. Stroebe & H. Schut (Eds.), *Handbook of bereavement research: Consequences, coping and care* (pp. 563-584). Washington, DC: American Psychological Association.
- Frijda, N. H. (1986). *The emotions*. New York: Cambridge University Press.
- Frijda, N. H., Kuipers, P., & Schure, E. T. (1989). Relations among emotion, appraisal, and emotional action readiness. *Journal of Personality and Social Psychology*, 57, 212-228.
- Gibson, R., Aust, C. F., & Zillmann, D. (2000). Loneliness of adolescents and their choice and enjoyment of love-celebrating versus love-lamenting popular music. *Empirical Studies of the Arts*, 18, 43-48.
- Greenwood, D. (2010). Of sad men and dark comedies: Mood and gender effects on entertainment media preferences. *Mass Communication and Society*, 13, 232-249.
- Izard, C. E., & Ackerman, B. P. (2000). Motivational, organizational, and regulatory functions of discrete emotions. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed., pp. 253-264). New York: Guilford.

- Janoff-Bulman, R., & Berger, A. R. (2000). The other side of trauma: Towards a psychology of appreciation. In J. H. Harvey & E. D. Miller (Eds.), *Loss and trauma: General and close relationship perspective* (pp. 29-44). Philadelphia: Taylor & Francis.
- Keltner, D., Ellsworth, P. C., & Edwards, K. (1993). Beyond simple pessimism: Effects of sadness and anger on social-perception. *Journal of Personality and Social Psychology*, 64, 740-752.
- Knobloch-Westerwick, S., & Alter, S. (2006). Mood adjustment to social situations through mass media use: How men ruminate and women dissipate angry moods. *Human Communication Research*, 32, 58-73.
- Knobloch, S., & Zillmann, D. (2002). Mood management via the digital jukebox. *Journal of Communication*, 52, 351-366.
- Knobloch, S., & Zillmann, D. (2003). Appeal of love themes in popular music. *Psychological Reports*, 93, 653-658.
- Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist*, 46, 819-834.
- Lockwood, P., & Kunda, Z. (1997). Superstars and me: Predicting the impact of role models on the self. *Journal of Personality and Social Psychology*, 73, 91-103.
- Mares, M. L., & Cantor, J. (1992). Elderly viewers' responses to televised portrayals of old age: Empathy and mood management versus social comparison. *Communication Research*, 19, 459-478.
- Meadowcroft, J. M., & Zillmann, D. (1987). Women's comedy preferences during the menstrual cycle. *Communication Research*, 14, 204-218.
- Nabi, R. L., Finnerty, K., Domschke, T., & Hull, S. (2006). Does misery love company? Exploring the therapeutic effects of TV viewing on regretted experiences. *Journal of Communication*, 56, 689-706.
- Nabi, R. L., Stitt, C. R., Halford, J., & Finnerty, K. L. (2006). Emotional and cognitive predictors of the enjoyment of reality-based and fictional television programming: An elaboration of the uses and gratifications perspective. *Media Psychology*, 8, 421-447.
- Nolen-Hoeksema, S., & Larson, J. (1999). *Coping with loss*. Mahwah, NJ: Lawrence Erlbaum.
- O'Neal, E. C., & Taylor, S. L. (1989). Status of provoker, opportunity to retaliate, and interest in video violence. *Aggressive Behavior*, 15, 171-180.
- Oliver, M. B. (2000). The respondent gender gap. In D. Zillmann & P. Vorderer (Eds.), *Media entertainment: The psychology of its appeal* (pp. 215-234). Mahwah, NJ: Lawrence Erlbaum.
- Oliver, M. B. (2008). Tender affective states as predictors of entertainment preference. *Journal of Communication*, 58, 40-61.
- Oliver, M. B., Kim, J., & Sanders, M. S. (2006). Personality. In J. Bryant & P. Vorderer (Eds.), *Psychology of entertainment* (pp. 329-341). Mahwah, NJ: Lawrence Erlbaum.
- Ortony, A., Collins, A., & Clore, G. L. (1988). *The cognitive structure of emotions*. New York: Cambridge University Press.
- Plutchik, R. (1980). A general psychoevolutionary theory of emotion. In R. Plutchik & H. Kellerman (Eds.), *Emotion: Theory, research, and experience* (Vol. 1, pp. 3-33). New York: Academic Press.
- Ragunathan, R., & Corfman, K. P. (2004). Sadness as pleasure-seeking prime and anxiety as attentiveness prime: The Different Affect-Different Effect (DADE) model. *Motivation and Emotion*, 28, 23-41.

- Raghunathan, R., & Pham, M. T. (1999). All negative moods are not equal: Motivational influences of anxiety and sadness on decision making. *Organizational Behavior and Human Decision Processes*, 79, 56-77.
- Rivers, S. E. (2005). *Discrete emotions in emotion regulation: The case of anger and sadness*. Unpublished doctoral dissertation, Yale University, New Haven: CT.
- Robinson, M. D., & Clore, G. L. (2001). Simulation, scenarios, and emotional appraisal: Testing the convergence of real and imagined reactions to emotional stimuli. *Personality and Social Psychology Bulletin*, 27, 1520-1532.
- Roseman, I. J. (1991). Appraisal determinants of discrete emotions. *Cognition and Emotion*, 5, 161-200.
- Roseman, I. J., Wiest, C., & Swartz, T. S. (1994). Phenomenology, behaviors, and goals differentiate discrete emotions. *Journal of Personality and Social Psychology*, 67, 206-221.
- Rucker, D. D., & Petty, R. E. (2004). Emotion specificity and consumer behavior: Anger, sadness, and preference for activity. *Motivation and Emotion*, 28, 3-21.
- Rusting, C. L., & Nolen-Hoeksema, S. (1998). Regulating responses to anger: Effects of rumination and distraction on angry mood. *Journal of Personality and Social Psychology*, 74, 790-803.
- Salovey, P., & Rodin, J. (1984). Some antecedents and consequences of social-comparison jealousy. *Journal of Personality and Social Psychology*, 47, 780-792.
- Smith, C. A., & Ellsworth, P. C. (1985). Patterns of cognitive appraisal in emotion. *Journal of Personality and Social Psychology*, 48, 813-838.
- Smith, C. A., & Lazarus, R. S. (1990). Emotion and adaptation. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 609-637). New York: Guilford.
- Tiedens, L. Z., & Linton, S. (2001). Judgment under emotional certainty and uncertainty: The effects of specific emotions on information processing. *Journal of Personality and Social Psychology*, 81, 973-988.
- Wills, T. A. (1981). Downward social comparison principles in social psychology. *Psychological Bulletin*, 90, 245-271.
- Zillmann, D. (1988). Mood management: Using entertainment to full advantage. In L. Donohew, H. E. Sypher & E. T. Higgins (Eds.), *Communication, Social Cognition, and Affect* (pp. 147-171). Hillsdale, NJ: Lawrence Erlbaum.
- Zillmann, D. (2000). Humor and comedy. In D. Zillmann & P. Vorderer (Eds.), *Media entertainment: The psychology of its appeal* (pp. 37-57). Mahwah, NJ: Lawrence Erlbaum.
- Zillmann, D., & Bryant, J. (1985). Affect, mood, and emotion as determinants of selective exposure. In D. Zillmann & J. Bryant (Eds.), *Selective exposure to communication* (pp. 157-190). Hillsdale, NJ: Lawrence Erlbaum.

THE ASSOCIATION BETWEEN TELEVISION VIEWING AND LOVE STYLES: A CULTIVATION PERSPECTIVE

AMIR HETSRONI

This research focuses on the relationship between different measures of television viewing habits and love styles. The Love Attitude Scale, based on Lee's love style taxonomy, was administered to an unmarried student sample (N=338) along with questions regarding the time devoted to TV viewing (general viewing as well as genre-specific viewing) and an item that asked about the most favorite program. Current involvement in a serious romantic relationship and marriage intentions were employed as control variables. Viewers who mentioned the news as their most favorite program scored higher on Ludus and Pragma. Watching genres abundant with love themes such as soap operas and family drama was found to be positively correlated with higher levels of Eros. Excessive viewing of the general programming was positively correlated with higher levels of Ludus. No significant association was detected between general or genre-specific TV viewing and Storge, Mania, Pragma and Agape love styles. In discussing the implications of the findings, cultivation and selective exposure are used as theoretical frameworks.

Keywords: cultivation, television, love, love style, romance, selective exposure.

Love is a recurring theme in popular television programs. Thus, it is feasible that routine exposure to television may affect our love style in line with the premise of cultivation theory which postulates that heavy exposure to popular programming causes viewers to see the world in a manner that resembles its portrayal on the screen (Morgan & Shanahan, 2010). The significance of such a potential connection goes beyond doubt in light of the

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documented influence of love style orientation on satisfaction with romantic relationships (Meeks, Hendrick, & Hendrick, 1998) and on the lifetime number of sexual partners (Hans, 2008), which surpasses the impact typically noted for measures of love and liking (Berscheid & Reis, 1998).

The relationship between television viewing and love styles was hitherto only marginally studied. The current work fills the gap by testing the connection between the two and – by doing that – adds a significant factor to the list of variables that have a documented effect on people's love styles. This work also expands the methodological boundaries of cultivation theory by asking to what extent is the cultivation effect impacted by the use of different measures of TV viewing.

LOVE AS A MEASURED CONCEPT

The word love refers to numerous expressions of affection, attraction, feelings and attitudes that manifest emotional and physical affinity with another person, a group of people, a nation, animals and even inanimate objects. This study refers solely to interpersonal love that is connected to dating, romance and coupleship. Dictionaries offer dozens of definitions of such love including "affection," "amour" and "devotion" (*cf.* Galician, 2004, pp.18-19). Over the last decades, researchers have attempted to move from these broad-based terms into measurable conceptualizations such as Lee's *love style taxonomy* (Lee, 1973), which was applied to a *Love Attitude Scale* (Hendrick & Hendrick, 1986) that has been validated in various countries including the United States (Hendrick, Hendrick, & Dicke, 1998), Portugal, Switzerland, Brazil, Angola (Neto et al., 2000), France (Murstein, Merighi, & Vyse, 1991), Israel (Almog, 2006), Russia, and Japan (Sprecher, Aron, Hatfield, Cortese, Potapova & Levitskaya, 1994).

Lee's taxonomy consists of six love styles: Eros, Ludus, Storge, Pragma, Mania and Agape. These styles translate into different types of lovers that are described by Hendrick (2004) as follows: the *Eros* lover is passionate. His love is intense and he wants to be involved with his partner at all levels. He is self-confident and trusting of his partner. Culturally, Eros love is known as romantic. The *Ludus* lover, in contrast, is not interested in intensity but rather experiences love as a game to be played, not necessarily with serious intentions. Ludic love is often played with several partners at a time, so that different people may be enjoyed for different qualities in different activities. This love style has a lot to do with what is culturally known as flirting. The *Storge* lover uses a strong sense of friendship to establish partnership that is based on similarity and completion in terms of attitudes and values. This similarity is more important to the Storge lover than physical appearance or sexual satisfaction because he prefers long-term commitment to short-term excitement. Culturally, this love style is known as soul mating. The *Pragma* lover, as the name implies, is practical. The pragmatic lover is looking for a suitable partner with whom a rewarding life can be built. To achieve that, he has a shopping list of qualities sought in a partner. Love

here is treated as a kind of transaction in which physical attraction is only part (and not always the most crucial part) of the deal. The *Mania* lover is characterized by emotional highs and lows, possessiveness, dependence, jealousy, and insecurity. Another component of Mania love may be physical symptoms such as difficulty in eating or sleeping. The *Agape* lover is characterized by altruism to the extent that the partner's welfare is more important than what he himself gets from the relationship. Commonly known as compassionate love, the Agape lover attributes little importance to sensuality and sexuality and cares more about spiritual qualities.

Very few people belong strictly to one love style. More commonly, we share qualities from different styles, while one or two styles dominate our persona (Hendrick & Hendrick, 1992). However, it is important to take note of our dominant love style(s), given that they determine a lot of what happens to us in our love lives. For instance, Eros predicts our satisfaction with long term romantic relationships (Meeks et al., 1998), whereas Ludus predicts lack of satisfaction with such relationships (Contreras, Hendrick, & Hendrick, 1996).

Other major findings of studies that used the *Love Attitude Scale* (Hendrick & Hendrick, 1986) connect the dominant love style with personality traits (self esteem, for instance, is positively connected with Eros and negatively associated with Mania), ethnicity and culture (westerners are higher in Pragma compared to people from traditional cultures), income (in comparison with poor people – rich people are higher in Pragma), sex (females are higher in Pragma and Mania and are lower in Agape and Ludus), and age (older people are less storgic and younger people are less pragmatic). People who are currently involved in a committed partnership are higher in Storge and Agape (Hendrick & Hendrick, 1992), whereas people who are not at the moment part of such partnership are higher in Ludus (Montgomery & Sorell, 1997). When it comes to marriage expectations, people who confess greater hopes to get married soon are more likely to adhere to Eros, Storge, Pragma and Agape love styles (Jones & Nelson, 1996). Love researchers often prefer to study married and unmarried people distinctively, because the two groups tend to score differently in Storge, Agape and Ludus; namely, unmarried respondents are higher on Ludus and lower on Storge and Agape (Contreras et al., 1996). Most of the studies about love styles use college student samples, because young people are likely to find love an engaging topic on which they are ready to share their opinion (Hendrick & Hendrick, 2002).

TELEVISION VIEWING AND LOVE STYLES

The relationship between having certain attitudes towards love and different levels of TV viewing can be accounted for by *cultivation theory*, which proposes that – because television is a noteworthy communication agent and a most effective storyteller – heavy viewing carries with it the adoption of estimates and views that are disproportionately or distortedly represented on the screen compared to their presence in daily life (Morgan &

Shanahan, 2010; Shanahan & Morgan, 1999). Cultivation is not an imitation of what takes place on the screen but an internalization of norms, beliefs and evaluations of social reality (Gerbner, Gross, Morgan, & Signorielli, 1986). The cultivation effect consists, in fact, of two types. The first refers to the positive relationship between excessive viewing and distorted perception of the world, e.g. erroneous assessment of the prevalence of certain occupations in direct correspondence with these occupations' screen presence known as a *first-order effect*. The second is the interrelatedness between excessive viewing and attitudes that directly derive from televised messages e.g. supporting severe punishment to crimes that are often depicted on television as causing severe damage, termed as *second-order effect* (Gerbner et al., 1986; Hawkins & Pingree, 1982). Cultivation is deemed to occur when a noticeable relationship exists between the amount of time devoted routinely to TV viewing and the tendency to exhibit first and second order effects (Morgan & Shanahan, 2010). Even though the cultivation effect is small in magnitude (around one percent of the explained variance), it is cross-culturally consistent and robust across different demographic sectors (Shanahan & Morgan, 1999).

Cultivation happens because people encode information, most often unintentionally, while they watch television, and etch this information in their long-term memory. Likewise, reliance on this encoded information is the source of the cultivation effect because heavy viewers are likely to have more information encoded (Shrum, Burroughs, & Rindfleisch, 2004).

Whereas the theoretical assumptions of cultivation are more or less agreed upon in the scientific community, opinions remain divided over methodological issues (Potter, 1994). Gerbner and his followers prefer to ask about total viewing, because in their eyes the content of the programming in general and that of the most highly watched shows in particular is consistent enough to generate unanimous effects (Shanahan & Morgan, 1999). However, such views ignore substantial changes in the TV fare that occurred over the past decades, which find expression in an increasing diversity of the programming and in a gradual replacement of the simplistic happy-ending formula plots by more complex open-ended narratives (Moore, Bensman, & Van Dyke, 2006). It also takes no notice of the fact that some programs might be more influential than others because they are more beloved by their viewers (Greenberg, 1988), and that at least part of the viewing is targeted and instrumental and not habitual and ritualistic (Rubin, 2002). In short, a comprehensive cultivation research should ask the respondents not only what they watch on TV but also what they *like* to watch (Potter, 1994), but in practice studies have mostly refrained from doing that. To address this lacuna, the current study will use as exposure measures both the time devoted to viewing different TV formats and the genre of the most favorite show.

From a cultivation perspective – love styles constitute a measure of second-order effects because they encompass an amalgam of attitudes toward and views of love that can be internalized from exposure to TV programming due to their ubiquitous appearance in shows. For example, the Eros love style, which embraces a romantic approach appears in a number of successful TV love stories from Paul and Jamie in *Mad About You* to Chandler

and Monica in *Friends*. The relationship that develops between these characters impresses us as passionate and intense. It encompasses many aspects of the characters' on-screen lives – which is typical of Eros love (Galician, 2004, p.72).

If we want to move beyond general impressions and state exactly which love styles are promoted by TV viewing, we need, first, to determine which love styles are systematically presented more frequently on television. This is not an easy task, because love styles are not readily content analyzed and certainly not in large quantities. Perhaps because of that the voices within the literature remain undecided on this issue. One view suggests that since the 1970s television programs have been reflecting and buttressing societal transition from old-fashioned romance to consensual practical love (Elkind, 1993). This view is based on historical accounts, which show that during the 1950s and the 1960s popular programs had featured mostly conventional happy families (e.g., married parents plus kids), while later on shows began to feature non-traditional families (e.g., single parent families, same sex couples) and non-traditional domestic arrangements (e.g. cohabitation) at a growing pace (Robinson & Skill, 2001), thus expressing a move from Eros to Pragma. Such trends can also be found in the current Israeli TV programming, where a recent content analysis of primetime shows found that the share of single parent families on the screen is higher than in the country's population (Hetsroni, 2008). This fact is mentioned here mainly because Israel is where our study takes place.

In contrast with the view that the current programming is shifting away from romantic love, Galician (2004) insists that even in its least romantic moments television still connotes romanticism. She finds support for her view in the portrayal of marriage on primetime programming which is more often positive than negative (Signorielli, 1991) and in the picture-perfect evolution of relationships in fictional TV series that stands in stark contradiction to the imperfect manner in which relationships develop in real life. Of course, it is not out of the question that popular programming promotes concurrently more than one model of love in order to appeal to different viewers (Schreiber, 2006).

There is enough evidence that television viewers do use TV scenes as behavioral guides about love and romance. For example, Bachen and Illouz (1996) found that 94% of the primary and secondary school students look to television for information on these matters (whereas only 33% turn to their mother and only 17% turn to their father). Nonetheless, only a handful of studies attempted to measure the actual cultivation effect of watching television on love orientation and on the viewers' approach to romantic relationships. Furthermore, the results of these studies are inconclusive. Morgan (1980) and Signorielli (1991) found a positive correlation between the amount of time devoted to TV viewing and the endorsement of family values that partly relate to old-fashioned romance, whereas Morgan, Legette and Shanahan (1999) detected a positive correlation between legitimatizing non-traditional family structures and television viewing. Holmes (2007) detected a small-to-mid-size correlation ($r=.28$) between preference for television programs that have relationship/romance themes and the romantic belief in predestined soul mates. The work of Segrin and Nabi (2002), which is the only study that used one of Lee's love styles (Eros)

as an indicator, found a small ($r=.15$) positive significant correlation between watching romantic comedies, soap operas, daytime talk shows, and reality programs concerning romance (together termed "relationship genre") and embracing Eros love. No significant correlation was found between general viewing and endorsing this love style.

RESEARCH QUESTIONS

In light of the dearth in studies assessing the relationship between TV viewing and different love styles and due to the inconclusive findings of studies regarding the connection between watching television and holding unequivocal views on romance in general and relationships in particular, asking research questions is preferred here to positing directional hypotheses. This research will estimate the size of the relationship between general viewing and viewing of specific popular genres (news programs which minimally feature items concerning romance and entertainment formats like soap operas, sitcoms and family drama that talk about this topic in abundance) and the six love styles. We will also examine whether there is a similar correlation between the genre of the viewers' most favorite show and the dominance of certain love styles. Four factors will be kept under control: sex, ethnicity, income, marital intentions, and current involvement in a serious romantic relationship. The influence of these factors on love styles is well established in the literature (Hendrick & Hendrick, 1992), and there is even an indication that at least one of the factors – relationship status – moderates the strength of the correlation between media consumption and beliefs about the right standards for romantic relationships (Holmes & Johnson, 2009). Age, also known for its influence on love styles, is practically kept under control because our sample is composed of college students. Personality traits, some of which may influence the prominence of certain love styles, are left beyond the scope of this study.

Specifically, two six-part research questions, where each part refers to a specific love style, are posited. The first question (*RQ1*) asks: Is there a positive or a negative relationship between TV viewing and [*name of a certain*] love style? The six variants of this question (*a* to *f*) are:

- Is there a positive or a negative relationship between TV viewing and *Eros* love style?
- Is there a positive or a negative relationship between TV viewing and *Ludus* love style?
- Is there a positive or a negative relationship between TV viewing and *Storge* love style?
- Is there a positive or negative relationship between TV viewing and *Pragma* love style?
- Is there a positive or a negative relationship between TV viewing and *Agape* love style?
- Is there a positive or a negative relationship between TV viewing and *Mania* love style?

The second question (*RQ2*) asks: Is there a difference in the level of [*name of a certain*] love style that can be ascribed to the genre of the favorite TV program? The six variants of this question (*a* to *f*) are:

Is there a difference in the level of *Eros* that can be ascribed to the genre of the favorite program?

Is there a difference in the level of *Ludus* that can be ascribed to the genre of the favorite program?

Is there a difference in the level of *Storge* that can be ascribed to the genre of the favorite program??

Is there a difference in the level of *Pragma* that can be ascribed to the genre of the favorite program?

Is there a difference in the level of *Agape* that can be ascribed to the genre of the favorite program?

Is there a difference in the level of *Mania* that can be ascribed to the genre of the favorite program?

METHOD

The study took place in Israel in March and April 2010 and surveyed unmarried undergraduate students ($N=338$) for their love styles, TV viewing habits, demographics, and love status (current involvement in a serious romantic relationship and marriage intentions). The choice of unmarried college students as research population stems from their inherent interest in love that increases response rate (Hendrick & Hendrick, 2002).

Sample and Research Instrument

The questionnaires were distributed at a public Israeli university among freshmen, sophomore and junior students whose curriculum does not include any acquaintance with Lee's love style taxonomy or with cultivation theory. The study was presented as an academic project without specifying the research questions. The questionnaire was filled out in class and extra credit was given to the students who took part in the study. Of the 396 students approached, we received 338 filled-in questionnaires, a response rate of 85%. Expectedly, the respondents' age hovered around the early 20s with only minor dispersion ($M=23.3$, $SD=2.6$). About two thirds of the sample (228 respondents) were females (something that reflects the sex ratio in the student body) and 157 respondents (46.5% of the sample) declared that – at the time of the study – they were involved in a serious romantic relationship. As many as 93% of the respondents were Jewish (the rest were Arabic). In terms of income, 31% of the respondents described their parents' income as slightly lower or much lower than the national average; 29% described their parents' income as more or less equal to the national average; 40% described their parents' income as slightly higher or much higher than the national average. We asked about the parents' income because Israeli college students tend to be financially dependent on their parents (Shavit, Ayalon, Bolotin-Chachashvili, & Menahem, 2007).

The questionnaire consisted of two parts: Part I contained the Love Attitude Scale; part

II included items concerning daily time allotted to TV viewing, the most favorite TV program, demographics, and "love status," which consisted of two items – one that measures anticipation of getting married in the foreseeable future (How do you plan to see yourself in a number of years? Definitely Married/Probably Married/Maybe Married and Maybe Unmarried/Probably Unmarried/Unmarried) and one that asks whether the respondent is *currently* involved in a romantic relationship. Items concerning TV viewing appeared at the end of the questionnaire in order to prevent a spurious effect stemming from thinking about television whilst specifying views on other topics (Shanahan & Morgan, 1999).

MEASURES

TV viewing

The following items were asked: "on an average *week* day, how much time (*in hours and minutes*) do you watch TV?" and "on an average *weekend* day, how much time (*in hours and minutes*) do you watch TV?" Items addressing different parts of the week were so weighted as to generate a measure of weekly TV viewing (*cf.* Hetsroni, 2008; Morgan et al., 1999; Signorielli, 1991). Additionally, we asked about viewing of popular genres whose typical content is relevant to our domain: news (that are characterized by minimal reference to romance) and soap operas (e.g. *The Bold and the Beautiful*), family drama (e.g., *Brothers and Sisters*) and sitcoms (e.g., *Two and a Half Men*) that often feature love affairs and include lengthy dialogues about love and romance. The daily time allotted to viewing these "love genres" was combined so as to create a measure of exposure to "love related programming" that takes after Segrin and Nabi's (2002) measure of "relationship genres viewing". Lastly, the respondents were presented with an open-ended item that requested them to name the TV show that they like to watch more than any other program. Answers to this question were coded by two research assistants, who were not privy to the goals of the study (Cohen's $\kappa=.89$). The coding scheme classified shows by their genre: news, love related programming, or other.

Love Style (Love Attitude Scale)

The Love Attitude Scale was composed by Hendrick and Hendrick (1986) as a measure of Lee's six love styles. The 42 items, seven items per love style, refer to a specific love relationship at present (when the respondent is currently in a relationship), or to a past relationship (when the respondent is not currently in a relationship but was in a relationship in the past), or to the conception of a relationship (when the respondent was never part of a romantic relationship) and offer two versions – one worded for males and one worded for females. The respondents are asked to mark their agreement with each of the statements on a scale that ranges from one ("totally disagree") to five ("totally agree"). Here are sample

items taken from the English version of the scale (Hendrick & Hendrick, 1986; 1990):

Eros: "My partner and I have the right physical 'chemistry' between us."

Ludus: "I believe that what my partner doesn't know about me won't hurt him/her."

Storge: "Our love is the best kind because it grew out of a long relationship."

Pragma: "A main consideration in choosing my partner is how s/he would reflect on my family."

Mania: "When my partner doesn't pay attention to me, I feel sick all over."

Agape: "I would rather suffer myself than let my partner suffer."

The scale was translated to Hebrew by Almog (2006) using back and forth translation by two native speakers under the supervision of an expert on romantic relations. Almog reports internal consistency values ranging from $\alpha=.65$ for Storge to $\alpha=.83$ for Agape in a sample of 228 Israeli adults, which are not far from the figures reported for the original English version (Hendrick & Hendrick, 1990). In our sample, the sub-scales reliability coefficient values were as follows: Eros ($\alpha=.71$), Ludus ($\alpha=.67$), Pragma ($\alpha=.72$), Mania ($\alpha=.70$), and Agape ($\alpha=.79$). These values denote an adequate level of reliability. In contrast, Cronbach's alpha coefficient pertaining to Storge ($\alpha=.55$) was less than sufficient, but it crossed the 0.6 threshold ($\alpha=.64$), after one of the items ("It is hard for me to say exactly when our friendship turned into love") had been omitted from the scale. The relatively low reliability of Storge was already observed in a previous Israeli survey (Almog, 2006) and in studies conducted in other countries (Neto et al., 2000, p.631).

A confirmatory factor analysis performed on the revised instrument (41 statements) tested the orthogonal six-factor model as stipulated by Hendrick and Hendrick (1990) yielding a goodness of fit index (GFI) that is equal to .90 and root mean square error of approximation (RMSEA) that is equal to .04. The items' factor loadings were all above the .40 threshold and were all statistically significant ($p<.05$). These figures attest that the multidimensionality of the scale fits into the theoretical six-factorial structure.

RESULTS

For each love style, an arithmetic mean that could range from 1 to 5 was computed. The values ($M=3.81$, $SD=.61$ for Eros; $M=2.46$, $SD=.67$ for Ludus; $M=3.34$, $SD=.71$ for Storge; $M=2.84$, $SD=.70$ for Pragma; $M=3.15$, $SD=.69$ for Mania; $M=3.60$, $SD=.67$ for Agape) place our Israeli sample as higher in Eros and Agape and lower in Ludus and Pragma in comparison with respondents of similar demographics (undergraduate students) from European countries such as France and Switzerland (see Netto et al., 2000, p.632).

The time our respondents allot daily to television viewing, two hours and twenty-five minutes on average, is 80 minutes less than the national average (Eurodata TV, 2010). However, devoting less time to TV viewing is not an unusual phenomenon among undergraduate students. As for viewing of specific genres, our respondents spend each day

on average one hour and fifteen minutes on watching love related programming and 40 minutes on watching the news. Regarding the most favorite program – 190 respondents (56.2% of the sample) named a love related show, 52 respondents (15.4%) picked up a news telecast, 33 respondents (9.8% of the sample) mentioned a program that belongs to other genres such as sports or action-adventure drama, and 63 respondents (18.6% of the sample) did not name any show as their most favorite program.

To answer *RQ1*, which asked about the connection between different love styles and the level of TV viewing, let us look at the fifth-order partial Pearson correlations between general viewing, news viewing and viewing of love-related programming and each of the love styles, when love status (current involvement in a romantic relationship, anticipation of getting married in the foreseeable future) and demographics (sex, ethnicity, income) are kept under control. The correlations appear in Table 1.

Only two love styles correlate significantly with TV viewing: Eros (correlated positively with general viewing and with viewing of love related programming) and Ludus (correlated positively with general viewing and with viewing of news programs).

To answer *RQ2*, which asked whether there are differences in the levels of love styles that can be ascribed to the genre of the most favorite program, we ran six ANCOVA procedures. The genre of the most favorite program (news or love related programming) was the independent variable. Eros, Ludus, Mania, Storge, Mania and Pragma (ranging on a 1 to 5 scale) served as the dependent variables, and sex, ethnicity, income, current involvement in a romantic relationship and anticipation of getting married in the foreseeable future served as covariates (control variables). The results of the ANCOVA, including effect size, appear in Table 2.

The level of Ludus is higher among respondents who name the news as their favorite program, compared to respondents who mention love related programming as their favorite show $\{F_{(1,236)}=3.9, p<.05, \eta^2=.018\}$. The level of no other love style is impacted by the genre of the most favorite program.

DISCUSSION

The findings corroborate an effect of exposure to television on two love styles. Under multiple controls, which include pertinent demographics (sex, ethnicity, income) and love status (current involvement in a serious romantic relationship and marriage intentions), heavy television viewing remains significantly linked to Eros and Ludus. The Eros lover is particularly exposed to genres abundant with love stories like soap opera, family drama and sitcom. The Ludus lover's TV diet is typified by a greater exposure to the news and by larger amounts of viewing in general. The other love styles in Lee's taxonomy – Storge, Pragma, Mania and Agape – are not significantly correlated with the time allotted to TV viewing. A

Table 1

Fifth-Order Pearson Partial Correlations between TV Viewing and Love Styles (N=338)

	Eros	Ludus	Storage	Pragma	Mania	Agape
TV Viewing - General	.110 *	.179 **	.068	.001	.049	.072
TV Viewing - News	.068	.153 *	.005	.065	-.022	.067
TV Viewing - Love Related Programming	.160 **	.089	.098	-.030	.046	.101

* $P < .05$ ** $P < .01$

nearly identical pattern of effects is detected, when the independent variable is the genre of the viewers' most favorite show, with the sole exception of Eros whose level is not significantly related to favoring shows of a certain genre.

A cultivation explanation of the findings is that the perennial flirter (Ludus) and the passionate romanticist (Eros) have – to some extent – unconsciously mastered their love craft from watching television. The connection between Eros and viewing of love related shows is not surprising due to the ubiquitousness of romantic elements such as marriage ceremony or honeymoon that are part of Eros love in soap operas and family drama (Galician, 2004; Schreiber, 2006). A similar relationship between higher levels of Eros and exposure to these genres was also found in Segrin and Nabi's (2002) study. Less obvious is the positive correlation between Ludus and excessive exposure to TV news. Perhaps, the suspicion and the lack of commitment that are embedded in many news items (e.g., reports about political intrigues) appeal to the Ludus lover, who is non-committed by essence (Hendrick, 2004).

Why did we not find any meaningful correlation between the amount of time spent in front of the home screen and the level of Storage, Pragma, Agape, and Mania? A cultivation answer would suggest that the popular programming is not abundant with presentations of these love styles that could provide the viewers with captivating descriptions of these orientations. Agape self-scarification, business style romance a-la Pragma, and non-sexual storgic friendship lack the bare necessities of conflict and suspense that constitute essential elements of fictional and non-fictional TV drama (Moore et al., 2006). Mania, often displayed in films in the 1930s and 1940s, has since then almost vanished from the screen – perhaps because malinger expressions of love seem overly simplistic to the modern viewer (Schreiber, 2006).

Table 2
ANCOVA for the Genre of the Most Favorite Program

Love Style	Love Related Programming (n=190)		News (n=52)		$F_{(1,234)}$	Partial η^2
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
Eros	3.88	0.50	3.87	0.62	0.05	.000
Lodus	2.36	0.64	2.62	0.62	3.90*	.018
Storge	3.33	0.72	3.35	0.70	0.25	.001
Pragma	2.74	0.66	2.92	0.73	0.90	.000
Mania	3.21	0.66	3.25	0.73	0.75	.000
Agape	3.59	0.65	3.68	0.61	1.09	.005

* $p < .05$

The fact that routine viewing of non-persuasive TV material has a significant impact on something as complex as love orientation is noteworthy. While the magnitude of the connection is not huge – ranging from one to two percent of the variance – it is still within the range of correlations usually encountered in cultivation studies (Shanahan & Morgan, 1999). When we take into account that higher levels of Eros and Ludus forecast the level of satisfaction from marriage (Meeks et al., 1998) and foresee the lifetime number of sexual partners (Hans, 2008), we realize how far reaching the impact of TV viewing on love orientation and relationship experience is. Owing to the fact that Eros is a positive indicator of satisfaction with a long term romantic relationship, whereas Ludus is a negative indicator of the same quality (Hendrick, 2004), watching genres such as soap, family drama and sitcom (whose viewing is positively correlated with Eros) can assist in securing fulfillment from romantic partnership, whereas watching the news (exposure to which is positively correlated with Ludus) can be harmful for this purpose.

Study Limitations and Suggestions for Future Research

In a cross-sectional study like ours it is difficult to determine causality in the relationship between dependent and independent variables. It is possible that people who already belong to a certain love style(s) expose themselves intentionally to programming that is in accord with their dominant love style(s). For example, the Eros lover may choose to watch love related programming because this programming is full of descriptions that are

in line with his character (Segrin & Nabi, 2002). More generally, *selective exposure*, as well as *selective attention*, can be an alternative interpretation of the findings to cultivation. Theoretically, this possibility is consistent with the *uses and gratifications school*, which suggests that TV viewers selectively choose to watch and attend to programs that satisfy their various social and psychological needs and interests (Rubin, 2002). However, one of the precursors of these needs and interests (along, of course, with family members, peers, and different socialization agents) might be prior TV exposure (Segrin & Nabi, 2002). Therefore, the selective exposure/selective attention interpretation of the findings is not entirely contradicting the cultivation explanation.

The last conclusion is further strengthened by a nearly identical pattern of results that were found for different measures of exposure to genre-specific programming such as the amount of time allotted to viewing certain genres (a measure of *ritual viewing*) and the genre affiliation of the most favorite program (a measure of *instrumental viewing*). The fact that different measures of TV exposure yield almost similar results braces the position of Gerbner and his colleagues, who have contended that in cultivation the mode of exposure to TV is less significant than the exposure itself (Gerbner et al., 1986). However, the existence of genre-specific effects indicates that – at least when we speak about dispositions towards love - the cultivation effect depends partly on content specifications.

A few words are due about methodological limitations. Whilst our model included several control factors, in a topic as multifarious as love it is obvious that additional and potentially pertinent factors should be taken into consideration in future studies. A study that considers love styles could benefit from the inclusion in the analysis of personality traits that are linked to interpersonal attraction. With respect to the research population, while surveying unmarried college students about love is a common practice in light of the relevance of the topic to the population (Hendrick & Hendrick, 2002), the demographic makeup of our sample still decreases external validity. Future studies would benefit, therefore, from a less homogenous research population. However, identifying consistent effects of casual TV viewing amongst respondents, who are expected to be more critical and more highly educated than the man on the street, indicates that our findings do reflect actual trends.

Finally, love styles and second-order cultivation may not be the concepts which are most easily manipulated in an experimental design due to their pervasive nature across life paths. Nonetheless, an experiment that would expose subjects to program segments that feature different love styles and later measure the level of these love styles among the subjects – may assist in strengthening the casualty in the relationship between TV viewing and love styles.

REFERENCES

- Almog, R. (2006). *The relationship between wisdom and love styles*. Unpublished masters' thesis, Tel-Aviv College, Israel.
- Bachen, C. M., & Illouz, E. (1996). Imagining romance: Young people's cultural models of romance and love. *Critical Studies in Mass Communication*, 13(4), 297-308.
- Berscheid, E., & Reis, H. T. (1998). Attraction and close relationships. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (4th edition) (pp. 193-281). NY: McGraw-Hill.
- Contreras, R., Hendrick, S. S., & Hendrick, C. (1996). Perspectives on marital love and satisfaction in Mexican-American and Anglo-American couples. *Journal of Counseling and Development*, 74, 408-415.
- Elkind, D. (1993). Adolescents, parenting, and the media in the twenty-first century. *Adolescent Medicine State of the Art Reviews*, 4, 599-406.
- Eurodata TV (2010). *One television year in the world*. Paris: Mediametrie.
- Galician, M-L. (2004). *Sex, love and romance in the mass media: Analysis and criticism of unrealistic portrayals and their influence*. Mahwah, NJ: Lawrence Erlbaum.
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1986). Living with television: The dynamics of the cultivation process. In J. Bryant & D. Zillmann (Eds.), *Perspectives on media effects* (pp. 17-40). Mahwah, NJ: Lawrence Erlbaum.
- Greenberg, B. S. (1988). Some uncommon television images and the Drench Hypothesis. In S. Oskamp (Ed.), *Television as a social issue* (pp. 88-102). Newbury Park, CA: Sage.
- Hans, J. D. (2008). Do love styles predict lifetime number of sex partners? *American Journal of Sexuality Education*, 33(2), 149-164.
- Hawkins, R. P., & Pingree, S. (1982). Television's influence on constructions of social reality. In D. Pearl, L. Bouthilet, & J. Lazar (Eds.), *Television and behavior: Ten years of scientific progress and implications for the eighties* (Vol. 2, pp. 224-247). Washington, DC: Government Printing Office.
- Hendrick, C., & Hendrick, S. S. (1986). A theory and method of love. *Journal of Personality & Social Psychology*, 50, 392-402.
- Hendrick, C., & Hendrick, S. S. (1990). A relationship-specific version of the Love Attitudes Scale. *Journal of Social Behavior and Personality*, 5, 239-254.
- Hendrick, C., Hendrick, S. S., & Dicke, A. (1998). The Love Attitude Scale: Short form. *Journal of Social and Personal Relationships*, 15, 147-159.
- Hendrick, S. S. (2004). Close relationships research: A resource for couple and family therapists. *Journal of Marital and Family Therapy*, 30(1), 13-27.
- Hendrick, S. S., & Hendrick, C. (1992). *Romantic love*. Newbury Park, CA: Sage.
- Hendrick, S. S., & Hendrick, C. (2002). Linking romantic love and sex: Development of the Perceptions of Love and Sex Scale. *Journal of Social and Personal Relationships*, 19, 361-378.
- Hetsroni, A. (2008). Over-estimates, under-estimates and the cultivation effect. *Communication Research Reports*, 25(3), 200-210.
- Holmes, B. M. (2007). In search of my "one and only": Romance-oriented media and beliefs in romantic relationship destiny. *Electronic Journal of Communication*, 17(3).

- Holmes, B. M., & Johnson, K. (2009). Where fantasy meets reality: Media exposure, relationship beliefs and standards, and the moderating effect of a current relationship. In E. P. Lamont (Ed.), *Social psychology: New research* (pp. 117-134). Hauppauge, NY: Nova Science.
- Jones, G. D., & Nelson, E. S. (1996). Expectations of marriage among college students from intact and non-intact homes. *Journal of Divorce and Remarriage*, 26, 171-189.
- Lee, J. A. (1973). *The colors of love: An exploration on the ways of loving*. Don Mills, Ontario, Canada: New Press.
- Meeks, B. S., Hendrick, S. S., & Hendrick, C. (1998). Communication, love, and relationship satisfaction. *Journal of Social and Personal Relationships*, 15, 137-142.
- Montgomery, M. J., & Sorell, G. T. (1997). Differences in love attitudes across family stages. *Family Relations*, 46, 55-61.
- Morgan, M. (1980, May). *Television and role socialization*. Paper presented at the International Communication Association 31st annual conference. Acapulco, Mexico.
- Morgan, M., Legette, S., & Shanahan, J. (1999). Television and family values: Was Dan Quayle right? *Mass Communication & Society*, 2(1/2), 47-63.
- Morgan, M., & Shanahan, J. (2010). The state of cultivation. *Journal of Broadcasting & Electronic Media*, 54(2), 337-355.
- Moore, B., Bensman, M. R., & Van Dyke, J. (2006). *Prime time television: A concise history*. Westport, CT: Praeger.
- Murstein, B. I., Merighi, J. R., & Vyse, S. A. (1991). Love styles in the United States and France: A cross-cultural comparison. *Journal of Social and Clinical Psychology*, 10, 37-46.
- Neto, F., Mullet, E., Deschamps, J.-C., Barros, J., Benvindo, R., Camino, L., Falconi, A., Kagibanga, V., & Machado, M. (2000). Cross-cultural variations in attitudes toward love. *Journal of Cross-Cultural Psychology*, 31, 626-635.
- Potter, W. J. (1994). Cultivation theory and research: A methodological critique. *Journalism Monographs*, 147, 1-34.
- Robinson, J., & Skill, T. (2001). Five decades of families on television: From the 1950s through the 1990s. In J. Bryant & J. A. Bryant (Eds.), *Television and the American family* (2nd edition) (pp. 139-162). Mahwah, NJ: Lawrence Erlbaum.
- Rubin, A. M. (2002). The uses-and-gratifications perspective of media effects. In J. Bryant & D. Zillman (Eds.), *Media effects: Advances in theory and research* (2nd edition) (pp. 525-548). Mahwah, NJ: Lawrence Erlbaum.
- Schreiber, M. (2006). *"You don't want to be in love... You want to be in love in a movie": Romance and postfeminism in contemporary film and television*. Unpublished doctoral dissertation, University of California – Los Angeles (UCLA), Los Angeles, CA.
- Segrin, C., & Nabi, R. L. (2002). Does television viewing cultivate unrealistic expectations about marriage? *Journal of Communication*, 52(2), 247-263.
- Shanahan, J., & Morgan, M. (1999). *Television and its viewers: Cultivation theory and research*. Cambridge: Cambridge University Press.
- Shavit, Y., Bolotin-Chachashvili, S., Ayalon, H., & Menahem, G. (2007). Diversification, expansion and inequality in Israeli higher education. In Y. Shavit, R. Arum, A. Gamoran, & G. Menahem, (Eds.), *Stratification in higher education: A comparative study* (pp. 39-62). Palo Alto, CA: Stanford University Press.

- Shrum, L. J., Burroughs, J. E., & Rindfleisch, A. (2004). A process model of consumer cultivation: The role of TV is a function of type of judgment, In L. J. Shrum (Ed.), *The psychology of entertainment: Blurring the lines between entertainment and persuasion* (pp. 177-192). Mahwah, NJ: Lawrence Erlbaum.
- Signorielli, N. (1991). Adolescents and ambivalence towards marriage. *Youth & Society*, 23, 121-149.
- Sprecher, S., Hatfield, E., Cortese, A., Potapova, E., & Levitskaya, A. (1994). Token resistance to sexual intercourse and consent to unwanted sexual intercourse: College students' dating experiences in three countries. *Journal of Sex Research*, 31, 125-132.

TOWARD THE DEVELOPMENT OF THE NEWS ADDICTION SCALE: A PILOT STUDY

OLENA VASYLENKO, FLOYD W. RUDMIN AND BURBUQE LATIFI

Twenty-eight Likert items were created based on the seven problem criteria for substance dependence specified in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV): 1) tolerance effects, 2) withdrawal effects, 3) more than intended, 4) inability to stop, 5) requiring substantial time, 6) impeding other activities, and 7) continued usage despite problems. The survey questionnaire also asked about time spent on news, about news preferences, and about demographics. Item selection was based on a) correlation with time spent on news, b) correlation with other items for each DSM-IV criterion, and c) scale item-total correlation. The final seven items in the News Addiction Scale (NAS) each represent one of the seven DSM-IV problems denoting addiction. The NAS showed good reliability ($\alpha=.84$), with inter-item correlations ranging between .32 and .51. Principle components factoring produced one factor, explaining 50.4% of the variance, with all items loading above .65. In multiple regression analysis, time spent on news was significantly predicted by NAS scores ($\beta=.44$) but not by education ($\beta=.09$), age ($\beta=.08$), or gender ($\beta=0.00$).

Keywords: addiction, DSM-IV, media, news, scale development

Addiction research has traditionally focused on chemical addiction, defining it to be “dependence on alcohol, opiates, cocaine, and other stimulants, such as methamphetamines, marijuana, club drugs and tobacco” (Donovan & Marlatt, 2005, p.4). However, researchers are beginning to investigate “nontraditional” addictions, such as addictions to the media, including addiction to the Internet (Young, 1998; Chou & Hsiao,

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2000) and addiction to television viewing (McIlwraith, 1998; Horvath, 2004). Studies have shown that the symptoms of media addictions are similar to those of chemical addictions, although no chemical is consumed. For example, McIlwraith (1998) concluded that the self-identified TV addicts were more unhappy and withdrawn, and used television viewing to distract themselves from negative moods or to fill time. Young (1998) found that students addicted to the Internet had difficulty studying and getting enough sleep, spent less time with friends, and were emotionally and socially withdrawn. In such correlational studies, the ill effects may have caused, or been caused by, the media addiction or perhaps by third variables.

Recent empirical and theoretical work on addiction has provided support for the idea that chemical and nonchemical addictions are based on similar mechanisms and therefore can be assessed similarly. First, neuroscience studies have shown that the reward circuits in the brain are activated both by chemicals traditionally thought of as addictive and by other rewarding behaviors that do not involve use of chemicals (Holden, 2001). Thus, any behavior that is perceived as rewarding might have an addictive potential. Moreover, if chemical and nonchemical addictions are based on a similar mechanism, they could be assessed using similar problem criteria. However, there is discussion as to whether rewarding behaviors that do not involve use of chemical substances are as addictive as substance addictions (Holden, 2001).

Second, theoretical work on addiction in the recent decades has provided support for the idea of similarity between chemical and nonchemical addictions. With the inclusion of nonchemical addictions in addiction research, attempts have been made to broaden the definition of the term to apply equally to chemical and nonchemical addictions. For example, Goodman has argued that addiction can be defined as:

A process, whereby a behavior, that can function both to produce pleasure and to provide relief from internal discomfort, is employed in a pattern characterized by 1) recurrent failure to control the behavior and 2) continuation of the behavior despite significant negative consequences (Goodman, 1990, p.1404).

This definition was derived from, and is therefore compatible with, the set of problem criteria for substance dependence as specified in *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III-R). Replacement of “substance use” with “behavior” is intended to make the definition applicable to chemical and nonchemical addictions alike. However, this definition is not universally accepted because little research has been done on the similarities between chemical and nonchemical addictions.

The controversy as to whether chemical and nonchemical addictions are similar is reflected in the DSM. According to Widiger and Smith (1994), *dependence* referred to both psychological dependence and physiological dependence in DSM-I and DSM-II and only to physiological dependence in DSM-III. The diagnostic criteria specified in DSM-III-R and DSM-IV imply that substance dependence can be generalized to behavioral or nonchemical dependence. For a diagnosis of substance dependence as specified in DSM-IV, a person

needs to display three of the seven problem criteria, of which only two (tolerance and withdrawal) include physiological symptoms (American Psychiatric Association, 1994). Thus, neither tolerance nor withdrawal is necessary for a diagnosis of substance dependence as specified in DSM-IV, and a person can be diagnosed with substance dependence regardless of whether physiological dependence, as indicated by tolerance and withdrawal, exists.

Thus, some researchers have applied DSM-IV to behavioral addictions. Items for Horvath's (2004) Television Addiction Scale were derived from the DSM-IV list of problems identifying substance dependence, and Young (1998) derived the items for her diagnostic questionnaire from the DSM-IV criteria for pathological gambling. When applying the psychiatric definition and diagnostic problem criteria to behavioral addictions, researchers assume that chemical and nonchemical addictions are similar. Although the traditional definition of addiction as specified by the DSM may be the most accepted one, it may not apply to chemical and nonchemical addictions equally. However, until the nature of nonchemical addictions is fully investigated and the symptoms and consequences are properly mapped, the DSM list of problems denoting addiction is a good starting point for assessment of nonchemical addictions. Perhaps future editions of the DSM will differentiate physiological and behavioral addictions.

NEWS ADDICTION

Although addiction research has provided support for media addictions such as excessive television viewing (McIlwraith, 1998) and excessive Internet use (Young, 1998), no studies have yet investigated addiction to a specific type of content distributed via media, namely, news. One reason for this may be that people consider keeping themselves informed an adaptive and necessary activity. Research has shown that people consider attending to news to be a civic duty or obligation (Hagen, 1994). While television viewing in general was not considered important, it was taken for granted that news should be watched in order to "keep up" and because "one must be informed" (Hagen, 1994, p.202). Thus, while spending much time watching television or surfing the Internet may be thought of as problematic, watching or reading news is generally considered a useful behavior.

Research has shown that what type of news one prefers and how important one considers news to be is influenced by sociodemographic characteristics such as gender, age, and level of education. For example, Knobloch-Westerwick and Alter (2007) found that men and women preferred different types of news. Women spent more time reading about social and interpersonal topics and less time reading articles about achievement and performance. These researchers also noted that men were more likely than women, respectively, to attend to news on a daily basis in newspapers (51% vs. 41%), radio (46% vs. 39%), and Internet (31% vs. 21%) (Knobloch-Westerwick & Alter, 2007). If men spend more time on news, one might expect that more men than women would experience news addiction.

Although no research has yet investigated to what degree there is a problem of excessive news consumption, anecdotal evidence suggests that news consumption may have an addictive potential. Self-identified addicts have described news consumption to be a behavior that interferes with other normal activities: "I check out at least a dozen different sites every morning before I even think about getting going... I can suddenly find that several hours have elapsed with nothing but knowledge to show for them" (Whenham, 2006, p.1). Another addict has described his attempts to overcome news addiction:

"I was surprised at how difficult this trial was from the very beginning. Throughout the first day, I was just itching to check the news... I had to delete my news bookmarks to prevent myself from subconsciously checking the news out of habit. After several more days, I was still itching to check the news. It felt like a craving. I soon realized I wasn't just dealing with a habit — I was actually tackling an addiction" (Pavlina, 2006, p.1).

A few studies have provided indirect evidence for the existence of news addiction. For example, Dewenter's (2003, p. 5) analysis of consumption behavior of the readers of German news magazines revealed an habituation effect, in that the readers did not switch to "comparable substitutional products in spite of the relatively low switching costs." This habituation effect was called "a rational addiction" to the media that "arises from the permanent use of the product" (Dewenter, 2003, p. 5). Rational addiction to news was not interpreted as problematic consumption by Dewenter, merely as a habit. In addition, DeBoer and Velthuijsen (2001) have argued that people could develop dependency relationships with the news. Their study was based on the media system dependency theory, which posits that people use the media "in order to understand themselves and their environment, to obtain guides to behavior and for relaxation and social play" (DeBoer & Velthuijsen, 2001, p. 142). They found that when interest in news and exposure to the media were high, there was a possibility of dependence. Their results also showed a positive relationship between exposure to news and dependence on news.

Although such findings show that some people consume more news than others, the researchers did not investigate whether news addiction exists. However, the aforementioned anecdotal evidence suggests that when people feel too much time is spent reading or watching news, an addiction may be indicated. Probably because of easy access to the media, exposure to news in the population is high. For example, in Norway, about 70% of the population have a newspaper subscription and read a daily newspaper; furthermore, 80% watch television daily for an average of 2.3 hours and 71% use the Internet daily (Statistics Norway, 2009). This high usage of media may be a harmless habit, but may indicate an addiction for some. Although watching and reading news may not be viewed as a typical addiction, negative consequences may follow when the behavior interferes with important activities, such as work or spending time with family. A news consumption habit is not a news addiction if it does not cause any of the problem criteria noted in the DSM. Catastrophic life problems, such as job loss, divorce, bankruptcy, criminal conviction, ill health, death, etc. are not included in DSM criteria for addictions.

The purpose of this study was to develop a psychometric measure of news addiction.

Such a scale would be useful in studies of population samples, particularly if the scale were brief and thus suitable for large N studies such as those carried out by national statistics bureaus. Such studies could determine the prevalence of news addiction, as well as the degree to which people self-report news consumption being a problem in their lives. A brief measure might also increase the likelihood of use in online and cell phone studies, as well as in multiscale studies employing Structural Equation Modeling to compare theories of news consumption. A successful brief scale might warrant future development of a larger, more comprehensive clinical scale.

METHOD

News Addiction Measures

The DSM-IV (American Psychiatric Association, 1994, p.181) lists seven types of problems that indicate dependence:

tolerance effects requiring more usage to achieve the same effect;
withdrawal effects experienced if usage is reduced or stopped;
larger amounts over longer time than intended;
unsuccessful efforts to cut down;
much time is spent obtaining, using, and recovering from usage;
impeding other activities such as work or time with family;
continued use despite problems.

Based on these problem criteria, 28 Likert items were developed, four items representing each of the seven types of problems. For example, the four trial items for the DSM criterion of “impeding other activities” were:

I would be more productive at work if I spent less time on news.
I have sometimes preferred news to spending time with my family.
I have sometimes stayed up too late watching or reading news.
I often stop other activities when the TV news is on.

The 28 items were randomized and presented with four-point Likert response options: *disagree completely*, *disagree*, *agree*, and *agree completely*.

Other Measures

In order to have a behavioral measure by which to select items with validity, the questionnaire also contained two questions about news consumption: 1) “How much time did you spend reading and watching the news yesterday?” and 2) “How much time a day do

you spend reading and watching news?” Respondents were to write in the amount of time for each question. The two answers were averaged to obtain an estimate of news consumption.

In order to explore if there were relationships between news topics and addiction scores, a list of six news topics (international political news, local news, sports news, business news, health and lifestyle news, and entertainment news) was presented, with instructions to rank order these from one (most preferred) to six (least preferred).

Finally, the questionnaire asked about age, gender, country of residence, and years of higher education. These demographic questions were included in order to describe the sample and to explore possible relationships between these variables and addiction scores.

Instructions for the questionnaire informed participants that the study was about news habits, how much time people spend on news, and what type of news is most preferred. Participants were assured that their answers would be anonymous. Respondents who were interested in learning the results of the study were instructed to contact an email account set up for that purpose, thus avoiding identifying themselves with their own questionnaire responses.

Sampling

The questionnaire was posted online. A link to the questionnaire was promoted by announcing it in online discussion groups, news forums, and book clubs and by circulating it to the authors' online network of friends. In addition, 45 students were recruited from a psychology class to complete a paper-and-pencil version. These students were Norwegians, but fluency in English is the norm in Norwegian universities.

This sampling procedure resulted in a diverse set of respondents, suitable for evaluating items for a news addiction scale. Of the 145 respondents, 63% were from Norway, 17% from the USA, Canada, UK, and Australia, 10% from Northern Europe, 8% from Southern Europe, and 1% from Asia and Africa. Ages ranged from 18 to 57 ($M=28.5$, $SD=10.7$); 57% were female and 43% male. Years of post-secondary education ranged from 0 to 10 years ($M=3.4$, $SD=2.06$).

RESULTS

Missing Data

The rank ordering of news topics from most preferred (value one) to least preferred (value six) resulted in 22% missing data. The task was apparently too difficult or the instructions were unclear. Due to the high rate of missing data and the unexpected difficulties with this question, information from this question was not considered for further

analysis or discussion.

Time Spent on News

Time spent on news per day ranged from 0 to 181 minutes ($M=52.4$; $SD=43.57$). Although men on average spent about ten minutes more per day on news ($M=57$) than did women ($M=48$), this difference was not statistically significant ($t=-1.23$, $df=137$, $p>.05$). As might be expected, the amount of time spent on news was positively correlated with age ($r=.25$, $n=140$, $p<.05$) and with education ($r=.21$, $n=140$, $p<.05$).

Item Selection

The first step in the selection process was elimination of one of the four items for each DSM-IV criterion based on lowest correlation with time spent on news. These items were surmised to be items with low validity. The second step was elimination of one of the three remaining items based on lowest item-total correlation with the other two items in the DSM-IV criterion group in order to remove items that poorly represent the DSM-IV criterion. The third step was the elimination of one of the two remaining items in the DSM criterion group based on lowest item-total correlation with the other 13 remaining candidate items in the total news addiction scale.

To illustrate, consider the selection of an item to represent the DSM-IV criterion of “tolerance effects”. The four candidate items were:

- i) I watch TV news more now than I did one year ago.
- ii) I now seek news from more sources than I did a year ago.
- iii) I feel a need to seek more news on a topic.
- iv) Brief news summaries leave me frustrated.

Item i) was eliminated in step-one because its correlation with time spent on news ($r=.05$) was lower than that of the other three items respectively ($r=.39$; $r=.28$; $r=.32$). Item ii) was eliminated in step-two because its item-total correlation ($r=.30$) for its DSM criterion group was lower than that of the other two items in the group, respectively ($r=.38$; $r=.45$). Item iii) was eliminated in step-three because its item-total correlation ($r=.44$) with the other 13 remaining items in the total scale was lower than that of item iv) ($r=.55$). By this three stage process, item iv) was retained for the final NAS scale, representing the aspect of news addiction that entails developing a tolerance for news such that more news is needed to be satisfied.

However, this process selected two items that were non-independent. The item for the DSM criterion of “much time” was “I spend too much time on news,” and the item selected for the DSM criterion of “continued use despite problems” was “I sometimes have felt guilty about spending too much time on news.” Agreement to the second item logically requires

agreement to the first item, thus rendering them non-independent. These two items were given the same answer by 73% of the respondents, and another 26% gave answers that differed by only 1 Likert unit. To resolve this problem, the second-best of the “much time” items was substituted. The first-selected and the second-best items were:

“I spend too much time on news;”

“I sometimes spend more time on news than I intended.”

They had similar validity correlations in step-one, respectively, ($r=.36$; $r=.33$) and similar item-total correlations for their DSM criterion group in step-two, respectively, ($r=.56$; $r=.53$).

They had different inter-item total correlations for the scale in step-three, respectively, ($r=.70$; $r=.53$), but the higher of these two correlations is elevated in part because of the problem of non-independence.

The final set of items thus selected for the News Addiction Scale (NAS) are listed in the Table, showing means and standard deviations for the total scale and for each item. The inter-item correlations, ranged from $r=.32$ to $r=.51$, with a mean inter-item correlation of $r=.42$. The item-total correlations ranged from $r=.54$ to $r=.62$, and the standardized alpha coefficient was $\alpha=.84$, which is high considering that the scale has only seven items. These high positive values attest to the scale’s internal reliability and also attest to the coherence of the construct of news addiction.

To examine whether all seven items measured the same construct, a principal components factor analysis was performed on the final scale. As might be expected given the item selection process, only one factor had eigenvalue greater than 1.00, accounting for 50.4% of the total variance. In the one-factor solution, all items had positive factor loadings ranging from .66 to .74, as presented in the Table.

The measure of time spent on news per day was used as a validity measure for the selection of items. The validity correlations for the final items ranged from $r=.24$ to $r=.38$, and the validity correlation for the scale was $r=.46$ ($n=141$, $p<.001$).

News Addiction Prevalence

As shown in the Table, the mean scores for the NAS, and for each item, were all below the scale mid-point of 2.5, in the disagree range. Thus, the respondents in this sample, as a group, reported themselves not to have addiction to news. However, eight individuals, comprising 5.5% of the sample, answered complete agreement to three or more of the seven items. By DSM-IV criteria for dependency problems, having three of the seven symptoms imputes a clinical diagnosis of dependency. If a criterion of two standard deviations of deviancy is used, then six individuals, comprising 4.1% of the sample, had abnormally high

Table: News Addiction Scale (NAS) and items, based on 4-point Likert responses, showing means (Mn), standard deviations (SD), and single-factor loadings (r).

News Addiction Scale (NAS)	Mn (SD) loading r
Total scale: summing 7 items, 4-point Likert scale, N = 145	2.04 (.62)
1. <i>DSM criterion: More than intended:</i> Sometimes I spend more time on news than I intended.	2.38 (.86) r = .66
2. <i>DSM criterion: Inability to stop:</i> It is difficult to stop when I am reading or watching important news.	2.38 (.94) r = .72
3. <i>DSM criterion: Withdrawal effects:</i> I feel uncomfortable when I miss the news for several days.	2.31 (.99) r = .72
4. <i>DSM criterion: Impeding other activities:</i> I have sometimes stayed up too late watching or reading news.	2.02 (.94) r = .74
5. <i>DSM criterion: Tolerance effects:</i> Brief news summaries leave me frustrated.	1.94 (.82) r = .68
6. <i>DSM criterion: Requiring substantial time:</i> I have gone out of my way to buy a newspaper or news magazine.	1.65 (.80) r = .70
7. <i>DSM criterion: Continued usage despite problems:</i> I sometimes have felt guilty about spending too much time on news.	1.59 (.72) r = .74

NAS scores. All six had also been identified by the DSM-IV addiction criteria. However, before concluding that approximately 5% of individuals have pathological news addiction, it should be noted that the sample here is opportunistic rather than random, and that the sample was recruited in ways that encourage self-selection of individuals who are heavy consumers of news.

Predictors of Time Spent on News

Weak positive correlations were found for NAS scores with age ($r=.25$, $n=144$, $p<.05$), with education ($r=.17$, $n=144$, $p<.05$) and with male gender ($r=.17$, $n=143$, $p<.05$). The mean NAS score for men ($M=2.17$) was significantly higher ($t=-2.02$, $df=141$, $p<.05$) than that for women ($M=1.96$), and the NAS standard deviation for men ($SD=.72$) was significantly larger ($F=2.00$, $p<.01$) than that for women ($SD=.51$). Thus, the relationship between NAS scores and time spent on news ($r=.46$, $n=141$, $p<.001$) could be due to age, education and/or gender effects.

To examine this possibility, multiple regression analysis was used. With time spent on news as the dependent variable, and NAS scores, education, age and gender entered simultaneously as predictors, they explained 24% of the variance. However, only the NAS score was a significant predictor ($\beta=.44$, $p<.001$) of time spent on news. The other independent variables were not uniquely predictive of time spent on news: age ($\beta=.08$, $p=.43$), education ($\beta=.09$, $p=.32$), and gender ($\beta=0.00$, $p=.98$).

DISCUSSION

Limitations

Because of the small size of the sample and the sampling procedures used, the results obtained cannot generalize to specified populations. However, the study was not intended to make claims about populations. The participants were of varied ages, genders, levels of education, and nationalities, sufficient to evaluate trial items for inclusion in the scale. The recruitment of many of the respondents via online news discussion sites probably induced a self-selection bias for heavy consumers of news media. For the purposes of this study, however, that was probably a benefit.

As mentioned earlier, measures of news topic preferences by a method of forced rank-order resulted in a high percentage of missing responses. Thus, this study was unable to investigate whether there was a relationship between preferred news topics and addiction scores. Future research should attempt to answer this question.

Future Research

The News Addiction Scale developed in this study had satisfactory reliability as measured by Cronbach's alpha coefficient and by inter-item and item-total correlations. The validity measure used in this study was time per day spent on news, with items selected to have validity. People with higher News Addiction Scale scores tend to spend more time on news than do people with lower scores. This finding is similar to that of DeBoer and Velthuisen (2001) who found that when exposure to news was high, there was a possibility of dependence.

Studies of convergent and discriminant validity are advisable, as are studies of test-retest reliability. Further studies of validity are necessary on new samples. For example, researchers could recruit pairs of people who know each other's news habits, such as family members or roommates, to fill out the questionnaire, with the target person reporting on himself or herself and with the other person reporting on the target person. A behavioral validation might entail respondents being required to wait at a computer consol that has been set to begin with a news presentation, but has options of games, email, music, or films, such that duration of news watching before searching other media would be a criterion measure of news dependency.

It is also important to commission normative studies of large random samples of specified populations in order to set cut points by which to identify individuals or groups with problematic news consumption habits, and to eventually determine the prevalence of news addiction. The small, self-selected, opportunity sample used in this study seems to have an addiction rate of about 5% using the DSM-IV criterion of experiencing three of the seven symptoms, and using the heuristic of two standard deviations above the mean. McIlwraith (1998) reported that 10% of respondents labeled themselves as addicted to television, and Chou and Hsiao (2000) reported that 5.9% of respondents were classified as addicted to the Internet. Thus, the tentative finding of this study is within reasonable range of these others studies' reports.

Although recent research has applied DSM-IV problem criteria to diagnose nonchemical addictions (e.g. Young, 1998; Horvath, 2004), it is unclear whether these symptoms apply equally to chemical and nonchemical addictions, especially for addictions that are rooted in adaptive behavior. Investigations of symptoms in self-identified addicts should inform researchers about which theories and definitions of addiction best explain news addiction. For example, use and gratifications research, which focuses on motives for use and gratification from use, might serve as a starting point. Furthermore, broad definitions of addiction, such as Goodman's (1990) could serve as alternative theoretical backgrounds for diagnostic criteria.

Finally, further research is necessary on gender differences in news addiction. Knobloch-Westerwick and Alter (2007) reported that men are more likely than women to attend to news on an average day. The present study found no significant gender differences in the amount of time spent on news per day. However, the present study did find significant

gender differences in News Addiction Scale scores, with men showing both high mean addiction scores and greater diversity in their scores.

Conclusion

The present study demonstrates that news addiction is a coherent construct. A brief, seven-item psychometric measure of news addiction was developed, following DSM-IV criteria of addiction. Future research using the News Addiction Scale will further establish the psychometric quality of the scale, will allow studies of prevalence, will help explore gender differences in news consumption behaviors, and might eventually contribute to developing theoretical explanations of news addiction.

REFERENCES

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: American Psychological Association.
- Chou, C., & Hsiao, M.C. (2000). Internet addiction, usage, gratification, and pleasure experience: The Taiwan college students' case. *Computers & Education*, 35, 65-80.
- DeBoer, C., & Velthuisen, A. S. (2001). Participation in conversations about the news. *International Journal of Public Opinion Research*, 13, 141-158.
- Dewenter, R. (June, 2003). *Rational addiction to news?* University FAF Economics Discussion paper No. 2.
- Donovan, D. M., & Marlatt, G. A. (2005). *Assessment of addictive behaviors* (2nd ed.). New York: The Guilford Press.
- Goodman, A. (1990). Addiction: Definition and implications. *British Journal of Addiction*, 85, 1403-1408.
- Hagen, I. (1994). The ambivalences of TV news viewing: Between ideals and everyday practice. *European Journal of Communication*, 9, 193-220.
- Holden, C. (2001). "Behavioral" addictions: Do they exist? *Science*, 294, 980-982.
- Horvath, C. (2004). Measuring television addiction. *Journal of Broadcasting & Electronic Media*, September 2004, 378-398.
- Knobloch-Westerwick, S., & Alter, S. (2007). The gender news use divide: Americans' sex-typed selective exposure to online news topics. *Journal of Communication*, 57, 739-758.
- McIlwraith, R. D. (1998). I, addicted to television: The personality, imagination, and TV watching patterns of self-identified TV addicts. *Journal of Broadcasting & Electronic Media*, 42, 371.
- Pavlina, S. (2006, September 26). Overcoming news addiction. In *Personal development for smart people*. Retrieved January 29, 2009, from <http://www.stevepavlina.com/blog/2006/09/overcoming-news-addiction/>.
- Statistics Norway. (2009, April 1). *Norsk mediebarometer 2008*. Retrieved April 27, 2009, from <http://www.ssb.no/emner/07/02/30/medie/>.

- Whenham, T. O. (2006, June 28). Controlling a news addiction. In *Personal productivity blog*. Retrieved January 29, 2009, from <http://www.allbusiness.com/human-resources/employee-development-employee-productivity/3878382-1.html>.
- Widiger, T. A., & Smith, G. T. (1994). Substance use disorder: Abuse, dependence and dyscontrol. *Addiction*, 89, 267-282.
- Young, K. S. (1998). Internet addiction: The emergence of a new clinical disorder. *CyberPsychology & Behavior*, 1, 237-244.

ENJOYMENT OF MEDIATED THREAT AS A FUNCTION OF CHARACTER AFFECT, EMOTION, AND OUTCOME: RECALLED RESPONSES TO A PRIME TIME SERIES

CYNTHIA HOFFNER AND QING TIAN

In an online questionnaire, 161 fans of the television series Lost described a recalled sequence in which a liked, neutral or disliked character was threatened and then rated their reactions on a series of scales. The study examined their enjoyment of the sequence and the episode as a function of their affect toward the threatened character, fear/worry during the sequence, and outcome of the threat. Results were consistent with Zillmann's model of suspense enjoyment and affective disposition theory. When the character was not harmed, respondents enjoyed both the threat sequence and the episode more when the character was liked more, and when they experienced more fear/worry. In contrast, when the character was harmed, enjoyment of the threat sequence was associated only with more liking for the character, and enjoyment of the episode was associated with greater fear/worry, but only when the character was disliked. Interpretations of the results and limitations of the study are discussed.

Keywords: Enjoyment; mediated threat; outcome; emotional response; character liking

Media narratives feature a wide range of characters that audience members come to know over the course of a film, or throughout long-term exposure to a television series. Viewers form impressions of characters, and come to like or dislike them in much the same way that they develop impressions of people in their daily life (Hoffner & Cantor, 1991b; Perse & Rubin, 1989). In television series, viewers are able to observe characters'

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interactions in many contexts, their solitary activities, and even their past experiences through flashbacks. When people come to know characters, they also care what happens to them. Narratives feature events and circumstances that have the potential to affect the physical and emotional well-being of the characters. Disposition theory is premised on the idea that audience members' enjoyment of narratives depends on both their feelings for the characters and the nature of the outcomes the characters experience (Raney, 2006; Zillmann, 2006). Another aspect of dramatic narratives that can contribute to enjoyment is suspense, or fear about potentially disturbing outcomes. According to Zillmann (1996, 2006), fear and apprehension about the outcomes for threatened characters can contribute to enjoyment of narratives, by intensifying positive responses to the successful resolution of a threat. The role of fear or worry about threatened characters in enjoyment of drama has been examined in a small number of studies, and has typically focused on unfamiliar narratives (Hoffner & Levine, 2005). Using a framework based on Zillmann's model of suspense enjoyment and disposition theory (Zillmann, 1996, 2006), the present study explores these issues through recalled threat sequences from the television drama, *Lost*. The study focuses on characters with whom audience members have already-established relationships, considers both liked and disliked characters, and examines emotional responses to sequences in which these characters were threatened.

AFFECTIVE DISPOSITIONS AND ENJOYMENT OF DRAMA

Media consumers develop affective responses to media characters, and also form long-term bonds with characters whom they view on a continuing basis (Giles, 2002; Hoffner, 2008). To some extent, affective dispositions toward characters may evolve from the moral elements of the narrative, with liking for protagonists (good characters) and disliking for antagonists (bad characters). But Zillmann (1996, 2006) noted that individuals differ in their moral evaluations and affective responses to characters. Moreover, most characters on continuing series have complex histories, and affective dispositions toward these characters are undoubtedly based on many factors in addition to moral considerations (Giles, 2002; Raney, 2006). Thus, the same character may be liked by some audience members, and disliked by others. This study focused on responses to narrative events as a function of existing character dispositions, developed through long-term exposure to the series, and thus did not examine the process of forming affective dispositions.

Disposition theory contends that affective dispositions toward characters vary along a continuum from positive through indifference to negative, and that enjoyment of media narratives depends on dispositions toward the characters involved, as well as the outcomes associated with the depicted events (Comisky & Bryant, 1982; Zillmann & Cantor, 1976; Zillmann, 2006). Audience members fear certain outcomes and hope for others, based on their affect toward the characters. Enjoyment increases when liked characters experience positive outcomes, or disliked characters experience negative outcomes. Thus, disposition

theory makes it clear that viewers should particularly enjoy programs in which liked protagonists escape harm and the threatening agents are defeated. Numerous studies have confirmed the basic tenets of disposition theory in enjoyment of drama (Raney, 2006). For example, Oliver (1993) found evidence that adolescents enjoyed slasher film previews more when they perceived that the victims had gotten what they “deserved.” King and Hourani (2007) found that viewers enjoyed horror films with traditional endings (in which the antagonist is destroyed) more than those with teaser endings (in which the antagonist survives). Raney and Bryant (2002) proposed an integrated model of enjoyment suggesting that both affective and cognitive factors contribute to enjoyment of crime drama. Their empirical test revealed that both viewers’ judgment of the characters (affective processing) and their judgment of justice (cognitive processing) predicted their enjoyment of a crime drama. A recent study of soap opera viewing over a 10-week period showed that enjoyment of the series was greater when characters were perceived as experiencing the outcomes they deserved (i.e., moral characters/positive outcomes, and immoral characters/negative outcomes) (Weber, Tamborini, Lee, & Stipp, 2008).

APPREHENSION, THREAT RESOLUTION AND ENJOYMENT

Enjoyment of drama depends on more than responses to characters and the outcomes they experience. One explanation for enjoyment of suspenseful narratives relies on the conversion of distress to euphoria following a satisfying resolution to a threat. According to Zillmann’s theory of suspense enjoyment, suspense is defined as audience members’ “acute, fearful apprehension about deplorable events that threaten liked protagonists” (Zillmann, 1996, p. 208). He argued that enjoyment of suspenseful drama is a function of both the level of apprehension produced during the program (characterized by subjective fear or distress and physiological arousal), and the viewer’s affective reaction to the resolution. He contended that arousal from suspenseful scenes should carry over and intensify the viewer’s positive response to a satisfying resolution, thus producing a rewarding, enjoyable emotional experience. Conversely, if the resolution is unsatisfying, residual arousal from suspense should intensify viewer’s dysphoria.

Few published studies have investigated the extent to which fearful apprehension while viewing enhances enjoyment of media presentations (Hoffner & Levine, 2005). Zillmann, Hay, and Bryant (1975) showed children an animated adventure program that varied in level of suspense. They found that physiological arousal, facial expressions of both fearfulness and positive affect, and liking for the program increased as the degree of suspense increased, especially when the threat was successfully overcome. However, the study did not directly examine the relationship between fear or arousal and liking for the program.

Other studies have reported evidence that more negative emotion is associated with greater enjoyment (Hoffner & Cantor, 1991a; Sparks, 1991; Zillmann, Weaver, Mundorf,

& Aust, 1986). Although this pattern was consistent with an explanation based on Zillmann's (1996) model of suspense enjoyment, more research is needed to clarify certain issues. In the three studies mentioned above, this pattern occurred regardless of whether the threat was successfully resolved within the program. For example, in the study by Zillmann et al. (1986), the stimulus program ended with the defeat of the antagonist. In an investigation of children's enjoyment of a frightening film sequence, Hoffner and Cantor (1991a) manipulated the resolution and found that the contribution of fear/worry to program enjoyment was similar for the resolved and unresolved versions.

Although a happy resolution may enhance enjoyment, this explanation cannot easily account for enjoyment of media presentations that do not end happily. Zillmann (1996) noted that episode resolutions within a program may contribute to positive affect, and the simple termination of the threat may be regarded as satisfying by some viewers. He contended that "removal of the threat that produced empathic distress may be regarded [as] a minimal stimulus condition for the cognitive switch from dysphoria to euphoria" (p. 226). Thus, residual arousal can enhance enjoyment as long as viewers positively appraise their responses to the ending - even the simple termination of a threat (Tamborini, 1991).

THE PRESENT STUDY

Although there is much research support for disposition theory and Zillmann's model of suspense enjoyment, it seems that no research has explored the combined influences of character affect, emotion, and outcome on viewer's enjoyment of drama (see Hoffner & Levine, 2005). In a study of children's responses to scary films, Hoffner and Cantor (1991a) examined how both fear/worry and liking for the threatened character related to enjoyment when the threat was resolved vs. unresolved, but they did not examine how the three variables interacted to influence enjoyment. Moreover, most previous studies were experiments with the participants being exposed to the characters/plots for a short period of time. Few studies have examined enjoyment of suspenseful drama featuring known characters, such as those on familiar television series. The present study sought to explore how affect toward the characters, fearful apprehension, and outcome of a threat jointly influence viewers' enjoyment of a suspenseful drama featuring known characters in an ongoing narrative. Therefore, instead of using manipulated video clips as the stimulus, this study asked participants to report on a sequence from a popular TV series in which a familiar character was threatened. The study examined enjoyment of both the threat sequence and the episode in which the threat occurred, because many threats that are left unresolved initially are resolved to some extent by the conclusion of the episode.

Based on the preceding review, several hypotheses were proposed:

H1: Overall, when a threatened character avoids harm, but not when the character is harmed, fear/worry will positively predict enjoyment of (a) the threatening sequence and (b) the episode in which the threatening sequence appears.

H2: When no harm occurs, emotion will interact with character affect such that fear/worry will enhance enjoyment of (a) the threatening sequence and (b) the episode to a greater extent when the threatened character is liked more.

H3: When harm occurs, emotion will interact with character affect such that fear/worry will enhance enjoyment of (a) the threatening sequence and (b) the episode to a greater extent when the threatened character is liked less.

METHOD

Procedure

Lost is a serial drama produced in the United States and shown on the ABC network from 2004 to 2010. The show followed the lives of a group of plane crash survivors on a mysterious island, as well as their lives prior to the crash.

An invitation with a link to an online survey was posted on several *Lost*-related online message boards, including the official *Lost* message boards on *Abc.com*. When participants clicked on the link, they were randomly directed to one of three versions of the questionnaire. Specifically, they were asked to identify their most favorite (liked) character, their least favorite (disliked) character, or a character about whom they felt neutral, and to briefly describe why they felt this way (to focus them on their selected character). The questionnaire included other measures reported elsewhere (Tian & Hoffner, 2010).

Respondents

Of 174 respondents who completed the questionnaire, 13 could not think of a scene in which the character they were reporting on had been threatened. These individuals were excluded from this study. Thus, 161 users of *Lost* fan sites (118 females, 43 males) completed the measures reported in this study for liked characters ($n = 60$), disliked characters ($n = 53$), or “neutral” characters ($n = 48$). Their age ranged from 18 to 64 years ($M = 30.2$, $SD = 11.3$). Over four-fifths of respondents (86.3%) identified themselves as white/Caucasian, 1.2% as Black/African-American, 1.2% as Latino(a), 1.9% as Asian, 5.6% as multi-ethnic, and 1.9% as “other.” Their highest level of education was: 1.2%, some high school; 19.3%, high school graduate; 24.8%, some college or vocational training; 36.0%, college graduate; and 16.8%, graduate degree. Three respondents did not report race/ethnicity or education.

Measures

Respondents were asked to think of a sequence in which the character they were reporting on had been threatened and to briefly describe what happened. They then rated the

sequence and their reactions on a series of scales.

Description of the threat sequence. The threats that respondents described were classified by two independent coders into the following categories (Cohen's kappa = .86): (1) violence, including the threat or infliction of physical harm, use of a weapon, or kidnapping; (2) accidental injury or endangerment; or (3) psychological threats, such as encountering danger (without violence) or interpersonal intimidation.

Severity of threat. The severity of the threat the character experienced during the sequence was rated on a scale ranging from 1, minor threat/no possibility of serious harm, to 5, high likelihood of death ($M = 3.69$, $SD = 1.17$).

Outcome of threat sequence. Respondents identified the outcome of the threat sequence in terms of what happened to the character: no harm (47.8%), harm (46.0%), or death (6.2%). These responses were coded as 0, no harm, or 1, harm (including death).

Fear/worry. Respondents rated their emotional responses during the threatening sequence, specifically how frightened they felt, how worried they were about the character, and how physiologically aroused they felt. Ratings were made on a scale from 0, not at all, to 6, very. These measures formed a single factor, and were averaged ($M = 3.16$, $SD = 1.6$, Cronbach's alpha = .85).

Enjoyment of threat sequence and episode. On a scale ranging from 0, not at all, to 6, very much, respondents rated how much they enjoyed the threat sequence they had identified ($M = 4.94$, $SD = 1.74$), as well as how much they enjoyed "the whole episode in which the sequence happened" ($M = 5.86$, $SD = 1.48$).

Commitment to Lost. Respondents reported how often they typically watch the series *Lost*, on a scale ranging from 1, once a season to 5, every week ($M = 4.94$, $SD = .31$). They also rated their agreement (1, strongly disagree, to 5, strongly agree) with the statement "I use a VCR/DVR or Tivo to record an episode if I cannot watch it when it is shown" ($M = 4.16$, $SD = 1.24$).

Manipulation check. As a check on the request that respondents choose a character that they liked, disliked, or felt neutral about, the five-item Social Attraction subscale of McCroskey and McCain's (1974) Interpersonal Attraction Scale was included. Ratings were made on a Likert scale, ranging from 1, strongly disagree, to 5, strongly agree ($M = 2.87$, $SD = 0.86$, Cronbach's alpha = .78).

RESULTS

Not surprisingly, fully 93.6% of respondents, who were recruited from online fan sites, reported that they typically watch *Lost* every week. Over three-quarters (78.4%) agreed or strongly agreed that they record an episode of *Lost* if they cannot watch it when it is shown.

A one-way analysis of variance (ANOVA) confirmed that social attraction to the three types of characters differed as expected $F(2, 154) = 35.74, p < .001$. Based on Tukey comparisons ($p < .05$), social attraction was higher for liked characters ($M = 3.39$) than for neutral characters ($M = 3.03$), which in turn was higher than for disliked characters ($M = 2.27$).

Descriptions of the threat. The most frequently described threat (61.5%) involved some kind of violence, such as being “attacked,” “beaten and abused,” “shot and nearly drowned,” “tortured,” or “kidnapped.” Psychological threats were mentioned by 21.1% of the sample, such as characters who were “confronted by the black fog entity,” “surrounded” by others, or had others close to them threatened with injury or death. Accidental injury was mentioned by 8.7%, and included vehicle accidents and falls. Finally, 8.7% of those who said they recalled a threatening scene involving the character did not provide a description of the threat. A chi square analysis showed that reports of the three types of threats did not vary based on character affect, $X^2(4) = 2.14, p > .70$.

Initial Analyses of Responses to the Threat Sequence

Separate 2 x 3 ANOVAs examined the influence of outcome and character affect on severity of the threat and fear/worry. Means were compared using the Tukey method ($p < .05$).

For severity of the threat, the analysis yielded only a main effect of outcome, $F(1, 154) = 20.53, p < .001$, with greater perceived severity of the threat when the character was harmed ($M = 4.06$) than when he/she was not harmed ($M = 3.24$).

For fear/worry, the analysis yielded main effects of both outcome, $F(1, 155) = 4.91, p < .01$, and character affect, $F(2, 155) = 13.29, p < .001$, as well as a significant interaction, $F(2, 155) = 3.58, p < .05$. Specifically, for disliked characters, fear/worry was the same regardless of the outcome ($M = 2.60$ for both), whereas fear/worry for both neutral and liked characters was higher when the characters were harmed (neutral, $M = 4.06$; liked, $M = 4.03$) than when they were not harmed (neutral, $M = 2.67$; liked, $M = 2.76$).

Predictors of Enjoyment

Hierarchical regression analyses predicted enjoyment of the threatening sequence and

Table 1

Regression Analysis for Enjoyment of the Threat Sequence, as a Function of Threat Outcome

	Character Not Harmed		Character Harmed	
	Beta	ΔR^2	Beta	ΔR^2
1 Demographics		.04		.01
Gender	-.11		.08	
Education	-.17		-.01	
2 Severity of Threat	.21	.04	.10	.01
3 Character Affect	.33**	.11**	.26*	.07*
4 Fear/worry	.24*	.05*	.19	.03
5 Character Affect X Fear/worry	.07	.00	-.56	.02
<i>Adjusted R²</i>	.18		.06	
<i>F value</i>	F(6,65) = 3.52**		F(6,73) = 1.83	

Note. Gender was coded male = 0, female = 1. Character affect was coded disliked = 0, neutral = 1, and liked = 2. Betas in the table are standardized betas at entry.

* $p < .05$ ** $p < .01$

enjoyment of the episode in which the sequence appeared, with separate analyses for the two outcomes (harm, no harm). Preliminary t-tests revealed that, overall, neither measure of enjoyment differed based on whether the character was harmed. In all regression analyses, the variables were entered in this order: 1) gender and education, 2) severity of the threat, 3) character affect (0 = disliked, 1 = neutral, 2 = liked), 4) fear/worry, and 5) the interaction between character affect and fear/worry.

Enjoyment of the threat sequence. Table 1 shows that, regardless of the outcome, liking for the featured character was associated with greater enjoyment of the threat sequence. In support of H1a, fear/worry was associated with more enjoyment of the threat sequence when the character was unharmed, but not when the sequence resulted in harm. However, neither interaction was a significant predictor, which indicates that the relationship between fear/worry and enjoyment of the threat sequence did not vary based on liking for

the character. Thus, H2a and H3a were not supported.

Enjoyment of the overall episode. Table 2 shows that enjoyment of the episode was positively predicted by severity of the threat and liking for the threatened character, but only when the character escaped harm. Hypothesis 1b proposed that fear/worry would positively predict enjoyment of the episode when the character avoids harm, but not when he/she is harmed. Consistent with this hypothesis, when the character avoided harm, fear/worry was associated with greater enjoyment of the episode. The nonsignificant interaction between character affect and fear/worry indicates that fear/worry enhanced enjoyment of the “no harm” episode regardless of liking for the character. In other words, fear/worry did not enhance enjoyment to a greater extent for more liked characters, as had been predicted. Thus, H2b was not supported.

When the character was harmed, fear/worry was not a significant predictor of enjoyment of the episode. However, the interaction revealed an association *only* when the disliked character was harmed. Specifically, for disliked characters, fear/worry was a significant positive predictor of enjoyment of the episode ($\beta = .53, p < .03$), but was not associated with enjoyment for neutral characters ($\beta = .11, p > .65$) or liked characters ($\beta = .01, p > .95$). Thus, H3b was supported.

DISCUSSION

This study sought to gain deeper understanding of the complex media enjoyment process by exploring the interaction of fear/worry, affective dispositions toward the characters and outcome on viewers' appreciation of suspenseful drama. The findings are generally consistent with expectations derived from disposition theory and Zillmann's model of suspense enjoyment.

According to Zillmann (1996), dispositions toward characters are central to the enjoyment of drama, and are critical to the development of suspense in drama. In other words, viewers must take sides emotionally with the characters to experience suspense. They experience higher level of apprehension and fear when a favored character is endangered or harmed. On the other hand, if they are indifferent to the characters, a minimal level of suspense will be experienced (Comisky & Bryant, 1992; Peterson & Raney, 2008; Zillmann, 1996). Findings of the present study are consistent with disposition theory. During their repeated exposure to the characters on *Lost*, in diverse situations, viewers formed positive, neutral or negative affective dispositions toward them. When disliked characters were threatened, fear/worry was the same regardless of whether the characters experienced harm. In contrast, when neutral or liked characters were threatened, fear/worry was significantly greater when the characters were harmed than when they avoided harm. Liking for the character was also associated with greater enjoyment of the threat sequence regardless of the outcome, and greater enjoyment of the episode overall, as long as no harm occurred. It may

Table 2

Regression Analysis for Enjoyment of the Episode, as a Function of Threat Outcome

	Character Not Harmed		Character Harmed	
	Beta	ΔR^2	Beta	ΔR^2
1 Demographics		.06		.00
Gender	-.07		.06	
Education	-.24*		-.01	
2 Severity of Threat	.25*	.06*	.22	.05
3 Character Affect	.23*	.05*	.17	.03
4 Fear/worry	.26*	.06*	.24	.04
5 Character Affect X Fear/worry	-.18	.00	-1.14*	.07*
<i>Adjusted R²</i>	.17		.12	
<i>F value</i>	F(6,67) = 3.49**		F(6,74) = 2.86*	

Note. Gender was coded male = 0, female = 1. Character affect was coded disliked = 0, neutral = 1, and liked = 2. Betas in the table are standardized betas at entry.

* $p < .05$ ** $p < .01$

be that the simple presence of a liked character in a sequence enhanced enjoyment, but that this alone was not sufficient to increase enjoyment of complex and multifaceted episodes that typically included many characters. In the case of the episode as a whole, reaction to the threat outcome, which depended on the respondent's disposition toward the character, apparently played a greater role in enjoyment.

Did the fear/worry experienced during viewing carry over to enhance enjoyment? Zillmann's (1996) model of suspense enjoyment suggests that suspense and arousal should enhance viewers' enjoyment only when a satisfying resolution is present. Otherwise, the residual arousal from suspense should intensify viewers' dysphoria. Empirical findings from previous studies concerning this argument are inconsistent (see Hoffner & Levine, 2005). The present study provides some support for Zillmann's model of suspense enjoyment. When the outcome was positive, that is, when the characters escaped threat without harm, fear/worry was associated with greater enjoyment of the sequence and the episode. This

outcome is generally consistent with Zillmann's (1996) prediction that residual arousal from a preceding stimulus can be transferred onto a subsequent, independent stimulus. When a happy ending is present, the more intense the initial distress is, the more residue of arousal can be converted to intensify positive affect in response to a satisfactory resolution.

When the character was harmed, in contrast, there was an interaction between fear/worry and character affect in predicting enjoyment of the episode. That is, the influence of fear/worry on enjoyment of the episode depended on liking for the character. For the disliked character – but not for the liked or neutral characters -- fear/worry was associated with greater enjoyment of the episode in which the character was harmed. This finding is also consistent with disposition theory and the model of suspense enjoyment, since seeing the disliked character harmed could be considered a satisfying resolution. This pattern was observed only for enjoyment of the episode as a whole, however. It may be that the full consequences of the threat outcome were typically not evident until the conclusion of the episode.

We also expected that when no harm occurred, the more liked the threatened character was, the more fear/worry should be converted to enjoyment of the positive outcome. However, when the character escaped harm, no interaction was observed between character affect and fear/worry. In other words, fear/worry enhanced enjoyment of the “no harm” episode regardless of liking for the character. Zillmann (1996) has argued that sometimes the simple termination of a threat may be regarded as sufficient for the cognitive conversion from dysphoria to euphoria. Moreover, if escaping from harm was not perceived as particularly rewarding (unlike outcomes such as success, money, or adulation), then seeing a disliked character escape harm may not have markedly reduced enjoyment. In addition, episodes of *Lost* typically involve many characters in the same plot lines, so it is possible that viewers' enjoyment reflected their response to the escape of other characters from the same threat. Thus, the termination of a threat may have brought relief because other, more liked characters were also safe (Zillmann, 1996).

Overall, the results of this study are consistent with disposition theory's argument that enjoyment increases when liked characters experience positive outcomes and disliked characters experience negative outcomes. The combined influence of fear/worry, character affect and outcome also confirmed Zillmann's (2006) model of suspense enjoyment by showing that fear/worry was associated with greater enjoyment when there was a satisfying resolution, which in this case was harm of the disliked character.

This study examined viewers' enjoyment of both the threat sequence and the episode, which showed somewhat different patterns of results. Although these findings are in no way conclusive, they do indicate that future study should explore how viewers' enjoyment varies at different stages of media presentations. As Zillmann (1996) has pointed out, suspenseful narratives can follow a variety of complex dramatic structures, and viewers' enjoyment of an entire program or film cannot be equated with their reactions to individual sequences within the narrative. Moreover, current media offerings often feature complicated characters whose motivations and morality change during the course of a narrative. Thus, audience

members' dispositions toward the characters may shift over time, which may influence their enjoyment of media entertainment.

Some limitations of the present study should be acknowledged. First, the current conclusions are based on viewers' self-reports of responses to a suspenseful sequence viewed in the past. They may have had difficulty accurately recalling their exact reactions during the presentations. Also, as suggested by Sparks, Pellechia and Irvine (1999), self-reported data may not be adequate to fully capture audience members' emotional responses to suspenseful media content. Therefore, future research may consider the combination of physiological measures, such as skin temperature and heart rate, and self-reports (King & Hourani, 2007), although the limitations of physiological measurements should be recognized as well (Hoffner & Cantor, 1991a). Of course, all methodological choices involve trade-offs. Concerns about retrospective self-reports are a consequence of examining narrative events involving characters with whom viewers had established relationships, rather than assessing responses to a specific sequence in a controlled setting. Second, the only content variables examined in the present study were the severity of the threat and the outcome of the threat; the study did not obtain details about the specific circumstances of the events or how they transpired. Further research should consider the influence of other relevant narrative cues, such as foreshadowing and characters' apparent ability to escape harm, on viewers' enjoyment of drama.

In sum, this study investigated the combined influence of fear/worry, dispositions toward the character, and threat outcome on viewers' enjoyment of suspenseful drama. The present findings provide support for both disposition theory and Zillmann's model of suspense enjoyment, but more research is needed to further clarify how dispositions toward characters and responses to the resolution moderate the relationship between fear/worry and enjoyment. Unlike most previous experimental studies, which have typically involved relatively short segments from films or other media, the present study examined viewers' affective responses to a familiar character in an ongoing television series. Longer exposure may allow viewers to become more emotionally involved with the experiences of the characters, thus enhancing their emotional responsiveness to the presentations. Future research should seek to replicate and extend the present findings using other types of stimuli featuring known characters, and exploring the structure of the threat sequences in greater detail.

REFERENCES

- Comisky, P., & Bryant, J. (1982). Factors involved in generating suspense. *Human Communication Research, 9*, 49-58.
- Giles, D. C. (2002). Parasocial interaction: A review of the literature and a model for future research. *Media Psychology, 4*, 279-305.

- Hoffner, C. (2008). Parasocial and online social relationships. In S. L. Calvert & B. J. Wilson (Eds.), *Handbook of children, media, and development* (pp. 309-333). Boston, MA: Wiley-Blackwell.
- Hoffner, C., & Cantor, J. (1991a). Factors affecting children's enjoyment of a frightening film sequence. *Communication Monographs*, 58, 41-62.
- Hoffner, C., & Cantor, J. (1991b). Perceiving and responding to mass media characters. In J. Bryant & D. Zillmann (Eds.), *Responding to the screen: Reception and reaction processes* (pp. 63-101). Hillsdale, NJ: Erlbaum.
- Hoffner, C., & Levine, K. (2005). Enjoyment of mediated fright and violence: A meta-analysis. *Media Psychology*, 7, 207-237.
- King, C. M., & Hourani, N. (2007). Don't tease me: Effects of ending type on horror film enjoyment. *Media Psychology*, 9, 473-492.
- McCroskey, J. C., & McCain, T. A. (1974). The measurement of interpersonal attraction. *Speech Monographs*, 41, 261-266.
- Oliver, M. B. (1993). Adolescents' enjoyment of graphic horror: Effects of viewers' attitudes and portrayals of victim. *Communication Research*, 20, 30-50.
- Perse, E. M., & Rubin, R. B. (1989). Attribution in social and parasocial relationships. *Communication Research*, 16, 59-77.
- Peterson, E., & Raney, A. A. (2008). Reconceptualizing and reexamining suspense as a predictor of mediated sports enjoyment. *Journal of Broadcasting & Electronic Media*, 52, 544-562.
- Raney, A. A. (2006). The psychology of disposition-based theories of media enjoyment. In J. Bryant & P. Vorderer (Eds.), *Psychology of entertainment* (pp. 137-150). Mahwah, NJ: Erlbaum.
- Raney, A. A., & Bryant, J. (2002). Moral judgment and crime drama: An integrated theory of enjoyment. *Communication Theory*, 14, 348-369.
- Sparks, G. G. (1991). The relationship between distress and delight in males' and females' reactions to frightening films. *Human Communication Research*, 17, 625-637.
- Sparks, G. G., Pellechia, M., & Irvine, C. (1999). The repressive coping style and fright reactions to mass media. *Communication Research*, 26, 176-192.
- Tamborini, R. (1991). Responding to horror: Determinants of exposure and appeal. In J. Bryant & D. Zillmann (Eds.), *Responding to the screen: Reception and reaction processes* (pp. 305-328). Hillsdale, NJ: Erlbaum.
- Tian, Q., & Hoffner, C. (2010). Parasocial interaction and identification with liked, neutral and disliked characters. *Mass Communication & Society*, 13, 250-269.
- Weber, R., Tamborini, R., Lee, H. E., & Stipp, H. (2008). Soap opera exposure and enjoyment: A longitudinal test of disposition theory. *Media Psychology*, 11, 462-487.
- Zillmann, D. (1996). The psychology of suspense in dramatic exposition. In P. Vorderer, H. J. Wulff, & M. Friedrichsen (Eds.), *Suspense: Conceptualizations, theoretical analyses, and empirical explorations* (pp. 199-231). Mahwah, NJ: Erlbaum.
- Zillmann, D. (2006). Dramaturgy for emotions from fictional narratives. In J. Bryant & P. Vorderer (Eds.), *Psychology of entertainment* (pp. 215-238). Mahwah, NJ: Erlbaum.
- Zillmann, D., & Cantor, J. (1976). A disposition theory of humor and mirth. In T. Chapman & H. Foot (Eds.), *Humor and laughter: Theory, research, and application* (pp. 93-115). London: Wiley.
- Zillmann, D., Hay, T. A., & Bryant, J. (1975). The effect of suspense and its resolution on the appreciation of dramatic presentations. *Journal of Research in Personality*, 9, 307-323.

Zillmann, D., Weaver, J. B., Mundorf, N., & Aust, C. F. (1986). Effects of opposite-gender companion's affect to horror on distress, delight, and attraction. *Journal of Personality and Social Psychology*, 51, 586-594.

CHOICES OF KOREAN INTERNET USERS: SELECTIVE EXPOSURE TO PROGRESSIVE AND CONSERVATIVE ONLINE NEWS MEDIA

YUNG SOO KIM AND JYOTIKA RAMAPRASAD

This online survey explored the relationship between Internet users' selection of (i.e., exposure to) online news media in Korea, which framed the issue of Korea's joining the Iraq War differently. The regression models based on 213 participants' answers showed that attitudes toward the Iraq War and awareness of the difference between two polarizing online news media, the progressive OhmyNews and the conservative Chosun.com, were significantly related to Korean Internet users' selective exposure.

Keywords: selective exposure, Korea, Internet users, online news media, Iraq War

The Internet has quickly become a viable technology for a variety of information sharing tasks (Flanagin & Metzger, 2000). Furthermore, the Internet considerably impacts the audience-message relationship because it provides increasing media choices to people (Mastro et al., 2002; Ruggiero, 2000). As a result, the Internet has provided a new platform for researchers to reexamine traditional theories including the selective exposure theory, which explains the pattern of medium and message selection by audience members (Bennett & Iyengar, 2008).

In Korea, which has been experiencing dramatic social, cultural, and political changes such as moving from a conservative to a liberal orientation (French, 2003), the impact of the Internet on public opinion was particularly manifest in the 2002 Korean presidential election. Roh Moo-Hyun, a young progressive reformist, was elected President because more people were getting their information and political analyses from liberal online news services, such

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as “OhmyNews,” instead of the overwhelmingly conservative newspapers (Choi et al., 2001; French, 2003).

This study examines the pattern of online news media selection by Korean Internet users. It mainly explores the relationship between respondents’ selection of online news sites, which exhibit polar points of view, and their own pre-disposition towards the Iraq War as well as their awareness of the different news orientations of these online news media.

LITERATURE REVIEW

Background

Since the beginning of the war against Iraq, the U.S. government has been seeking international support for its war effort. Korea was also asked to send troops to Iraq (“War is proving political problem not only for U.S., but for friends as well,” 2004). Consequently, there was a serious debate in Korean society about whether Korea should join the United States in this war (Joe & Kim, 2004).

Korea and the United States have enjoyed military, economic, and political ties since the Korean War in which more than 37,000 U.S. soldiers were killed. Today, more than 28,000 U.S. troops are still stationed in South Korea, which is one of key alliances and seventh-largest trading partner of the United States (Department of State, 2010; Powell, 2010). However, there has been widespread anti-American sentiment among Koreans, especially in the younger generations. Koreans are critical of the U.S. government’s active involvement in various Korean domestic issues including its long time support for authoritarian military governments in Korea despite the Koreans’ protests against these governments (Jung, 2010; Kristof, 1987).

Given the play of these positive and negative interactions and beliefs, opinion was divided in Korea about involvement in the Iraq War. Some Koreans believed that Korea was obligated to help the United States because of the strong alliance of the two countries since the Korean War, while others thought that Korea should not join what they considered an isolated war effort by the United States (“Thousands in South Korea protest planned deployment of more troops to Iraq,” 2004). With this uneasy debate in the country, Korea finally began to send troops to Iraq in September 2004, and its approximately 3,000 soldiers became the third-largest partner in the coalition after the United States and Britain until Korea finally completed the withdrawal of the most of its troops from Iraq at the end of 2008 (“S. Korea vows strong alliance with U.S.,” 2004; “South Korea ends four-year deployment in Iraq,” 2008).

Selective Exposure

In early mass communication research, Klapper (1960) noted “the tendency of people

to expose themselves to mass communications in accord with their existing opinions and interests” (pp. 19–20). Festinger (1957) explained that information or knowledge that contradicted individuals’ pre-existing point of view based on their values and beliefs would result in psychological discomfort, i.e., cognitive dissonance. Consequently, people would try to relieve this discomfort by avoiding information contradictory to their values and beliefs.

However, empirical studies that have tried to test the selective exposure theory based on cognitive dissonance have not produced uniform results (Johnson, Bichard, & Zhang, in press; Smith, Fabrigar, & Norris, 2008). Other studies conceptualizing selective exposure as an “information-processing technique” found much more reliable relationships between information-consumers’ selective exposure activities and their intention to find information which they can process more effectively. Because information that does not match their predisposition requires people to spend more cognitive energy, a driving force behind consumers’ selective exposure is not the motivation to avoid information that can cause dissonance, but the motivation to choose information that requires less cognitive energy (Edwards & Smith, 1996; Johnson, Bichard, & Zhang, in press).

An early selective exposure study (Elasmar & Straubhaar, 1993) examined key variables that led television audiences to engage in selective exposure to television news programs. Among variables the study tested, audience perception of the attributes of specific news sources, credibility for example, was the most important predictor of the audience’s selective exposure. A more recent selective exposure study (Johnson, Zhang, & Bichard, 2010) suggested that news consumers who were more interested in visiting political websites where strong partisan content was presented were more likely to practice selective exposure.

Another significant study (Iyengar et al., 2008) examined two models of selective exposure. In testing the “anticipated agreement hypothesis” (wherein people like to hear about candidates with whom they expect to agree) and the “issue publics hypothesis,” (wherein votes choose to encounter information on issues most important to them personally), the study suggested that news consumers tended to expose themselves to the particular policy issue that interested them (i.e., it found support for the issue publics hypothesis). The study further indicated that “issue based” selective exposure activities prevailed over “candidate based” selective exposure.

Selective Exposure on the Internet

Studies on selective exposure mainly have pointed out that selective exposure is deeply rooted in the specific availability of media. In the ‘70s, before the wide diffusion of cable television, there were only three major networks (CBS, ABC, and NBC) to choose from and few cities in the United States had competing newspapers in their town. Furthermore, network television and newspapers traditionally aspired to be objective, non-partisan news outlets. In that circumstance, there was not much room for information consumers to practice selective exposure (Mutz & Martin, 2001; Stroud, 2008). This is one reason why selective

exposure was not the subject of much discussion until audience choices expanded greatly with the availability of numerous channels of cable television (Kaye & Sapolsky, 1997).

The Internet provides even greater, an almost unlimited, selection of all kinds of information. Information on the Internet is readily accessible to Internet users based upon their own needs and choices (Mastro et al., 2002). The Internet has a variety of information and viewpoints, regarding both general matters and specific issues, enabling audiences to easily expose themselves to various types of news as well as various ideological perspectives (Mastro et al., 2002; Tewksbury, 2003). Furthermore, the Internet allows users to exercise much greater control about which specific information sources they want to visit compared with traditional media which tend to direct audiences to follow their lead in terms of information flow (Johnson, Bichard, & Zhang, in press; Stroud, 2008)

As the availability of media choices has greatly increased with hundreds of cable television channels and millions of Web Sites, selective exposure theory suddenly has received new-found attention and seen an increase in studies adopting it as a theoretical foundation.

In a study that used national survey data for the 2004 presidential election, Stroud (2008) suggested that people's political predispositions were strongly related to media outlets selected. The study concluded that even though there was some early skepticism, selective exposure provides an important theoretical framework in understanding how information consumers chose certain media outlets and contents over abundant other choices.

Measurement of Selective Exposure

Previous studies have employed a variety of approaches to measure selective exposure, the dependent variable of this study. Stroud's study (2008) measured selective exposure by asking survey respondents to answer which newspaper they read most often. Garrett's study (2009), which examined the role of intention of 'opinion reinforcement' in individuals' selective exposure to issue-based content, adopted two measures. One was expressed interest in reading a specific news item. The other was actual time spent reading specific stories. Johnson and his colleagues (Johnson, Bichard, & Zhang, in press) used a 5-point scale on which members of an online panel of Internet users were asked to indicate the frequency of visits to certain Web sites and blogs that provide specific content they agreed or disagreed with. Iyengar and his colleagues (Iyengar et al., 2008) used a more direct measure. They gave study participants a CD-ROM, which contained rich information about a major party candidate in the 2000 presidential election, and then tracked actual CD use by recording the number of visits to pages.

Internet Population and Media in Korea

Many indicators, including the adoption of broadband Internet, suggest that Korea is the one of 'the most wired' countries in the world (French, 2003; Kim & Johnson, 2009).

Korea has experienced remarkable growth in its Internet population. The population doubled every year in the early stages after the technology became available to the public in 1994 (Choi et al., 2001). More recent statistics from a summary report of the Korean Internet Population (Korea Communication Commission & Korean Internet and Security Agency, 2010) show that more than 37 million Koreans, almost 77.8% of the country's population, were using the Internet in mid-2010. In terms of the ratio of households with access to the Internet in 2009, Korea was ranked first among countries around the world (95.9%), while the United States (68.7%) was ranked 16th (OECD, 2010). A study that investigated Korean college students' Internet use patterns found that these students relied more on the Internet than on other traditional media such as TV, radio, newspaper, and magazine (Kim, 2008).

Traditionally, a handful of big, conservative newspapers, which shared 80% of all daily circulation, have had an overwhelming impact on public opinion in Korea (Gillmor, 2004). Of these, the three biggest right-wing newspapers, *Chosun*, *JoongAng*, and *Donga* provided conservative perspectives to Korean society (Rhee, 2003). Thus, Koreans had little access to open and free dialogue resulting in growing dissatisfaction of the public with the mainstream conservative media (Schroeder, 2004).

The progressive, independent online news media, however, have changed the sphere of public opinion in Korea (French, 2003). During the 2002 presidential election, conservative newspapers were critical of the liberal candidate Roh Moo-Hyun and consistently supported the conservative presidential nominee, Lee Hoi-Chang, sometimes misinforming the public through biased reporting and distortion of facts (Gillmor, 2004; Rhee, 2003). During the election, the online news media became an alternative source for people who had a progressive perspective and provided them access to reliable news stories (Rhee, 2003). Roh, who successfully exploited the Internet for his campaign, won the presidency by getting 60 percent of the votes from those in their 20s and 30s (Gillmor, 2004).

After the Korean election, these progressive, alternative online news media, drew global attention. Especially, the success and power of OhmyNews was in the center of these discussions. OhmyNews was often described as a precursor of citizen journalism ("AP reports launch of OhmyNews International" 2004; Chang, 2009; Sambrook, 2009). According to the Web site of OhmyNews (2010), anyone who registers with OhmyNews can submit a 750-word piece in exchange for a few dollars per story. Currently more than 40,000 citizen journalists are actively engaged in writing news stories and their stories have been published after professional editors review them.

Orientation of Chosun.com and OhmyNews

As indicated earlier, the entrance of online media into Korea changed the range of political viewpoints available to the public (French, 2003; Rhee, 2003). In the case of the Presidential election in Korea, the traditional mainstream news sources continued their conservative orientation, while the online sources provided a more progressive viewpoint.

The news media also displayed different perspectives on the Iraq War issue. Some conservative media revealed their pro-war perspective, while progressive media insisted that Korea should not send troops to Iraq (Joe & Kim, 2004). Specifically, Chosun.com, the online version of the conservative *The Chosun Ilbo*, was largely pro-war, and OhmyNews took the position that Korea should not send its troops to the war.

Further evidence of these orientations is found in a content analytic study (Author, 2006) that examined how Chosun.com and OhmyNews relied on news source selection to set up frames regarding the issue of participation of Korean troops in the Iraq War. Based on 300 news stories from OhmyNews and Chosun.com, the study showed that the progressive OhmyNews published news stories that presented anti-war frames more frequently, while the conservative Chosun.com published news stories that presented pro-war frames more frequently. More specifically, in OhmyNews, anti-war frames were identified in 159 stories (87.4%) and pro-war frames in 15 stories (8.2%). The proportion of balanced/neutral stories was minimal (4.4%). In contrast, stories that presented pro-war frames dominated Chosun.com. Even though the proportion of anti-war stories (21.2%) and balanced/neutral stories (28.0%) published in Chosun.com was relatively high, 60 pro-war framed stories constituted more than half (50.8%) of the 118 news stories. Thus, the study confirmed the existence of a clear difference in percent of anti- and pro-war frames between the two different Korean online news media in line with their ideological orientation.

RESEARCH QUESTIONS AND HYPOTHESES

Previous studies suggest that individuals' media choice is selective and audiences' selective exposure to the media can be predicted by their pre-existing point of view; these studies further indicate that this selective exposure can be issue based. It has been also suggested that with the variety of choices the Internet provides, the time is right for re-examining the selective exposure theory. It is evident that Korea has a heavy population of Internet and online media consumers, and online media have a strong impact on public opinion. Studies suggest that Korean media exhibit polar choices between conservative mainstream media and progressive independent media, and this polarity is also present in online media. Polarity in media positions might be another important condition to demonstrate selective exposure at work. Korea thus offers a good site for examining possible selective patterns of use of the Internet news media to test the selective exposure theory.

Based on the literature review and the purpose of this study to examine the selective exposure of Korean Internet users to online news media, the study proposed the following overall research question and three hypotheses:

RQ: Is Korean Internet users' selection of media (selective exposure) related to:

- 1) their attitude towards the Iraq War (including Korean engagement in it to maintain the traditional U.S.-Korea alliance), and

2) their awareness of differences in the two online media's positions on the Iraq War, (support of the war by the conservative Chosun.com and opposition by the progressive OhmyNews)?

Because this study aims to relate the pattern of selective exposure to attitude to the war and awareness of media differences, it used three measures of selective exposure and thus presents three hypotheses based on the research question.

H1: Regardless of their demographic characteristics and general Internet use, the time respondents intended to spend exposing themselves to the progressive OhmyNews and the conservative Chosun.com will be positively related to 1) the strength of their progressive/conservative attitude towards the Iraq War and 2) the strength of their awareness of the progressive/conservative orientation of the two online media.

H2: Regardless of their demographic characteristics and general Internet use, respondents' frequency of reliance on the progressive OhmyNews and the conservative Chosun.com for information on the Iraq War will be positively related to 1) the strength of their progressive/conservative attitude towards the Iraq War and 2) the strength of their awareness of the progressive/conservative orientation of the two online media.

H3: Regardless of their demographic characteristics and general Internet use, attention respondents paid to the progressive OhmyNews and the conservative Chosun.com for information on the Iraq War will be positively related to 1) the strength of their progressive/conservative attitude towards the Iraq War and 2) the strength of their awareness of the progressive/conservative orientation of the two online media.

METHOD

Sample and Data Collection

Korean Internet users were the population for this study. Korean Internet users were defined in this study as people over 18 years who frequently use the Internet including online news media and have Korean citizenship regardless of their geographical location. This study used a non-probability sample. Any Korean Internet user willing to participate in the survey voluntarily was selected into the sample. Therefore, this study's respondents can be described as a convenience sample of Korean Internet users.

The survey was promoted to Korean Internet users through announcements posted on several bulletin boards on various popular Korean web sites such as "Daum" (www.daum.net) and "Nate" (www.nate.com). These two portal sites have heavy traffic of visitors because they provide a strong interface for various community forums as well as a directory of web sites, a facility to search for other sites, news, weather information, e-mail, stock quotes, etc.

An online survey was posted on the World Wide Web for a two-month period between February and March in Spring 2005. Those willing to participate in the survey were directed to access a webpage where the questionnaire was located, using their own computer and network connection and according to their own schedule. This procedure enabled participants to respond within their regular environment/setting regardless of geographic location. IP addresses were tracked to prevent duplicate entries into the dataset.

On the survey web page, the study was introduced to the participants as examining the pattern of online news media use, and participants were promised confidentiality. During the two-month period, 218 Korean users filled out the questionnaire. All respondents were Korean citizens and at least 18 years old and used the Internet frequently. After removing five questionnaires that had response set, the final sample size was 213 respondents.

Measurement of Dependent and Independent Variables

The questionnaire first measured the two independent variables followed by the dependent variable. The questionnaire also measured how much time respondents spent on the Internet and specifically on online news media on the previous day. A previous day measure was used to ensure reliable data. The questionnaire ended with demographic questions such as gender, education, occupation, and marital status.

As noted earlier, previous selective exposure studies employed a variety of methodological approaches to measure selective exposure of media consumers. Those approaches included asking survey respondents to answer which newspaper they read most often, measuring expressed interest in reading a specific news item, and recording of actual time spent reading specific stories (Garrett, 2009; Iyengar et al., 2008; Stroud, 2008).

In this study, selective exposure was conceptually defined as the pattern of online news media selection made intentionally by Korean Internet users. This pattern was measured in three different ways. For all three methods of measurement, higher numbers indicate larger selection of OhmyNews over Chosun.com and lower numbers indicate larger selection of Chosun.com over OhmyNews.

First, respondents were asked how they would allocate their time between OhmyNews and Chosun.com by specifying time for each online news site if they had five hours to spend on these two Internet news media (See Appendix). Minutes allocated to OhmyNews and Chosun.com by each respondent were used for the analysis to indicate their selective behavior. For example, 240 minutes for OhmyNews and 60 minutes for Chosun.com indicated that a respondent answered he or she would allocate four hours for OhmyNews and one hour for Chosun.com.

Second, respondents were asked to indicate how frequently they relied on OhmyNews and Chosun.com for information about the Iraq War (from “always on OhmyNews” to “always on Chosun.com” on a 7-point scale, with higher numbers indicating greater reliance on OhmyNews). Third, respondents were asked how much attention they paid to OhmyNews and Chosun.com for information about the Iraq War from the two news sources (from “only

to OhmyNews” to “only to Chosun.com” on a 7-point scale, with higher numbers indicating greater attention to OhmyNews). These three measures would indicate the pattern of selective exposure respondents engaged in.

As indicated earlier in the paper, traditional, conservative newspapers such as *The Chosun Ilbo* and their online versions, such as Chosun.com, adopted a pro-Iraq War/Korean engagement/U. S. alliance position, while the newer, liberal media such as the online OhmyNews adopted the opposite, progressive position. The labels—conservative and progressive—are used in this paper, and particularly in explaining the measurement of independent variables below and later in the findings, because this is how the Korean public perceives these positions.

The two independent variables in this study were awareness of the position differences between OhmyNews and Chosun.com, and attitude towards the Iraq War. Awareness of the difference between the two online media was defined as how much respondents were aware that OhmyNews and Chosun.com presented the issue of Korea joining in the Iraq War and other social issues differently. The literature and a content analytic study indicate that OhmyNews opposed Korea joining the Iraq War, while Chosun.com emphasized that Korea should join in the Iraq War to maintain the alliance between the United States and Korea. Awareness of difference was measured by seven statements (Cronbach’s $\alpha = .82$) with a higher number indicating stronger awareness of the difference between the two online media. In these items, conservative and progressive positions were attributed to both the online outlets, so that statements were not biased to reveal these outlets’ positions. That is, statements did not always align a progressive stance with OhmyNews.

Attitude toward the Iraq War was defined as respondents’ opinions regarding the Iraq War. Specifically, it measured respondents’ attitude to the U.S. government’s war effort in Iraq, to the participation of Korean troops in the Iraq War, and to the need for a strong alliance between the United States and Korea. This variable was measured by five statements (Cronbach’s $\alpha = .83$) with a higher number indicating a more progressive opinion, i.e., greater opposition to the war and related engagement as well as to an alliance with the United States. Both pro- and anti-war/Korean engagement /U.S. alliance statements were used to eliminate item bias.

FINDINGS

Sample Characteristics

In general, respondents of this study were relatively young with higher education (See Table 1). An earlier study examining Internet adoption in Korea found that younger, educated people were more likely to be Internet users in Korea (Kim & Johnson, 2009; Park & Thelwall, 2008; Rhee & Kim, 2004). Thus, the respondents of this study appear to share

Table 1. Demographic Description of the Sample

Variables (N=213)	Mean	S.D	Min.	Max.
<i>Age</i>	29.38Yrs.	7.575	18Yrs.	56Yrs.
<i>Internet Use</i>	193.57Min.	130.25	0Min.	840Min.
<i>Internet News Use</i>	76.81Min.	70.59	0Min.	480Min.
Variables (N=213)	N	(%)		
<i>Gender</i>				
Male	117	(54.9%)		
Female	96	(45.1%)		
<i>Education</i>				
High School Degree	1	(.5%)		
Current College Student	74	(34.7%)		
Bachelor's Degree	88	(41.3%)		
Current Graduate Student	18	(8.5%)		
Post-Bachelor's Degree	32	(15.0 %)		
<i>Marriage</i>				
Married	72	(33.8%)		
Unmarried	141	(66.2%)		
<i>Student vs. Non- Student Status</i>				
Students	99	(46.5%)		
College	81	(38.0%)		
Graduate	18	(8.5%)		
Non-Students	114	(53.5%)		
Journalists	43	(20.2%)		
Educators	17	(8.0%)		
Public officers	6	(2.8%)		
Others	48	(22.5%)		

the characteristics of the general population of Korean Internet users. The average use of the Internet on the previous day was 193.57 minutes (approximately 3 hours and 10 minutes) and the average use of online news sites was 76.81 minutes (roughly an hour and a quarter).

The proportion of journalists (20.2%) in the sample is probably larger than the proportion in the population of Korean Internet users. The fact that citizen journalism was a much discussed subject among Korean journalists during that time might explain why a large number of journalists participated in the study.¹ Because the nature of journalists' jobs,

¹One of the authors of this paper is a former journalist. Korean journalists might have recognized this author, whose name was on the cover letter of the survey, and thus participated more actively in the study.

Table 2. Non-Demographic Description of the Sample

Variables (N=213)	Min.	Max.	Mean	S.D.
<i>Awareness of Difference</i>	3.00	7.00	5.4212	.97022
<i>Attitude toward the Iraq War</i>	1.40	7.00	5.0714	1.25600
<i>Selective exposure</i>				
<i>Time on OhmyNews</i>	30	300	182.39	68.997
<i>Information</i>	1	7	4.62	1.333
<i>Attention</i>	1	7	4.53	1.488

Note: For the five variables in this table, respectively, a higher number indicates greater awareness of difference between the two online media, a more progressive attitude toward the Iraq War (i.e., less support for deploying Korean troops, etc.), and larger selection of OhmyNews in terms of time intended to spend, frequency of access, and attention paid.

i.e., the gathering of information for dissemination through media, is likely to be related to the variables of interest to this study, it was important to assess whether the journalists were markedly different from the non-journalists in the sample. T-tests indicated that journalists differed from non-journalists only in one aspect; they were more aware (mean = 5.76) of the difference between the two online media than other participants (mean = 5.34) ($t = 3.182$; $p = .002$). Journalists did not differ significantly from non-journalists on other variables including the three dependent variable measurements and attitude towards the Iraq War (See Table 2-1).

Respondents were well aware that OhmyNews was progressive and Chosun.com was conservative in the way these media presented the issue of the Iraq War/Korean engagement/U.S. alliance as well as other social issues (mean=5.42). Furthermore, respondents considered themselves as generally progressive; they opposed the Iraq War and

Table 2-1. Difference between Journalists and Non-Journalists in Non-Demographic Variables

Variables (N=213)	Mean for Journalists (N=43)	Mean for Non-journalists (N=170)	T	Sig
<i>Awareness of Difference</i>	5.76	5.34	3.182	.002
<i>Attitude toward the Iraq War</i>	4.97	5.09	-.629	.531
<i>Selective exposure</i>				
<i>Time on OhmyNews</i>	170.23Min.	185.46Min.	-1.295	.197
<i>Information</i>	4.47	4.65	-.986	.327
<i>Attention</i>	4.23	4.60	-1.451	.148

Table 3. Multiple Regression of Time Intended to Spend on OhmyNews and Chosun.com on Awareness of Difference, Attitude toward the Iraq War, and Demographic Variables

Multiple R: .720

R square: .519

Standard Error: 48.791

F value: 27.495; $p = .000$

	df	Sum of Squares		Mean Squares		
Regression	8	523618.173		65452.272		
Residual	204	485626.485		2380.522		
Variables		B	SE B	Beta	T	Sig.
<i>Awareness of Difference</i>		22.838	4.232	.321	5.396	.000
<i>Attitude toward the Iraq War</i>		30.896	2.914	.562	10.604	.000
<i>Age</i>		-.073	.806	-.008	-.091	.928
<i>Gender</i>		-3.567	7.407	-.026	-.482	.631
<i>Student vs. Non- Student Status</i>		-16.040	9.686	-.116	-1.656	.099
<i>Marriage</i>		-7.380	10.488	-.051	-.704	.482
<i>Internet use</i>		.042	.034	.079	1.237	.217
<i>Internet news use</i>		-.061	.063	-.062	-.968	.334

the participation of Korean troops in the war (mean=5.07). They intended to spend on average 183 minutes on OhmyNews from a total of 300, and their frequency of access to OhmyNews as well as the attention they paid to it was higher than midpoint (the midpoint indicates equal frequency of use and attention to both outlets).

H1: Time intended to spend on OhmyNews and Chosun.com

Multiple regression analysis, using the two independent variables as well as the demographic and general Internet use variables, resulted in a significant overall model that explained 51.9 percent of variability ($R = .720$) in time intended to spend on OhmyNews and Chosun.com. While none of demographic variables were significantly related to this dependent variable, attitude toward the Iraq War and awareness of the difference between the two online news media were significant predictors (See Table 3). Of the explained variance, 26.5 percent was the unique contribution of attitude toward the Iraq War (semi-partial correlation = .515) and 6.8 percent was the unique contribution of awareness of difference (semi-partial correlation = .262). Thus, H1 was supported.

A comparison of beta scores suggested that attitude toward the Iraq War ($\beta = .562$) was more powerful than awareness of difference ($\beta = .321$). Even though comparing standardized beta scores is controversial, it is acceptable in this study because both of these variables were measured on a 7-point scale.

The more respondents were against the Iraq War, against engagement in it, and against alliance with the United States, and the greater their awareness of the difference between the

Table 4. Multiple Regression of Frequency of Reliance on OhmyNews and Chosun.com on Awareness of Difference, Attitude toward the Iraq War, and Demographic Variables

Multiple R: .756						
R square: .571						
Standard Error: .890						
<i>F</i> value: 33.951; <i>p</i> = .000						
	df	Sum of Squares		Mean Squares		
Regression	8	214.970		26.871		
Residual	204	161.462		.791		
Variables		B	SE B	Beta	T	Sig.
<i>Awareness of Difference</i>		.334	.077	.243	4.325	.000
<i>Attitude toward the Iraq War</i>		.680	.053	.641	12.797	.000
<i>Age</i>		-.009	.015	-.053	-.632	.528
<i>Gender</i>		-.010	.135	-.004	-.076	.939
<i>Student vs. Non- Student Status</i>		-.009	.177	-.003	-.053	.958
<i>Marriage</i>		-.075	.191	-.027	-.391	.696
<i>Internet use</i>		.000	.001	.048	.801	.424
<i>Internet news use</i>		.000	.001	-.018	-.295	.768

two online news media, the more likely were they to prefer OhmyNews in terms of time they intended to spend on it, regardless of demographic and Internet use characteristics. On the other hand, those who were in support of the Iraq War/Korean engagement/U. S. alliance and were aware of the difference between the two online media intended to spend more time on Chosun.com.

H2: Frequency of Reliance on OhmyNews and Chosun.com

Multiple regression analysis, using the two independent variables as well as the demographic and general Internet use variables, indicated that awareness of the difference between the two online news media and the attitude toward the Iraq War were significant predictors of frequency of reliance on OhmyNews and Chosun.com for Iraq War information. However, none of the demographic and general Internet use variables had a significant relationship with this reliance (See Table 4). Thus, H2 was supported.

Altogether, 57.1% of the variability ($R = .756$) in reliance was explained by the set of independent variables. Attitude toward the Iraq War made a unique contribution of 34.4% (semi-partial correlation = .587) and awareness of difference made a unique contribution of 3.9% (semi-partial correlation = .198). In terms of the beta score, attitude toward the Iraq War ($\beta = .641$) was more powerful than awareness of difference ($\beta = .243$). Regardless of demographic and general Internet use characteristics, respondents who supported the Iraq War tended to rely on Chosun.com and those who opposed it tended to rely on OhmyNews as long as they were aware of the difference between the two online media.

Table 5. Multiple Regression of Attention Paid to OhmyNews and Chosun.com on Awareness of Difference, Attitude toward the Iraq War, and Demographic Variables

Multiple R: .715						
R square: .511						
Standard Error: 1.060						
<i>F</i> value: 26.661; <i>p</i> = .000						
	df	Sum of Squares		Mean Squares		
Regression	8	239.774		29.972		
Residual	204	229.334		1.124		
Variables		B	SE B	Beta	T	Sig.
<i>Awareness of Difference</i>		.574	.092	.374	6.241	.000
<i>Attitude toward the Iraq War</i>		.608	.063	.513	9.596	.000
<i>Age</i>		-.025	.018	-.126	-1.417	.158
<i>Gender</i>		.043	.161	.014	.268	.789
<i>Student vs. Non- Student Status</i>		-.105	.210	-.035	-.498	.619
<i>Marriage</i>		-.154	.228	-.049	-.676	.500
<i>Internet use</i>		.001	.001	.077	1.201	.231
<i>Internet news use</i>		.000	.001	-.002	-.038	.970

H3: Attention Paid to OhmyNews and Chosun.com

Multiple regression results showed significant positive relationships between how much attention Korean Internet users paid to the two news sources for information about the Iraq War and awareness of the difference between the two online news media and attitude toward the Iraq War. Altogether, 51.1% of the variability ($R = .715$) in attention paid was explained by the model but only attitude toward the Iraq War and awareness of difference made unique contributions to explanation, respectively 22% (semi-partial correlation = .470) and 9.3% (semi-partial correlation = .306). A comparison of beta scores indicated that attitude toward the Iraq War ($\beta = .513$) was more powerful than awareness of difference ($\beta = .374$) (See Table 5). Thus, H3 was supported. The results show that Korean Internet users' awareness of the difference between the two online news media and attitude toward the Iraq War were significantly related to attention paid to OhmyNews or Chosun.com.

DISCUSSION

Using the selective exposure framework, this study explored patterns in online news media selection by Internet users in Korea to examine whether their selection matched their own orientations towards political issues and was related to their awareness of ideological differences in the content of the media. The results of this study strongly supported the tenets of selective exposure theory.

The multiple regression models based on 213 online participants' answers showed that attitudes toward the Iraq War and awareness of the difference between two polar online news media, the progressive OhmyNews and the conservative Chosun.com, were significantly related to Korean Internet users' selective exposure to online news media. Demographic factors, such as age, gender, student vs. non-student status, marital status, as well as Internet use and Internet news use did not significantly explain the selective exposure of Korean Internet users to these online news sources.

A substantial portion of the variance in the dependent variable (51.9% for time intended to spend, 57.1% for frequency of reliance for information about the Iraq War, and 51.1% for attention paid for information on the Iraq War) was explained by attitude toward the Iraq War and awareness of the difference in online media orientations, when demographic and Internet use factors were included in the regression models in this study. Demographic and Internet use variables however did not uniquely contribute to explaining selective exposure.

In the other words, the results indicate that people who had more progressive attitudes toward the Iraq War and a strong awareness of the difference between OhmyNews (which adopted an anti-Iraq War/Korean engagement/U. S. alliance position) and Chosun.com (which adopted the opposite orientation from OhmyNews) were more likely to choose the progressive OhmyNews in terms of time intended to spend, reliance for information about the Iraq War, and attention paid for information on the Iraq War.

The literature suggests that audiences engage in selective behaviors to process information more effectively. More specifically, information or knowledge that contradicts an individual's pre-existing point of view based on her/his values and beliefs requires audiences to spend more cognitive energy. Consequently, people try to choose information or knowledge more consistent with their values and beliefs (Johnson, Bichard, & Zhang, in press). Attitude toward the Iraq War was used as the cognitive predisposition in this study. Its significant contribution to selective exposure confirms the basic tenets of the theory, particularly when noted within the context of the lack of predictive power of demographic variables. The results confirmed that the selective exposure theory is useful in understanding how audiences choose their media.

Audience's cognitive predispositions are not fixed and may change as the result of various factors such as communication with other people, peer pressure, and interaction with different media. Furthermore, audience's cognitive predispositions may be issue specific. Thus, selective exposure theory does not imply permanency in media choice but rather a strong relationship between audience's media choice and their cognitive predisposition at that point in time for that particular issue.

While cognitive predisposition (in this study attitude toward to the Iraq War), is important for selective exposure to take place, the public also has to be aware of the orientation of different media. This study examined selective exposure to Internet news media in a circumstance where there were clear differences in the media orientations of the two online media. Thus, indirectly, the study also confirms that the presence of a substantial

difference in media outlets' position is a pre-condition for selective exposure to take place.

Selective exposure theory suggests that individuals' media choice is selective and that audiences' selective exposure to the media is influenced by a variety of factors including their pre-existing point of view about certain issues (Iyengar et al., 2008; Knobloch et al., 2003). However, selective exposure studies have not always uncovered this phenomenon possibly because the media choices might not have been polar enough to draw out these differences in selection. That is, if the media choices available to the public are not sufficiently different, then audiences cannot make widely different choices (Mutz & Martin, 2001). Another way to express this is that the systematic difference between the media is not large enough to create a detectable effect size in selection of media.

This lack of diversity of media viewpoints has been noted often. The media are considered to be consonant, to maintain the status quo, and to engage in pack or herd journalism for reasons such as primacy of the profit motive, catering to the lowest common denominator, risk aversion, socialization in the newsroom, and ideological leanings. Thus if media do present widely different orientations and frames, these could be an important condition to lead to selective exposure behaviors on part of audiences (Stroud, 2008).

The recent rapid adoption of the Internet as a new news medium is another important circumstance for the application of selective exposure theory because the Internet provides an unprecedented variety of choices for the audience (Johnson, Bichard, & Zhang, in press; Mastro et al., 2002).

Other studies need to be done to confirm the findings of this study and seek new dimensions of the applicability of selective exposure theory. These studies may particularly concentrate on the Internet because Internet content has the potential for and actual diversity of viewpoints and orientations. The Internet brings global media to one's fingertips, has unlimited space, and allows citizen journalists and bloggers. All these contribute to providing the public with content that fits their cognitive predispositions.

While many studies have in fact been re-exploring selective exposure theory in this new medium of the Internet, this study also provides evidence of the cross-cultural applicability of selective exposure theory. The study also makes a contribution to understanding the Korean media scene and the rapid deployment of the Internet in Korea.

Measuring people's attitudes, perceptions, and behaviors accurately has always been difficult. This study used one standard and two new ways to measure selective exposure. For the latter, it used a continuum of choices from Always X Medium to Always Y Medium with a resulting score that provides the level of choice of one medium. This provides a continuous, directional measure that facilitates the use of advanced statistical tests. This is a major methodological contribution of the study and one that future researchers could use profitably. This study employed these three different methods to measure respondents' selective exposure to online media to provide a more rigorous test of the selective exposure theory and to eliminate doubt about whether selective exposure was evident only because of the measurement used.

The study has also pointed out the importance of choosing media outlets that have

clearly identifiable polar orientations to enable the selective exposure phenomenon to show itself, if in fact it exists. This study chose two clearly different online news media because this difference was a vital condition to explore the selective exposure theory. These methodological procedures can be helpful to future researchers who examine selective exposure theory or to others who try to assess people's attitudes, perceptions, and behaviors with greater precision.

Such study might be particularly relevant in the United States today where media and public opinion have become quite polarized. The American public is split quite evenly between the conservative and liberal camps and the media are becoming more polarized and providing some diversity of viewpoints as evident from the orientations of Fox, CNN, and MSNBC (Brubaker & Hanson, 2005; Coe et al., 2008; Diddi, 2008; Pew Research Center for the People and the Press, June 8, 2004).

Circumstances were right to conduct this study in Korea thus providing a valuable opportunity to test the selective exposure theory. In Korea, two online media sites have two clearly different orientations, conservative and progressive. Further, the Korean public has exhibited a heavy dependence on the Internet, and there is a strong impact of online media on public opinion as evident from the results of a recent election (Kim & Johnson, 2009; Park & Thelwall, 2008; Rhee & Kim, 2004). But others can improve on this study. This study examined only demographic and general Internet use variables apart from the two major independent variables to explain selective exposure. Future studies may include specific party memberships of information consumers, their perception of the credibility of specific media, and the quality of information provided by different sources.

The Internet does not provide any practical way to achieve random sampling of the entire population of Internet users. Thus, non-probability sampling is considered adequate for any Web based online survey (Johnson et al., 2008). Still, the use of a convenience sample remains a limitation of this study. Further inhibiting generalization to the population of Korean Internet users is the fact that the majority of the respondents in the survey were young with higher levels of education and the respondents included a noticeable proportion of journalists. On the other hand, it is possible that the convenient sample of this study may be representative because other studies have suggested that the general population of Korean Internet users tend to be younger, educated people (Kim & Johnson, 2009; Park, 2008; Rhee & Kim, 2004). Also, t-tests did not reveal any major differences for important variables between the journalist and non-journalist respondent groups. Nonetheless, generalization of the results to the population should be done with great caution. A future study with a less skewed sample would be beneficial.

In sum, the contributions of this study include the following: confirming the presence of selective exposure, providing test of the theory in an Asian country, using new and multiple ways to measure selective exposure, and raising the importance of having media choices and the presence of polarized media to demonstrate selective exposure at work.

REFERENCES

- AP reports launch of OhmyNews International: Influential South Korean Internet site goes international with "Citizen Reporters." (March 02, 2004). The Associated Press Newswire.
- Author (2006). Finding framing devices: Patterns of source selection in framed Korean online news media.
- Babbie, E. (1999). *The basic of social Research*. Belmont, CA: Wadsworth Publishing.
- Bennett, W. L., & Iyengar, S. (2008). A new era of minimal effects? The changing foundations of political communication. *Journal of Communication*, 58(4), 707-731.
- Brubaker, J., & Hanson, G. (2005, August). *The effect of CNN and Fox news' post-debate coverage on viewers' perceptions of presidential candidates*. Paper presented at the annual conference of the Association for Education in Journalism and Mass Communication, San Antonio, TX.
- Chang, W. Y. (2009). OhmyNews: Citizen journalism in South Korea. In S. Allan & E. Thorsen (Eds.), *Citizen journalism: Global perspectives* (pp. 143-152). New York: Peter Lang Publishing Inc.
- Choi, Y. J., Jarzabek, M. G., Song, J.G., & La, D. S. (2001, August). *Investigating Korean college students' Internet use patterns and motivations, and exploring vulnerability of Internet dependency*. Paper presented at Communication Technology and Policy Division of the annual convention of AEJMC, Washington D.C.
- Coe, K., Tewksbury, D., Bond, B. J., Drogos, K. L., Porter, R. W., & Yahn, A. (2008). Hostile news: Partisan use and perceptions of cable news programming. *Journal of Communication*, 58(2), 201-219.
- Diddi, A. (2008, August). *Network and Cable News Framing of the Iraq Issue in the 2004 Presidential Campaign*. Paper presented at the annual conference of the Association for Education in Journalism and Mass Communication, Chicago, IL.
- Edwards, K., & Smith, E. E. (1996). A disconfirmation bias in the evaluation of arguments. *Journal of Personality and Social Psychology*, 71(1), 5-24.
- Elasmar, M., & Straubhaar, J. D. (1993). Selective exposure to TV war news sources during the Gulf War. In B. S. Greenberg & W. Gantz (Eds.), *Desert storm and the mass Media* (pp. 232-247). Cresskill, NJ: Hampton Press, Inc.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, IL: Row & Peterson.
- Flanagin, A. J. and Metzger, M. J. (2000). Perceptions of Internet information credibility, *Journalism & Mass Communication Quarterly*, 77(3), 515-540.
- French, H. W. (March 6, 2003). Online newspaper shakes up Korean politics. *New York Times*: p. A3.
- Garrett, R. K. (2009). Echo chambers online?: Politically motivated selective exposure among Internet news users. *Journal of Computer-Mediated Communication*, 14(2), 265-285.
- Gillmor, D. (2004). *We the media: Grassroots journalism by the people for the people*. Sebastopol, CA: O'Reilly Media, Inc.
- Joe, S. S. & Kim, Y. J. (2004). A comparative study of online journalism in relation to agenda-setting function. *Journal of Korean Society for Journalism and Communication Studies*, 48(3), 302-329.

- Johnson, T. J., Bichard, S. L., & Zhang W. (In press). Revived and refreshed: Selective exposure to blogs and political web Sites for political Information. Accepted for Francesca Comunello (Ed.) *Networked sociability and individualism: Technology for personal and professional relationships*.
- Johnson, T. J., Kaye, B. K., Bichard, S. L., & Wong, W. J. (2008). Every blog has its day: Politically-interested Internet users' perceptions of blog credibility. *Journal of Computer-Mediated Communication*, 13(1), 100–122.
- Johnson, T. J., Zhang, W., & Bichard, S. (In press). Voices of convergence or conflict?: A path analysis investigation of selective exposure to political websites. *Social Science Computer Review*.
- Jung, H. J. (2010). The rise and fall of anti-American sentiment in South Korea. *Asian Survey*, 50(5), 946–964.
- Iyengar, S., Hahn, K. S., Krosnick, J. A., & Walker, J. (2008). Selective exposure to campaign communication: The role of anticipated agreement and issue public membership. *The Journal of Politics*, 70(1), 186–200.
- Kaye, B. K. & Sapolsky, B. S. (1997). *Electronic monitoring of in-home television RCD usage*. *Journal of Broadcasting and Electronic Media*, 47(2), 296–302.
- Kim, D., & Johnson, T. J. (2009). A shift in media credibility: Comparing internet and traditional news sources in South Korea. *The International Communication Gazette*, 71(4), 283–302.
- Knobloch, S., Carpentier, F. D., & Zillmann, D. (2003). Effects of salience dimensions of informational utility on selective exposure to online news. *Journalism & Mass Communication Quarterly*, 90(1), 91–108.
- Klapper, J. T. (1960). *The effects of mass communication*. Glencoe: The Free Press.
- Korea Communication Commission & Korean Internet and Security Agency (2004). *2010 Internet usage analysis*, Seoul. Korea.
- Kristof, N. D. (1987, July 12, 2010). Anti-Americanism grows in South Korea. *The New York Times*, p. D3.
- Mastro, D. E., Eastin M. S., & Tamborini, R. (2002). Internet search behaviors and mood alterations: A Selective Exposure Approach. *Media Psychology*, 4(2), 157–172.
- Mutz, D. C., & Martin, P. S. (2001). Facilitating communication across lines of political difference: The role of mass media. *American Political Science Review*, 95(1), 97–114.
- OECD (July 2010), ICT database and Eurostat, Community Survey on ICT usage. Retrieved September 1, 2010 from <http://www.oecd.org/dataoecd/19/45/34083073.xls>.
- Park, H. W., & Thelwall, M. (2008). Developing network indicators for ideological landscapes from the political blogosphere in South Korea. *Journal of Computer-Mediated Communication*, 13(4), 856–879.
- Pew Research Center for the People and the Press (June 8, 2004). News audiences increasingly politicized. Retrieved November 30, 2008 from <http://people-press.org/report/215/news-audiences-increasingly-politicized>.
- Powell, B. (June 28, 2010). Sixty Years and Counting. *Time*. Retrieved October 11, 2010 from <http://www.time.com/time/magazine/article/0,9171,1997297,00.html>.
- Rhee, I. Y. (2003). The Korean election shows a shift in media power. *Nieman Reports*, 57(1), 95–97.
- Rhee, K. Y. & Kim, W. B. (2004). The Adoption and Use of the Internet in South Korea. *Journal of Computer-Mediated Communication*, 9(4).

- Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass Communication & Society*, 3(1), 3-37.
- Sambrook, R. (2009). Citizen Journalism. In J. Owen & H. Purdey (Eds.), *International News Reporting: Frontlines and Deadlines* (pp. 220-242). Hoboken, NJ: Wiley-Blackwell.
- Schroeder, C. M. (June 18, 2004). Is this the future of journalism? Newsweek Web exclusive. Retrieved November 30, 2005 from <http://www.msnbc.msn.com/id/5240584/site/newsweek>.
- Smith, S. M., Fabrigar, L. R. & Norris, M. E. (2008). Reflecting on six decades of selective exposure research: Progress, challenges, and opportunities. *Social and Personality Psychology Compass*, 2, 464-493.
- S. Korea vows strong alliance with U.S. (September 30, 2004). The Associated Press Newswire.
- South Korea ends four-year deployment in Iraq. (December 19, 2008). Yonhap News Agency Newswire.
- Stroud, N. J. (2008). Media use and political predispositions: Revisiting the concept of selective exposure. *Political Behavior*, 30(3), 341-366.
- Thousands in South Korea protest planned deployment of more troops to Iraq. (August 15, 2004). The Associated Press Newswire.
- U.S. Department of State (May 28, 2010). Background Note: South Korea. Retrieved November 2, 2010 from <http://www.state.gov/r/pa/ei/bgn/2800.htm>.
- War is proving political problem not only for U.S., but for friends as well. (July 14, 2004). The Associated Press Newswire.

Appendix. Measurements

* Items were in Korean in the questionnaire the survey.
They have been translated below into English.

I. Measurement of Dependent Variable (in three different ways)

A. Time intended to spend between OhmyNews and Chosun.com

If you have five hours to spend on Internet news, how would you allocate your time between Ohmynews and Chosun.com.

(Ohmynews) _____ hour(s) _____ minute(s)
(Chosun.com) _____ hour(s) _____ minute(s)

B. Frequency of Reliance on OhmyNews and Chosun.com

How frequently do you rely on Ohmynews and Chosun.com for information about the Iraq War?

- 1) *Always on Ohmynews.com*
- 2) *Almost always on Ohmynews*
- 3) *Mainly on Ohmynews but some on Chosun.com*
- 4) *Equally on Ohmynews and Chosun.com*
- 5) *Mainly on Chosun.com but some on Ohmynews*
- 6) *Almost always on Chosun.com*
- 7) *Always on Chosun.com*

C. Attention Paid to OhmyNews and Chosun.com

How much do you pay attention to Ohmynews and Chosun.com for information about the Iraq War?

- 1) *Pay attention only to Ohmynews.com*
- 2) *Pay attention mainly to Ohmynews*
- 3) *Pay attention mainly to Ohmynews but some to Chosun.com*
- 4) *Equally to Ohmynews and Chosun.com*
- 5) *Pay attention mainly to Chosun.com but some to Ohmynews*
- 6) *Pay attention mainly to Chosun.com*
- 7) *Pay attention only to Chosun.com*

II. Measurement of Independent Variables (using the seven-point Likert scale shown below).

Very strongly disagree.....Neutral..... Very strongly agree

1----- 2-----3----- 4-----5-----6-----7

A. Awareness of the difference between the two online media

1. Ohmynews has an anti-Iraq War perspective.
2. Chosun.com favors non-governmental organizations that oppose Korean government's decision on joining the Iraq War.
3. Ohmynews has a liberal perspective on the issue of Korea joining the war against Iraq.
4. Ohmynews has supported conservative candidates in the previous presidential elections.
5. Chosun.com has supported Korea's political, economic, and military independence from America.
6. Ohmynews has supported a strong alliance between America and Korea
7. Chosun.Com supports conservative candidates for important positions in the Korean government.

B. Attitude toward the Iraq War

1. Korea made the right decision in joining the Iraq war.
2. Korean troops should be withdrawn from Iraq.
3. America's war against terror in Iraq is a legitimate war.
4. Korea should be independent from America politically.
5. Korea's decision to join the Iraq War was necessary to keep the strong alliance with America.

LIST OF AD HOC REVIEWERS SINCE 2007

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