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ORIGINAL ARTICLE

Involved, Transported, or Emotional? Exploring the Determinants of Change in Knowledge, Attitudes, and Behavior in Entertainment-Education

Sheila T. Murphy, Lauren B. Frank, Meghan B. Moran, & Paula Patnoe-Woodley

Annenberg School for Communication & Journalism, University of Southern California, Los Angeles, CA 90291, USA

This study examined how 3 constructs—involvement with a specific character, involvement with the narrative (Green and Brock's construct of transportation), and viewers' emotional reaction to the narrative—produce entertainment-education (EE) effects. A pretest/posttest survey of 167 regular viewers measured the effects of exposure to a lymphoma storyline on a television drama, Desperate Housewives. *Transportation or involvement with the narrative was the best predictor of change in relevant knowledge, attitudes, and behavior. Although involvement with a specific character has been hailed an important direct predictor of EE effects, a structural equation model indicated that character involvement may be more important for its ability to heighten transportation and emotion, which, in turn, produce changes in viewers' knowledge, attitudes, and behavior.*

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Every evening, millions of Americans turn on their television and curl up on their couch, expecting to be entertained. But a growing body of research suggests that television provides more than just a pleasant pastime. Studies have shown that television provides an important, often primary, source of health information for many Americans (Beck, 2004; Brodie et al., 2001; Kaiser Family Foundation, 2002; Murphy, Hether, & Rideout, 2008). According to one survey, 26% of the public cited entertainment television as being one of their top sources of health information, and over half (52%) said they consider the health information contained in these programs to be accurate (Beck, 2004; Beck & Pollard, 2001).

In addition to the obvious benefit of having widespread reach, there are several other compelling reasons for investigating television's potential to convey health-related information within the United States (Brown & Walsh-Childers, 2002;

Corresponding author: Sheila T. Murphy; e-mail: smurphy@usc.edu

Singhal & Rogers, 1999). In recent years, Americans have become increasingly intolerant of interruptions in their entertainment, such as commercials or public service announcements (PSAs). As a result commercial sponsors often turn to "product placement" where products and appeals are directly embedded into popular programs. Within the health field, groups such as the Kaiser Family Foundation, the Centers for Disease Control and Prevention, and others seeking to communicate prosocial information are similarly attempting to integrate health-related content directly into popular television storylines—a practice often called "entertainment-education" or EE (Sabido, 2004; Sherry, 2002; Singhal, Cody, Rogers, & Sabido, 2004; Singhal & Rogers, 1999).

Singhal and Rogers (2002) defined EE as "the intentional placement of educational content in entertainment messages" (p. 117). In the public health arena, EE has been embraced as a cost-effective means to communicate health information in an engaging format to a mass audience (Bouman, 2002; Brodie et al., 2001; Valente et al., 2007). It has been argued that embedded health messages are more effective than traditional public service campaigns because they are less "obvious" and, as a result, viewers may be less resistant to their content (Brown & Walsh-Childers, 2002; Singhal & Rogers, 1994; Slater, 1997, 2002; Slater & Rouner, 2002). Some researchers have suggested that one of the main advantages of using an EE strategy over a more traditional public health campaign that employs PSAs and clinic brochures is that the use of narratives can lead viewers to become transported into a narrative world where disbelief is suspended and counterarguing circumvented (Green & Brock, 2000; Greenberg, Salmon, Patel, Beck, & Cole, 2004; Singhal & Rogers, 1999; Slater, 2002; Slater, Rouner, & Long, 2006). Still other researchers suggest that health information delivered through engaging storytelling, involving characters the viewer already "knows" and cares about, is more likely to be attended to than traditional health campaigns (Singhal et al., 2004; Singhal & Rogers, 1999; Slater & Rouner, 2002). More recently, Moyer-Gusé (2008) has 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).

But although a growing body of evidence suggests that health messages conveyed in popular television programming can produce significant change in viewers' knowledge, attitudes, and behavior (Bae, 2008; Bae & Kang, 2008; Brodie et al., 2001; Collins, Elliot, Berry, Kanouse, & Hunter, 2003; Hether, Huang, Beck, Murphy, & Valente, in press; Keller & Brown, 2002; Kennedy, O'Leary, Beck, Pollard, & Simpson, 2004; Sharf & Freimuth, 1993; Sharf, Freimuth, Greenspon, & Plotnick, 1996; Slater et al., 2006; Valente et al., 2007), the precise mechanisms underlying these effects remain unclear. As Moyer-Gusé (2008) points out "despite empirical advances in this area, more work is needed to understand fully what makes entertainment-education unique from a message-processing standpoint" (p. 407). The present research is an attempt to compare the relative contribution of three mechanisms frequently cited in the EE literature as underlying these effects—a viewer's involvement with a particular character; their involvement with the narrative more generally (measured here by Green and Brock's

2000 construct of transportation); and their emotional response to a seven-episode cancer storyline in the popular primetime program, *Desperate Housewives*.

Involvement with a particular character

Because of its ability to involve viewers in the lives, loves, and losses of familiar fictional characters, television may be particularly well-suited to convey health-related information (Green, 2006). Prior research has shown that, in addition to direct learning, the modeling of behavior allows for vicarious learning and plays a pivotal role in behavior change (Bandura, 1977, 2002, 2004a, 2004b). Indeed, a core premise of Bandura's (2004a, 2004b) social cognitive theory, which serves as the theoretical backbone of EE, is that individuals are far more likely to mimic a behavior that they have seen being performed than one that was recommended but not demonstrated. But not all models are equally effective. Successful EE relies on the use of characters with whom viewers can identify, which explains, in part, why white female viewers the same age as Nancy in *thirtysomething* were more strongly moved by this fictitious character's cancer experiences (Sharf & Friemuth, 1993; Sharf et al., 1996); whereas young Latinas were particularly influenced by portrayals of young Latina characters in telenovelas (Singhal & Rogers, 1999). Indeed research suggests that involvement with characters 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). In summary, viewers appear to learn more from models—in this case, fictional television characters—with whom they identify, like, feel as if they know, or perceive to be similar to themselves (Bandura, 2002).

Unfortunately, distinguishing between these related concepts has proved notoriously difficult. For instance, identification has been conceptualized in many ways by different researchers. Definitions include a viewer's perceived similarity of a character (Basil, 1996; Eisenstock, 1984; Liebes & Katz, 1990; Maccoby & Wilson, 1957; Slater & Rouner, 2002), liking of a character (Basil, 1996; Eisenstock, 1984; Liebes & Katz, 1990; Maccoby & Wilson, 1957), wanting 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 one relates to a character (Wilkin et al., 2007), and an emotional and cognitive process whereby one takes the perspective of a character (Cohen, 2001, 2006; Eyal & Rubin, 2003). 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, 2004a, 2004b) 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 that 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, whereas 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).

Still other researchers propose a specific temporal ordering among these related constructs. Schiappa, Allen, and Greg (2005), for example, posit that parasocial interaction is a necessary antecedent to identification. Cohen (2006), however, argues that perceived similarity, liking and wanting to be like a character are not identification, instead viewing these constructs as antecedents to identification. According to Cohen, when a viewer truly identifies with a character, she or he—at least momentarily—views the events happening to the character as if they were happening to them. Consequently, in Cohen's 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.

As evidenced by this brief summary of the extant literature, there is at present no universally agreed upon conceptual definition of identification. The current research follows Moyer-Gusé's (2008) lead, and uses the term *involvement with characters* to refer to the overarching category of concepts related to viewers' interaction with specific fictional characters. This overarching category incorporates the related constructs of identification, wishful identification (a viewer's wish to be like the character), similarity, liking, and parasocial interaction, which are often used interchangeably and/or very differently (see Moyer-Gusé, 2008 for a review). In this article, we examine four variables known to be related to involvement with a specific character—perceived similarity, liking, wishful identification, and parasocial interaction. We review their relationship to one another, to the related constructs of transportation and emotion, and their ability to predict change in viewers' knowledge, attitudes, and behaviors in response to a cancer storyline in a popular television program.

Involvement with the narrative

Various scholars have noted that humans are innate storytellers (Schank & Abelson, 1995). Less attention has been paid to the logical counterpart of this proposition—that humans are innately prepared to be influenced by stories (Green, 2004, 2006; 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" (p. 701). In Green and Brock's theoretical framework, when an audience member is transported, he or she becomes part of the narrative they are 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 and 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 they 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.

Green and Brock (2000, 2002) propose that transportation can be an important predictor of persuasive effects. It is argued 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 counterargue or to critically assess the messages in the narrative (Green & Brock, 2000; Kreuter et al., 2007). Slater and Rouner (2002) similarly noted that engagement with narrative storylines in EE programs can suppress counterarguing by viewers. Transported individuals are also likely to view a narrative as being more like a real 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 found that an individual's level of transportation into a written story predicted subsequent beliefs consistent with the story's messages. Green (2004) likewise found that transportation was positively associated with story-related beliefs.

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 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 acknowledges the complex relationship between these two constructs noting that identification could both precede and come after transportation. In other words, although 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). Alternately, Busselle and Bilandzic (2008) hypothesize that transportation (the sensation of flow in a narrative plus the loss of awareness of self and surroundings) and identification work together to produce the broader construct they define as engagement. In summary, 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), a component of transportation (Sood, 2002) or work alongside transportation to produce an overall experience of engagement with a narrative (Busselle & Bilandzic, 2008).

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 with *a particular character* in the narrative. This article investigates the relationship between involvement with a narrative and involvement with a specific character by examining viewers' transportation into a cancer storyline on *Desperate Housewives* and thereby measuring their perceived similarity, liking, wanting to be like, and feeling like they know the character of Lynette, who is diagnosed and treated for lymphoma.

Emotion

Still other research suggests that it may not be involvement with a character or being transported that underlies the power of a narrative but rather the emotion that the story evokes. In fact, Green and Brock (2000) note the early and essential role that heightened emotions and motivations play in their construct of transportation. 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. And Slater and Rouner (2002) acknowledge the central role of emotion in EE: ''entertainment education, especially when it uses an extended serial format, provides substantial opportunity for emotional investment in fictional characters'' (p. 185). To assess the role of emotion as a potential mediator of narrative persuasion effects, this study measured viewers' emotional response to a familiar fictional character's battle against cancer.

But what level of emotional response is involved in producing effects such as those described in the EE literature? It has alternately been suggested that such responses are differentiated primarily at the level of hedonic valence as positive or negative affect (Eagly & Chaiken, 1993; Murphy & Zajonc, 1993; Pratto, 1994; Tal-Or & Cohen, 2009; Zajonc, 1980), or are further differentiated at the level of discrete emotions such as happiness, anger, fear, disgust, or sadness, with each emotion preparing the organism for a distinct response (Bodenhausen, Sheppard & Kramer, 1994; DeSteno, Petty, Rucker, Wegener, & Braverman, 2004; Nabi, 2002a, 2002b; Tiedens & Linton, 2001; see also Dillard & Nabi, 2006 for a review). Each of these levels is hypothesized to have a different impact on an individual's information processing and their subsequent motivation to act. For instance, many theorists have examined the unique roles played by positive and negative affect in persuasion (Eagly & Chaiken, 1993; Petty,

DeSteno & Rucker, 2001; Petty & Wegener, 1998). Johnson and Tversky (1983) and subsequent researchers have found evidence of mood congruence such that negative affect inflates and positive affect deflates an individuals' estimates of the perceived likelihood of a negative event such as contracting cancer. Moreover, until relatively recently, the generally accepted view was that, relative to positive affect, negative affect tended to increase information processing (see Nabi, 2002a, 2002b; Petty & Wegener, 1998; or Schwarz & Clore, 1996 for a review).

But other lines of research suggest that specific negative emotions can have different effects on information processing. For instance, Nabi (2002a, 2002b) found that anger is likely to produce closer information processing of messages than fear. In summarizing the position of many cognitive appraisal theorists, DeSteno et al. (2004) argue that "the bifurcation of emotional phenomenon into positive versus negative states . . . represents a gross oversimplification of emotional experience" and that important distinctions between emotions are lost (p. 43). These authors argue that if the purpose of the emotion system is to make situationally adaptive responses, then "it seems plausible that the ability to experience distinct emotions should result in their differential influence on many cognitive and motivational processes" and as a result "may produce distinct effects on persuasion" (p. 48). Moreover, they present data indicating that to the degree that an individual's emotional state matches the specific emotional tone of the message, the more attention and acceptance the message will receive.

To answer the question of what is the correct level of theoretical analysis with respect to emotion, the current work measures viewers' self-reported levels of five discrete emotions—happiness or joy, sadness, disgust, anger, and fear (Ekman, 1992; Nabi, 2002a, 2002b)—in response to a cancer-related storyline on the popular primetime program *Desperate Housewives*. This allows us to examine whether different negative emotions produce differential effects in viewers' ability to process the information presented in the cancer storyline as well as whether positive and negative affect or specific emotions best predict change in knowledge, attitudes, and behavior.

Measuring EE effects

A growing body of evidence has documented the effectiveness of entertainment television in raising viewer awareness of health issues (Brodie et al., 2001; Keller & Brown, 2002; Kennedy et al., 2004; Sharf & Freimuth, 1993; Sharf et al., 1996). Importantly, exposure to health information in popular programming not only impacts viewers' knowledge about various health issues, but also exposure has been associated with attitude and behavior change. For example, Sharf et al.'s (1996) study of the ovarian cancer storyline on *thirtysomething* reported that 40% of viewers took some kind of action as a result of being exposed to the storyline and 32% of viewers came away with insights and new ways of thinking. Singhal and Rogers (1999) found that the South African television show *Soul City* increased both discussion about and information-seeking related to health topics on the show. Brodie et al. (2001) reported that 51% of regular *ER* viewers talked with family and friends

about health issues depicted in the program, and approximately one in five regular *ER* viewers sought out additional health information after seeing a health storyline on *ER*. Furthermore, one in seven viewers said that they spoke with a healthcare provider because of something they saw on *ER*. Similarly, Collins et al. (2003) found increased interpersonal communication following exposure to the *Friends*' "condom" episode with approximately one out of every five viewers in their sample reporting having talked with an adult about the episode. Hether et al. (2008) likewise found associations between exposure to breast cancer storylines and self-reported behavior change including viewers scheduling a breast cancer screening and changes in attitudes toward preventative mastectomy.

Traditionally, EE outcomes are assessed as influencing knowledge, attitudes, and practices (KAP) or behavior (Slater & Rouner, 2002; Valente, 2002). For instance, a particularly powerful lung cancer storyline might heighten a viewer's knowledge that smoking causes lung cancer, produce negative feelings about smoking, and potentially cause them to quit smoking. Because involvement with characters, transportation, and emotion are thought to produce effects through different mechanisms (see Moyer-Gusé, 2008 for a review), it follows that specific predictors may be more strongly related to specific outcomes. Thus, we ask:

RQ1: Which of the following concepts—involvement with a specific character, involvement with a narrative more generally, or emotion—best predict EE effects? More specifically, which concept is most likely to produce an increase in cancer-related (a) knowledge, (b) attitudes, and (c) behavior?

In addition, the relationship between these variables may be different when examining a full theoretic model than in models predicting single outcomes. Thus, our final research question examines how these constructs might operate together to produce entertainment-education effects.

RQ2: Which combination and ordering of these constructs—involvement with a specific character, involvement with a narrative, and/or emotion—best predicts entertainment-education effects?

Method

The *Desperate Housewives* lymphoma storyline

In this *Desperate Housewives* six-episode story arc, one of the lead female characters, Lynette Scavo (Felicity Huffman), has been diagnosed with Non-Hodgkin's lymphoma and is being treated with chemotherapy. At the end of the third season, Lynette hit her head, became ill and went to a hospital emergency room to be examined. A CAT scan of her brain uncovered suspicious looking submandibular lymph nodes in her neck and a biopsy was ordered. In the following episode, Lynette received a diagnosis of Non-Hodgkin's lymphoma and learned that her cancer was

likely curable, but to be prepared for the hair loss, exhaustion, and nausea from her chemotherapy treatments.

The *Desperate Housewives* fourth season began on September 30, 2007 and continued prominently featuring Lynette's cancer storyline in "Now You Know." (On September 23, a summary of the previous season was aired that reminded the viewer of what had transpired with Lynette.) At this point, Lynette was halfway through her chemotherapy treatments and had not told her children or friends that she was ill. She was completely bald but wore a wig to conceal this fact, and showed frequent signs of severe nausea and exhaustion. She finally told her friends and comforted them by expressing "Relax, I am not going to die" and showing a positive attitude promising to "beat this." In the October 7 episode, "Smiles of a Summer Night," Lynette received chemo infusions and learned the importance of having her friends with her as "chemo buddies." As the debilitating nausea continued and Lynette refused to eat, in "The Game" (October 14, 2007), her mother suggested that she try marijuana to assuage the nausea. Lynette refused, so her mother tricked her into trying it by baking the marijuana into brownies. The marijuana stopped the nausea and made Lynette feel substantially better. When she learned of her mother's devious act, she reprimanded her and refused to use marijuana again.

On October 21 in "If There's Anything I Can't Stand," Lynette was on a break from her chemotherapy treatments, feeling better and sexually interested in her husband once again. Although making love her wig fell off, and her husband's attraction waned because of her bald head. He asked her to put the wig back on. In the October 28 episode "Art Isn't Easy," Lynette continued to improve and interact with her children once again. Even though she received good news that her blood work had improved, Lynette was fearful that her illness had hurt her children.

Lynette had a PET scan in the November 4 episode "Now I Know, Don't Be Scared," to see if the chemo had eradicated the cancer. Her oncologist arrived unannounced at the Scavo home that evening to declare that the test results showed clear lymph nodes—Lynette was cancer free. In the final episode of the storyline, "You Can't Judge a Book by its Cover" (November 11, 2007), Lynette was recovering well and ready to resume her motherly duties; the storyline concluded with her mother finally going home.

Participants

A pretest/posttest survey was administered online by Frank N. Magid Associates. Magid maintains a database of primetime television viewers willing to be solicited for survey research. For this project, Magid solicited 23,842 of these subscribers to participate, using a purposive sampling method to select those who had previously reported being regular viewers of *Desperate Housewives*. As an incentive to increase the response rate, participants were offered $100 gifts chosen by lottery and *Desperate Housewives* promotional materials. E-mail solicitations were sent prior to the first episode in the fourth season, and participants were given 3 days to respond. Of those solicited, 6,221 responded and started the survey (26%). To be eligible to take

the survey, participants had to be female, aged 18–49 years, and regular viewers of *Desperate Housewives* (watch at least two episodes a month). The choice to measure female viewers' involvement in this study was made because the outcomes in which the researchers were interested were inextricably related to being a woman (e.g., scheduling a pelvic exam).

Of those who responded to the e-mail solicitation to complete the survey, 502 (8.1%) met all these criteria and were eligible. These people completed the baseline survey. After the storyline aired, e-mails were sent to 394 participants.[1] Participants were given 6 days to complete the survey. Of those solicited, 170 (43%) completed the final follow-up survey, constituting a panel sample.

Measures

Health status

The baseline survey included a question about whether respondents' health was generally excellent, very good, good, fair, poor, or very poor. Responses were coded on an interval scale from 1 to 6 such that higher numbers indicated better health.

Involvement with a character

To avoid priming a particular character, respondents were asked about their involvement with Lynette Scavo, the character who develops lymphoma, and three of the other main female protagonists on the show: Bree Van de Camp, Susan Mayer, and Gabrielle Solis. Respondents were asked to rate how much they liked, how similar they were to, how much they felt like they knew, and how much they would like to be like each of these characters. Response options were 10-point Likert scales anchored by "not at all" and "a great deal." These questions were included in both the baseline and follow-up surveys. Only the responses regarding viewers' involvement with Lynette are used in this analysis.

Involvement with the narrative

In the follow-up survey, respondents were asked nine questions about their level of transportation with respect to Lynette's cancer storyline. These nine items were based on Green and Brock's (2000) scale. Participants were asked how strongly they agreed or disagreed on a 10-point Likert scale with statements such as, "I was mentally involved with the story line while watching it."

Emotion

Emotional responses to the narrative were assessed in the follow-up survey. Respondents were asked to rate to what extent Lynette's diagnosis made them feel each of five basic emotions: sad, disgusted, angry, afraid, and happy on a 10-point Likert scale.

Knowledge

Knowledge was assessed on both the baseline and follow-up surveys. Respondents were asked to self-report their knowledge of Hodgkin's lymphoma specifically and cancer generally on a 10-point Likert scale. These questions were embedded in a list of foils of other health conditions, such as diabetes, heart disease, and melanoma. In

addition, participants were asked which of the following symptoms could result from chemotherapy treatment: (a) nausea/vomiting, (b) paleness, (c) fatigue, (d) hair loss, and (e) weight gain (reversed). Response options were dichotomous yes/no, and the number of correct answers out of five was scored.

Attitude

Similarly, respondents reported attitudes toward a cancer diagnosis at both baseline and follow-up surveys. Respondents were asked to rate on 10-point Likert scales: (a) how concerned they would be about staying sexually attractive to their partner (a major part of Lynette's storyline), (b) how important it would be to know their family history of cancer, (c) how important it would be to have people to support them, and (d) how important it would be to maintain an active sex life with their partner if they were diagnosed with cancer.

Behavior

Given findings that narratives can spark both discussion of the topics addressed and seeking information about the topic (Brodie et al., 2001; Collins et al., 2003; Hether et al., in press; Singhal & Rogers, 1999), two distinct types of behavior were addressed: (a) seeking information about cancer and (b) talking about Hodgkin's lymphoma and cancer. In the follow-up survey, respondents reported how likely they were to (a) talk to someone about cancer, (b) go to a doctor for a check-up, (c) call for more information about cancer, (d) search the Internet for Web sites on cancer, (e) visit blogs or chat rooms on cancer, (f) go to the *Desperate Housewives* homepage for information on cancer, and (g) go to the *Desperate Housewives* fan blogs or chat rooms to discuss the cancer storyline.

In addition, respondents were asked at baseline and at follow-up survey how much they had talked about Hodgkin's lymphoma specifically and cancer more generally with family or friends in the past 30 days. As with the knowledge questions, these items were embedded in a list of foils of other health topics. There were four response options: (a) not at all, (b) less than once per week, (c) once per week, and (d) a few times a week.

Results

Preanalysis

Of the 170 women who completed the survey, three did not answer all of the questions. Therefore, all analyses include the remaining 167 participants. The respondents consisted largely of married (65%), Caucasian (84%) women with at least some college education (81%). The median household income level of the respondents was between 50,000 and 75,000 dollars.

Prior to conducting the analysis for the research questions, we ran a series of factor analyses to confirm that the theoretical constructs of involvement with a character, involvement with a narrative, and emotion could be validly differentiated from each other. On the basis of an initial factor analysis, the basic emotions were divided into

positive (happy) and negative (sad, disgusted, angry, and afraid). Ultimately, sad also loaded on involvement and was thus not included in the final negative emotions scale. Thus, the final negative emotions scale included three items ($\alpha = 0.77$). Following Moyer-Gusé (2008), we combined liking, perceived similarity, wishful identification, and parasocial interaction into a single construct of involvement with a character ($\alpha = 0.75$ at Time 1 and 0.70 at Time 2). To achieve factor analysis loadings for which all of the measures loaded only on their theorized construct, we used five of the nine transportation items resulting in a five-item scale ($\alpha = 0.87$).

The women who participated in the survey saw a large number of the episodes in the lymphoma storyline ($M = 5.7$, $SD = 1.9$ of seven possible episodes). In general, women were highly involved with Lynette ($M = 7.1$, $SD = 1.7$ of 10) and moderately involved with the storyline ($M = 5.6$, $SD = 2.3$ of 10). However, they were less likely to report strong emotions in response to the storyline ($M = 2.1$, $SD = 2.3$ for positive emotion and $M = 3.9$, $SD = 2.2$ for negative emotion). See Table A1 for the bivariate correlations of Time 2 constructs.

Main analysis

Research Question 1

The first research question was analyzed using multiple regression analysis. The effects of involvement with a character (Lynette), involvement with a narrative (the lymphoma storyline), and emotional response to the narrative on knowledge, attitudes, and behavior were assessed both sequentially and simultaneously (while controlling for the other theoretical constructs). The regression models control for health status and the number of episodes viewed (a dose–response analysis).[2] The results of these regression models are shown in Table 1.

For the knowledge regression models, transportation was the best individual predictor ($\beta = 0.30$, $p < .01$). Although both involvement and negative emotion were also associated with knowledge in the sequential models ($\beta = 0.17$, $p < .05$ and $\beta = 0.21$, $p < .05$, respectively), the effects of involvement and emotion were no longer significant in the full model including all theoretical constructs. Similarly, transportation was the construct that most highly associated with attitudes ($\beta = 0.18$, $p < .05$) and with talking about cancer ($\beta = 0.25$, $p < .01$). Finally, information seeking was strongly related to transportation ($\beta = 0.59$, $p < .01$), positive emotion ($\beta = 0.17$, $p < .01$), and negative emotion ($\beta = 0.17$, $p < .05$).

Research Question 2

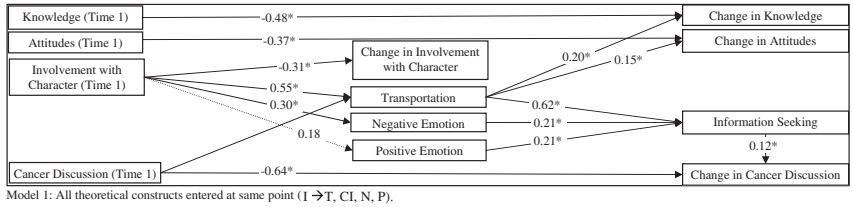
Analysis for this question involved a comparison of a series of five models that include controls for baseline constructs and that estimate changes in knowledge, attitudes, and behaviors (Time 2 minus Time 1).[3] The initial models fitted stemmed from the results of the regression analyses with paths included from the theoretical constructs to the outcomes based on significant results. As the relationships within the KAP (knowledge, attitudes, practices) model were not central to this study, the fit of this portion of the model was adjusted using modification indexes to create the best possible fit.

Table 1 Effects of Involvement, Transportation, and Emotion on Knowledge, Attitude, and Practice ($N = 167$)

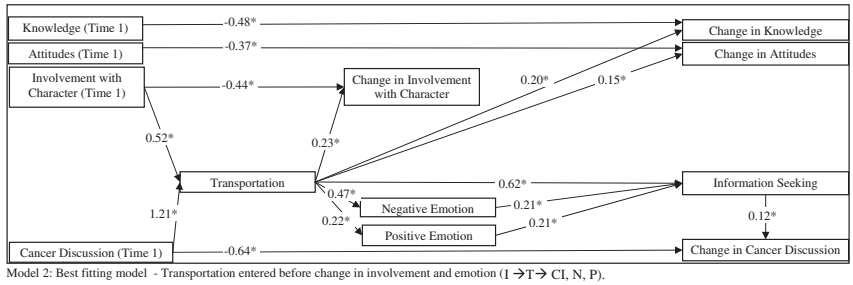
	Baseline	Involvement	Transport	Emotion	Full
Knowledge					
Knowledge at baseline	0.63**	0.60**	0.53**	0.61**	0.53**
Health status	0.03	0.02	0.07	0.04	0.08
# Episodes viewed	0.00	−0.03	−0.03	−0.01	−0.03
Involvement		0.17**			−0.03
Transportation			0.33**		0.30**
Positive emotion				0.02	0.02
Negative emotion				0.21**	0.06
R^2	0.40	0.43	0.50	0.45	0.50
Attitudes					
Attitudes at baseline	0.66**	0.63**	0.63**	0.66**	0.63**
Health status	−0.04	−0.05	−0.01	−0.03	−0.02
# Episodes viewed	0.00	−0.02	−0.01	0.00	−0.02
Involvement		0.13*			0.04
Transportation			0.19**		0.18*
Positive emotion				0.06	0.05
Negative emotion				0.06	−0.04
R^2	0.44	0.45	0.47	0.45	0.47
Practice: Information seeking					
Health status	−0.05	−0.09	0.02	−0.03	0.03
# Episodes viewed	−0.10	−0.15	−0.14*	−0.11	−0.14*
Involvement		0.39**			−0.06
Transportation			0.68**		0.59**
Positive emotion				0.18*	0.17**
Negative emotion				0.46**	0.17*
R^2	0.01	0.16	0.48	0.32	0.54
Practice: Talking about cancer					
Talking at baseline	0.59**	0.57**	0.50**	0.55**	0.49**
Health status	0.02	0.01	0.04	0.03	0.06
# Episodes viewed	0.03	0.01	0.00	0.01	0.00
Involvement		0.11			−0.06
Transportation			0.26**		0.25**
Positive emotion				0.13	0.13
Negative emotion				0.12	0.03
R^2	0.35	0.36	0.40	0.39	0.42

Note: Standardized beta coefficients from regression models.
*$p < .05$. **$p < .01$.

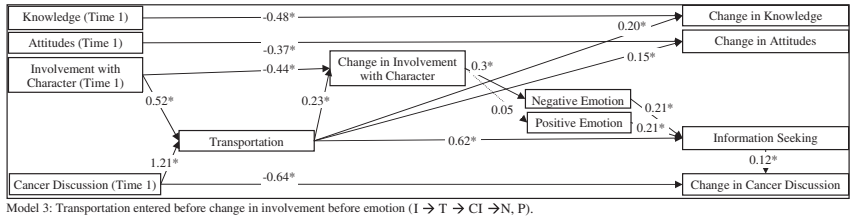
A series of possible models was run, varying the order of the theoretical constructs (e.g., change in involvement leading to transportation and vice versa). See Figure 1 for the five alternative models tested and Table 2 for their fit statistics. Model 2



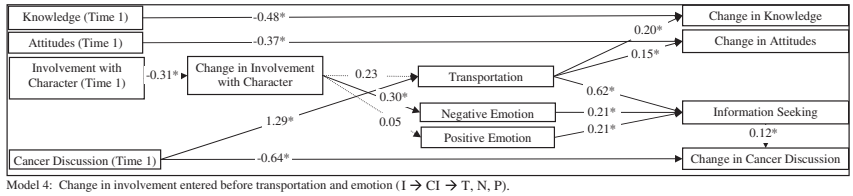
Model 1: All theoretical constructs entered at same point (I →T, CI, N, P).



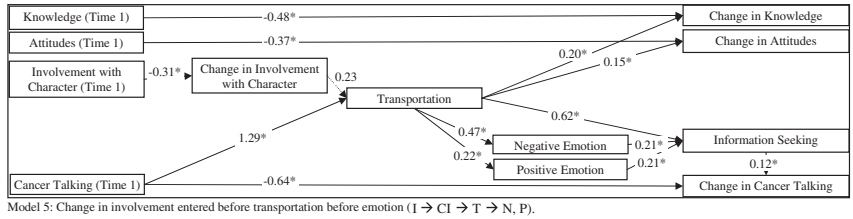
Model 2: Best fitting model - Transportation entered before change in involvement and emotion (I →T→ CI, N, P).



Model 3: Transportation entered before change in involvement before emotion (I → T → CI →N, P).



Model 4: Change in involvement entered before transportation and emotion (I → CI → T, N, P).



Model 5: Change in involvement entered before transportation before emotion (I → CI → T → N, P).

Figure 1 Alternative structural equation models of the effects of involvement, transportation, and emotion on knowledge, attitudes, and practice.

(involvement → transportation → change in involvement, negative emotion, and positive emotion) was a substantially better fit to the data than other models where all of the theoretical constructs were entered at the same stage or where change in involvement preceded transportation. Model 2 was an excellent fit to the data with an RMSEA of 0.06 and a CFI of 0.96. The direct, indirect, and total effects of each of the

Table 2 Fit Statistics for Alternative Theoretical Models

	χ^2	*df*	χ^2/df Ratio	SRMR	RMSEA	RMSEA 90% CI Lower–Upper	CFI
Model 1. I → T, CI, N, P	198.9	50	3.98	0.16	0.13	(0.11–0.15)	0.78
Model 2. I → T → CI, N, P	88.3	45	1.96	0.07	0.06	(0.03–0.08)	0.96
Model 3. I → T → CI → N, P	153.5	48	3.20	0.13	0.10	(0.08–0.12)	0.88
Model 4. I → CI → T, N, P	216.7	49	4.42	0.15	0.13	(0.12–0.16)	0.77
Model 5. I → CI → T → N, P	151.4	49	3.09	0.11	0.10	(0.08–0.12)	0.88
Best fitting model			Model 2	Model 2	Model 2		Model 2

Note: For χ^2/df ratio, SRMR (Standardized Root Mean Square Residual), and RMSEA (Root Mean Square Error of Approximation), lower numbers indicate better fit, but for CFI (Comparative Fit Index), higher numbers indicate better fit. I = involvement at baseline; T = transportation; CI = change in involvement; N = negative emotion; P = positive emotion.

Table 3 Direct, Indirect, and Total Effects of Involvement, Transportation, and Positive and Negative Emotion on Knowledge, Attitudes, and Behavior ($N = 167$)

	Knowledge			Attitudes			Information Seeking			Cancer Talking		
	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
Model 2. I → T → CI, N, P												
Involvement (Time 1)	—	0.10*	0.10*	—	0.08*	0.08*	—	0.40*	0.40*	—	0.05*	0.05*
Transportation	0.20*	—	0.20*	0.15*	—	0.15*	0.62*	0.15*	0.76*	—	0.09*	0.09*
Positive emotion	—	—	—	—	—	—	0.21*	—	0.21*	—	0.02*	0.02*
Negative emotion	—	—	—	—	—	—	0.21*	—	0.21*	—	0.02*	0.02*

Note: Direct and indirect effects may not add to total effects due to rounding error.
*$p < .05$.

theoretical predictors on knowledge, attitudes, and behavior are shown in Table 3. Specifically, involvement indirectly relates to knowledge, attitudes, and behaviors as mediated by transportation. Transportation is related to all three components of the KAP model: knowledge, attitudes, and behavior, and is the strongest of the three theoretical constructs. Positive and negative emotion related only to behaviors.

Discussion

This study examined the ways in which involvement with a specific character, involvement with a narrative more generally, and emotion related to shifts in the knowledge, attitudes, and behavior of viewers of a health-related storyline on a popular weekly television drama, *Desperate Housewives*. Following Moyer-Gusé (2008), we combined liking, perceived similarity, wishful identification, and parasocial interaction into a single construct of involvement with a character. Factor analysis showed that this decision was acceptable as all four measures loaded on a single factor that explained 52% of their total variance. Through an initial factor analysis, we were also able to isolate measures that differentiated between involvement with a character and involvement with a narrative (measured using Green & Brock's 2000 concept of transportation) suggesting that these are distinct constructs. Finally, each of the negative emotions of anger, fear, disgust, and sadness yielded a consistent pattern of results with respect to our dependent measures that was similar to one another but distinct from the pattern produced by the positive emotion of happiness. Consequently, although the bifurcation of emotions into positive and negative affect may indeed be an "oversimplification of emotional experience" as DeSteno et al. (2004) and others suggest (Dillard & Nabi, 2006), it nevertheless best describes the current pattern of results.

The first research question examined the extent to which viewers' involvement with the character of Lynette, involvement with the narrative or transportation, and their emotional reaction to the cancer storyline affected their knowledge, attitudes, and behavior. Interestingly, although we controlled for the number of episodes seen in the regression models, there was no evidence of a dose–response effect. This may be due to the fact that the prominence of the lymphoma storyline was not equal across all episodes, and different episodes emphasized learning about different aspects of the disease (e.g., chemotherapy symptoms vs. concerns regarding sexual attractiveness). Thus, it is not surprising to find that the number of episodes viewed did not relate to shifts in knowledge, attitudes, and behavior.

Of the three theoretical constructs under consideration transportation was the most predictive of increased knowledge. We suspect that, as Green and Brock (2000, 2002) and others (Kreuter et al., 2007) have argued, transported viewers are likely to devote more of their cognitive resources and pay closer attention to the unfolding drama. It follows that higher levels of transportation should be related to increased knowledge of information relevant to the storyline. Although both involvement with Lynette and experiencing negative emotion in response to the

lymphoma storyline were also associated with knowledge when analyzed separately in the sequential models their effects were no longer significant in the full model including all theoretical constructs. This suggests that these constructs are related, but not completely overlapping.

Transportation was likewise the strongest predictor of attitudes about staying sexually attractive to one's partner and the importance of having social support. That only these attitudes were predicted by transportation may be due to the heavy emphasis on these topics within the lymphoma storyline. These findings support Slater and Rouner's (2002) argument that persuasion occurs when individuals are highly transported or involved in a narrative and that, although issue involvement may increase narrative involvement, individuals need not have personal involvement with a particular issue for persuasion to occur. Consequently, although many of the *Desperate Housewives* viewers in this study may not have had high levels of issue involvement—that is, they themselves were not undergoing cancer treatment—their attitudes were nevertheless swayed as a function of their degree of transportation.

The behavioral outcomes—further information seeking and talking to family and friends about cancer—were similarly related to viewers' self-reported level of transportation or involvement with the narrative. This result both supports Green and Brock (2000, 2002) and Green (2004) and furthers their work by finding that transportation related to behavioral outcomes in addition to beliefs and attitudes. As argued by Green (2006), transportation into a narrative may reduce counterarguing and, as a consequence, increase the likelihood that viewers will process the information conveyed in a less critical manner. The current findings further suggest that transported viewers may also be more likely to act upon the information conveyed by the storyline by subsequently seeking out more information about lymphoma and cancer more generally and discussing these issues with friends and family. Information seeking was also predicted by a viewer's emotional response to the lymphoma storyline. Positive, but not negative, emotion was related to talking to others, either about lymphoma or cancer more generally. Viewers experiencing negative emotions may have concluded that although seeking additional information regarding cancer might alleviate their negative mood (Petty & Wegener, 1998), talking to others about cancer may not. In contrast, those experiencing positive emotions may have tried to maintain their mood by discussing the cancer storyline with friends and family.

With respect to our second research question, structural equation modeling was used to examine the relationships between involvement, transportation, emotion, and EE effects. The best model fit occurred when involvement with the character of Lynette led to both heightened involvement with the narrative and to heightened levels of negative and positive emotion. Involvement with the narrative or transportation, in turn, predicted the greatest shift in the knowledge, attitudes, and behaviors associated with the lymphoma storyline. Experiencing positive and negative emotion was also related to increased behavior change.

This model of informational, attitudinal, and behavioral change from before and after the *Desperate Housewives* storyline aired provides support for the possibility that transportation may partially mediate change in involvement with a character over time. As noted previously, various researchers have proposed that involvement with a character may be an antecedent to transportation (Cohen, 2001; Green et al., 2004; Slater & Rouner, 2002), as well as an outcome of transportation (Cohen, 2001; Green, 2004; Slater & Rouner, 2002). Our findings suggest that both of these propositions may be true. In other words, it appears that the relationship may be reciprocal such that involvement with a particular character increases transportation and vice versa.

How do these findings advance our understanding of the respective roles played by involvement with a specific character, with the narrative more generally, and a viewer's own emotional response to a narrative in producing EE effects? First, our analyses suggest that although these three constructs may be related, they are not completely overlapping. Indeed, they seem to produce different effects at different points in the persuasion process. Although character involvement has long been hailed as an important direct predictor of EE effects, our model indicates that character involvement may be as important for its ability to produce heightened levels of transportation and emotion which, in turn, relate to changes in knowledge, attitudes, and behavior. Moreover, because this study involves a longitudinal study of regular viewers' reactions to a popular ongoing storyline, it may provide a more generalizable description of the processes individuals undergo when watching their favorite programs in the comfort of their own homes. 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 their reactions to novel characters and narratives.

Although this work represents a step forward in the understanding of EE effects, there are a few limitations that must be acknowledged. First, because we were concerned about potential survey fatigue we kept the survey relatively short and did not include additional items that could have added further depth and insight to the study. For example, we included a shortened version of Green and Brock's transportation scale and were unable to include other measures of character involvement such as those recommended by Cohen (2001). In addition, there was a slight disconnect between some of the outcome measures and the storyline because, although we were given notice of the general plotline of Lynette's lymphoma, we did not have full access to the scripts before the episodes aired. If we had been given access to the actual scripts ahead of time, we could have crafted items that better tapped the attitudes and behaviors portrayed. Moreover, this study only surveyed people who had previously been identified as regular *Desperate Housewives* viewers. Nonregular viewers who saw the same storyline may have showed a different pattern of effects due to lower levels of involvement, transportation, and emotion. Moreover, it should be noted that the lymphoma storyline was only one of several storylines in any particular episode. Perhaps the specific emotion associated with that particular storyline was diluted by the emotions aroused by other competing *Desperate Housewives* storylines,

leading us to underestimate the impact of emotion. Finally, although many of the relationships tested included measures at two times, transportation and emotion could only be measured after the storyline aired. Consequently, the structural equation models cannot establish whether causal relationships among the theoretical constructs exist.

In conclusion, this study attempted to provide an ecologically valid examination of how three constructs—involvement with a particular character, involvement with the narrative more generally, and viewers' emotional reaction to the narrative—work together to produce EE effects. This work responds to calls from Moyer-Gusé (2008) who suggests that further research is needed to more fully evaluate the ways in which cognitive processes (particularly narrative involvement and involvement with characters) produce EE effects and from Slater and Rouner (2002) who note that additional research is needed to study EE effects stemming from serial programming as opposed to single episodes. Our results suggest that the relationship between these three constructs and the kinds of EE effects they produce is nuanced. Our hope is that by understanding not just how predictors of EE effects produce outcomes in isolation but how they relate to one another, media and health practitioners can design more successful entertainment messages tailored to produce specific behavioral, attitudinal, and informational objectives.

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Notes

1 In addition, 108 people who had completed the baseline survey also completed a follow-up survey halfway through the storyline. Results from analysis of their answers are not presented here.
2 In addition, the regressions were run with controls for exposure to cancer in other media: (a) newspapers, (b) magazines, (c) daytime television, (d) primetime television (8 pm to 11 pm), (e) television news, (f) a televised public service announcement (PSA), (g) radio, (h) Internet, and (i) other. The results were qualitatively the same, so the simpler models that do not control for other media exposure to cancer are shown here.
3 In addition, analysis was conducted with a series of models using only the constructs measured at Time 2 with both measurement and structural components. The results of the analysis matched the results shown here. Contact S.T.M. for these results.

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Appendix

Table A1 Means, Standard Deviations, and Bivariate Correlations ($N = 167$)

	M	*SD*	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
# Episodes (1)	5.7	1.9								
Involvement (2)[a]	7.1	1.7	0.16*							
Transportation (3)[a]	5.6	2.3	0.05	0.57**						
Positive emotion (4)[a]	2.1	2.3	0.05	0.19*	0.22**					
Negative emotion (5)[a]	3.9	2.2	0.00	0.40**	0.53**	0.39**				
Knowledge (6)[a]	6.1	1.4	−0.04	0.26**	0.47**	0.13	0.27**			
Attitude (7)[a]	7.6	1.8	−0.01	0.27**	0.30**	0.05	0.14	0.25**		
Talking (8)[b]	1.5	0.7	−0.07	0.19*	0.43**	0.22**	0.32**	0.47**	0.17*	
Information seeking (9)[a]	3.9	2.6	−0.11	0.36**	0.68**	0.35**	0.53**	0.52**	0.34**	0.65**

[a]Measured on 1–10 scale. [b]Measured on 1–4 scale.
*$p < .05$. **$p < .01$.

投入，移情还是动感情？娱乐教育中知识、态度和行为改变的决定因素

Sheila T. Murphy, Lauren B. Frank, Meghan B. Moran & Paula Patnoe-Woodley

南加州大学传播与新闻学院

【摘要：】

本文研究对特定角色的投入，对叙事的投入（Green 和 Brock 的移情概念），和观众对叙事的情感反应这三个概念产生的娱乐教育效应。对 167 位普通观众的前测/后测调查测量了《绝望主妇》电视剧中一段关于淋巴瘤的剧情的效应。移情或对叙事的投入是对相关知识、态度和行为变化的最佳预测指标。虽然对特定角色的投入是娱乐教育效应重要的直接影响因素，但是结构方程模型表明对角色的投入对提高移情和情感的能力更加重要，继而改变观众的知识、态度和行为。

Involviert, transportiert oder emotional? Eine Untersuchung zu Determinanten der Beeinflussung von Wissen, Einstellungen und Verhalten bei Entertainment-Education

Die Studie untersucht, wie die drei Konstrukte Involvement mit einer spezifischen Medienfigur, Involvement mit der Geschichte (Green und Brocks Konstrukt Transportation) und die emotionale Reaktion des Zuschauers auf die Geschichte zu Entertainment-Education-Wirkungen führen. Mittels Pretest/Posttest-Befragung von 167 Fernsehzuschauern untersuchten wir die Wirkung einer Storyline zum Thema Lymphknotenerkrankung in der Fernsehserie *Desperate Housewives*. Transportation oder Involvement mit der Geschichte war der beste Prädiktor für relevante Veränderungen auf Wissens-, Einstellungs- und Verhaltensebene. Auch wenn das Involvement mit einer spezifischen Figur bislang als wichtiger direkter Prädiktor für E-E-Effekte gefeiert wurde, deuten Strukturgleichungsmodelle darauf hin, dass das Involvement mit einem spezifischen Charakter eher eine Rolle für die Verstärkung von Transportation und Emotion spielt, was dann wiederum Veränderungen auf Wissens- , Einstellungs- und Verhaltensebene zur Folge hat.

Schlüsselbegriffe: Identifikation, Involvement, Transportation, Emotion, Entertainment-Education, Medienwirkungen

관련되었는가. 전달되었는가, 또는 감정적인가? 오락 교육에 있어 지식, 태도들, 그리고 행위 변화의 결정요인들에 대한 탐구

요약

본 연구는 어떻게 세가지 구성요소들—특정 배우들에의 관여하기, 이야기들에 참여하기, 그리고 이야기들에 대한 관찰자들의 감정적 반응들이 오락 교육 효과를 생산하는가를 연구한 것이다. *Desperate Housewives* 를 정기적으로 시청하는 167 명에 대한 사전 사후 서베이가 실시되었으며, 이는 림프종이야기들에 대한 노출효과를 측정하기 위한 것이다. 이야기들에 대한 운송 또는 관여는 관련된 지식, 태도들, 그리고 행위의 변화에 있어 최고의 예측계였다. 비록 특정한 배역에 대한 관여가 오락교육효과들의 주요한 직접적인 예측계이나 구조적 균형모델은 배역 관여가 운송과 감정을 강조하는 능력을 위해 무엇보다 중요하며 이는 결과적으로 시청자의 지식.태도들 그리고 행위를 변화시키는 것으로 보인다.

¿Involucrado, Transportado o Emocional? Explorando los Determinantes de Cambio de Conocimiento, Actitudes y Comportamiento en la Educación de Entretenimiento

Resumen

Este estudio examinó cómo tres constructos – involucramiento con un personaje específico, involucramiento con la narrativa (el constructo de transportación de Green y Brock), y las reacciones de los televidentes hacia la narrativa – produjeron los efectos del entretenimiento educativo. Una encuesta previa y posterior de 167 televidentes regulares midió los efectos de la exposición a una línea sobre linfoma en el drama televisivo, *Amas de Casa Desesperadas (Desperate Housewives).* La transportación o envolvimiento con la narrativa fue el mejor vaticinador de cambio relevante de conocimiento, actitudes y comportamientos. Aunque el envolvimiento con un carácter específico ha sido aclamado como un vaticinador importante de los efectos de entretenimiento educativo, un modelo de ecuación estructural indicó que el envolvimiento con el carácter puede ser más importante por su habilidad para mejorar la comunicación y la emoción lo cual a su vez, produce cambios en el conocimiento, actitudes y comportamiento de los televidentes.

Palabras Claves: identificación, envolvimiento, transportación, emoción, entretenimiento educativo, efectos de los medios

Intérêt, enthousiasme ou émotion? Une exploration des facteurs déterminants du changement dans les connaissances, les attitudes et les comportements dans le divertissement instructif

Résumé

Cette étude a examiné comment trois construits, soit l'intérêt pour un personnage spécifique, l'intérêt pour le narratif (le construit de l'enthousiasme [*transportation*] de Green & Brock) et la réaction émotive des spectateurs face au narratif, produisent des effets de divertissement instructif. Une enquête prétest/post-test auprès de 167 fidèles spectateurs a mesuré les effets de l'exposition à une intrigue concernant un lymphome dans une série dramatique, *Desperate Housewives*. L'enthousiasme ou l'intérêt pour le narratif était la meilleure variable explicative de changement des connaissances, des attitudes et des comportements pertinents. Bien que l'intérêt pour un personnage spécifique ait été identifié comme une importante variable explicative directe des effets de divertissement instructif, un modèle par équation structurelle a indiqué que l'intérêt pour un personnage pourrait être plus important parce qu'il augmente l'enthousiasme et l'émotion, éléments qui, à leur tour, produisent des changements dans les connaissances, les attitudes et les comportements des téléspectateurs.

Mots-clés : identification, intérêt, enthousiasme, émotion, divertissement instructif, effets médiatiques