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Entertainment-Education and Elaboration Likelihood: Understanding the Processing of Narrative Persuasion

The impact of entertainment-education messages on beliefs, attitudes, and behavior is typically explained in terms of social cognitive theory principles. However, important additional insights regarding reasons why entertainment-education messages have effects can be derived from the processing of persuasive content in narrative messages. Elaboration likelihood approaches suggest that absorption in a narrative, and response to characters in a narrative, should enhance persuasive effects and suppress counterarguing if the implicit persuasive content is counterattitudinal. Also, persuasion mediators and moderators such as topic involvement should be reduced in importance. Evidence in support of these propositions are reviewed in this article. Research needed to extend application of these findings to entertainment-education contexts, to further develop theory in the area of persuasion and narrative, and to better account for other persuasive effects of entertainment narrative, such as those hypothesized in cultivation theory, are discussed.

Entertainment-education from its inception was closely associated with Bandura's (1986) social cognitive theory (Institute for Communication Research, 1981; Singhal & Rogers, 1999). The importance of social cognitive theory in informing the design of entertainment-education efforts, and explaining their results, is undoubted. Social cognitive theory, while necessary to explain the effects of entertainment-education efforts, may not be sufficient. Social cognitive theory focuses on the effects modeling and vicarious learning have on self-efficacy and the acquisition of new behavior. Entertainment-education, however, clearly has substantial effects on beliefs and attitudes (Kincaid, 1993; Piotrow, Kincaid, Rimon, & Rinehart, 1997; Singhal & Rogers, 1999) that may often precede changes in self-efficacy and behavioral intention (Prochaska, DiClemente, & Norcross, 1992; Slater, 1999). These attitudinal effects appear to be substantially larger than the often impressive behavioral effects and presumably, for many audience members, precede behavioral effects, as suggested by classic theories of persuasion (Fishbein & Ajzen, 1981; McGuire, 1989).

Therefore, an analysis of the mechanisms by which entertainment-

education may affect beliefs and attitudes must extend beyond a consideration of modeling and vicarious reinforcement. As we have argued elsewhere (Slater, in press-a), entertainment-education is expected to influence individuals beliefs and attitudes in distinctive ways, depending on the individual's readiness to change (Prochaska et al., 1992; Vaughan & Rogers, 2000). In particular, audience members who are more resistant to the proposed behavior presumably recognize the potential value of the behavior and develop an interest in enacting the behavior, despite possible initial resistance, and before self-efficacy processes and skill acquisition have an impact.

Here we detail one of those arguments, regarding implications of elaboration likelihood models for entertainment-education and possible mediators of the influence of persuasive content in narratives. We argue that the processing of narratives, to a great extent, precludes cognitive resistance or counterarguing to persuasive content in the narratives. Understanding such mechanisms may be crucial to understanding how entertainment-education messages influence behavior change, even when the behavior advocated is inconsistent with some of the initial beliefs and attitudes of the intended audience. We will detail a model for processing persuasive content in narratives that is based upon, yet is distinct from, the traditional elaboration likelihood model.

The Processing of Persuasive Content in Narrative

The elaboration likelihood model of persuasion (Petty & Cacioppo, 1986), or ELM, offers researchers two related tools. The first tool is a set of empirically tested variable relations, and the second is the conceptual perspective out of which the predicted variable relationships were derived. When most researchers think of the ELM, they think first of the elegant findings resulting from ELM research, particularly issue involvement as a moderator of central processing (attention to message arguments and the potential for lasting attitude change) versus peripheral processing (attention to source cues, number of messages, etc. and the potential for temporary attitude change).

These ELM findings, however, are clearly of limited use in understanding entertainment-education. Several researchers have pointed out that these ELM findings may be robust only in the important but narrow domain of overtly persuasive topics concerning issues that may directly affect the recipient in terms of his or her own self-interest. The ELM pattern of results can be expected to break down, or at least change in nontrivial ways, in the context of messages that elicit other kinds of involvement (Johnson & Eagly, 1989; Slater, 1997; Slater, in press-b; Slater & Rouner, 1996).

The ELM, however, offers much more than a specific set of predicted variable relationships. It is a conceptual model arguing for the importance of understanding how people respond while processing persuasive information in a message, as well as a methodological model for measuring and analyzing such responses. As an audience-centered model focusing on message reception and processing, ELM is a useful tool for exploring the psychological dynamics of how entertainment-education messages may influence beliefs and attitudes that are likely to be necessary prerequisites for behavior change. Therefore, this article focuses principally on the implications of ELM approaches for understanding entertainment-education, and conversely, on the implications of entertainment-education for conceptualizing elaboration likelihood models of narrative processing.

Applying ELM to Entertainment-Education and Persuasive Narratives. How might one extend the concepts and logic of the ELM to persuasive narratives such as entertainment-education? A starting point might be to examine probable differences in how a message recipient will process a narrative with persuasive content versus a traditional persuasive message. Slater (1997, in press-b) suggests that in order to compare the processing of distinct genres of messages, one must begin by considering the motivations, purposes, and goals that the recipient brings to each type of message.

The goals and purposes for a recipient in reading a persuasive message about a topic that will impact his or her finances, grades, and workload are self-evident. The message must be carefully perused with respect to potential gains and losses, and the rationale for losses not be offset by gains. This process is a classic example of what Petty and Cacioppo call "central" or Chaiken and Eagly (Chaiken, 1980; Eagly & Chaiken, 1993) call "systematic processing" of the persuasive content of a message. This same message, manipulated to refer to a different time or place so that the content has no direct impact on the life of the recipient, will not gain the same careful perusal (Petty & Cacioppo, 1986).

The motivations and goals of the recipient of an entertainment narrative that also contains persuasive content, as in an entertainment-education narrative, are presumably very different. First, entertainment-education is intended to stand on its own in terms of narrative quality. Successful entertainment-education efforts attract audiences, not because of their educational or persuasive content, but because they are compelling drama (Brooke, 1995; Piotrow et al., 1997; Singhal & Rogers, 1999). The distinctions among incidental persuasive effects of narrative, as suggested by cultivation theory (Gerbner, Gross, Morgan, & Signorielli, 1994), and the intentional persuasive effects of entertainment-education are then, a matter of degree rather than of kind. Entertainment-educa-

tion is further toward the edge of a continuum, not far from "message movies" such as *The Killing Fields* and *Guess Who's Coming to Dinner*. Therefore, we must look towards theory that attempts to explain why people are so drawn to entertainment narratives in order to understand the processing strategies that they bring to entertainment-education messages.

Of course, no theory suggests that there is a single reason why people love stories in general or mediated stories in particular. Indeed, this phenomenon is so deeply rooted in human experience and history (see Fisher, 1985, for an intellectual history of thinking about narrative), that social science accounts can only be partial and highlight selected dimensions. For example, some researchers emphasize the use of media dramas in providing vicarious social relationships (Rubin, Perse, & Powell, 1985). Others have explored the arousal and the distraction or diversion provided by mediated entertainment (Zillmann & Bryant, 1994). Our focus here is on the variables that determine how persuasive content within narratives may be processed.

In the context of the classic, issue-related persuasive messages traditionally studied by ELM, engagement with the message is a function of the extent to which the message topic impinges on the recipient's self-interest. In the context of narratives that also include persuasive content, is the same likely to be the case? We argue that it is not. If the persuasive content and intent is so obvious as to become more salient during processing than the narrative itself, the narrative may fail and so should the persuasive effort. This does not mean that recipients must be unaware of persuasive intent, but simply that the drama must be compelling enough to cause such awareness to fade into the background while reading or viewing the story.

Instead, the degree of engagement with the narrative, Slater (1997, in press-a) argued, should depend upon how well the narrative serves the needs and goals of the reader or viewer. If the recipients needs and goals include vicarious social relationships and experiences, then predictors of engagement or involvement should include the degree of identification with protagonists in the narrative (Basil, 1995; Rubin et al., 1985; Zillmann & Bryant, 1994). Of course, one might expect identification to be partly predicted by variables important in social cognitive theory, such as homophily between the protagonists and the intended recipients (Bandura, 1986). If recipient needs and goals include arousal and diversion (Zillmann & Bryant, 1994), then certainly engagement with the narrative will depend on the interest of the plot and story line for the individual. Interest in the story line will in turn depend on two conditions: (a) the individual's intrinsic interest in the type of story (romantic, heroic, etc.), and (b) in the quality of the narrative.

These variables are obvious enough in terms of their probable rela-

tionship with an individual's engagement in a narrative. We also believe that they should predict the effectiveness of the persuasive subtexts in such narratives. Entertainment-education experts discuss contingencies that determine the viability of such subtexts. These contingencies include integration of the subplot with character development and larger plot lines in ways that make them both nonobvious in terms of persuasive intent and compelling in terms of narrative interest (see Singhal & Rogers, 1999, for various examples). In a narrative, attention is focused on the unfolding relationship of characters, situations, and events. We expect a persuasive impact of this narrative, to the extent of the recipient's sympathetic response to the character's own development and experiences, may lead to at least temporary acceptance of values and beliefs that represent a shift from the individual's existing beliefs. This perspective is certainly consistent with the emphasis placed by entertainment-education experts on intensive efforts to elicit information about existing audience values and beliefs, and pretesting story lines that address these beliefs and seek to incrementally change them (Piotrow et al., 1997; Singhal & Rogers, 1999).

The ELM Versus the Extended ELM. One difference between ELM as it is conventionally used and our effort to extend ELM thinking to a narrative context, is the use here of identification with characters and engagement with the story line to predict the effectiveness of the persuasive subtext as well as of the narrative. In other words, the processing of persuasive content in a narrative may be conceptualized as an elaboration likelihood model (Figure 1). The more intuitive exogenous variable predictions have just been described. A more detailed rationale for key dependent variable predictions and some preliminary evidence supportive of those predictions are described below.

The model illustrated here, while an elaboration likelihood model, is not the conventional ELM variable framework (Petty & Cacioppo, 1986). This effort to extend elaboration likelihood models to genres other than conventional issue oriented persuasive messages has been referred to elsewhere as the "extended ELM" (Slater, in press-b). The differences between the model illustrated here and the ELM when applied to issue relevant traditional persuasive messages is that variables such as issue involvement with the persuasive topic do not appear here, and are replaced by engagement or absorption in the narrative and identification with characters.

A few other features of the present model are worth noting at this point. Another difference between the ELM in traditional persuasive contexts and an extended ELM applied to the processing of narrative is that a clean distinction between central and peripheral processes is no longer discernable. In the absence of absorption in the narrative, no

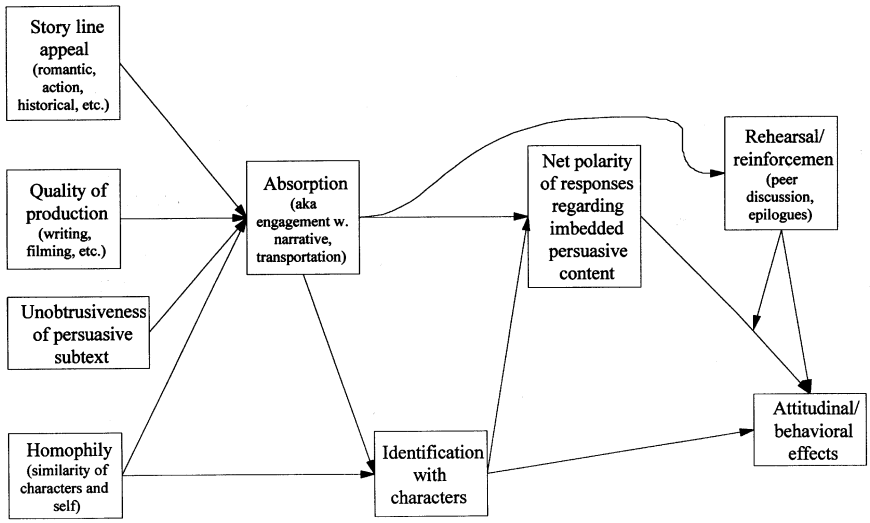

Figure 1. A Theoretical Model for the Processing and Effects of Persuasive Content Embedded in Narratives

persuasive impact of the narrative is likely. The impact of persuasive subtexts imbedded in the narrative will be a function (perhaps linear, perhaps curvilinear) of the extent of absorption or engagement with the narrative. Therefore, such absorption can be illustrated as a mediator rather than a moderator variable (i.e. contingent) in the process.

Another issue is the role of identification with characters. Identification with characters, in the sense of experienced similarity to those characters, or even parasocial relationship with those characters, is dependent upon absorption in the narrative. On the other hand, a narrative can be absorbing in the absence of perceived similarity with characters, or even in the absence of a feeling of friendship for those characters. A reader may vicariously experience Agamemnon's envy, Achilles' grief and wrath, and Paris' fear without believing himself or herself to be much like these characters or without being drawn to them as people. *Absorption* is vicariously experiencing the characters' emotions and personality. *Identification* represents an additional dimension of that experience, in which an individual perceives another person as similar or at least as a person with whom they might have a social relationship. Therefore, identification may best be conceived as a partial mediator of the effects of absorption in the narrative (see Figure 1).

There are other crucial differences between the processing of narratives with persuasive content and conventional persuasive messages. Involvement with the topic of a persuasive message and engagement with a narrative are qualitatively different, in ways that should profoundly

influence the elaboration that takes place in response to persuasive content in such messages (Prentice & Gerrig, 1999; Slater, 1997). These differences are the focus of the following discussion.

Engagement or Absorption in Narratives

Anyone who has passed through a high school English class is familiar with the concept of "suspension of disbelief." Storytellers enthrall their listeners, viewers, or readers, from this perspective, in part because the stories become real, at least while the story is going on. Psychological research on cognition and narrative supports such an account of how a narrative is processed. Research by Gilbert and his colleagues (1991) suggests that all information has to be processed as if it were factual, and that active cognitive effort is required to recall and discount even information known to be false. Subjects were likely to report information that they knew to be invented as true if they were distracted while processing the information. Gilbert's research focused on didactic information. This effect is likely to be considerably more dramatic in the case of fictional narratives, as in entertainment-education.

A variety of studies have shown that information contained in fictional messages can influence beliefs about social groups (Prentice, Gerrig, & Bailis, 1997; Slater, 1990; Wheeler, Green, & Brock, 1999) and about social issues (Green & Brock, 2000; Strange & Leung, 1999). Human beings are social information processors before they are processors of facts, figures, and logical arguments; every parent soon learns how effectively even a toddler with limited language skills can process information about emotions and manipulate human relations. Narratives are accounts of social information, the unfolding of human relations and events. There appears to be a great deal of automaticity associated with the processing of narrative information, be it fictional or not (Bower, Black, & Turner, 1979; Graesser, 1981). Memory and retrieval processes for information contained in narrative are particularly efficient (Mandler & Johnson, 1980). Graesser (1981) distinguished the intensity of involvement with a narrative from the cognitively effortful involvement with information-dense messages by terming the former "absorption." Green and Brock (2000) and Gerrig (1993) use the term "transportation" in a similar sense. Engagement, absorption, and transportation are three terms used by different researchers to describe the same phenomenon. Each concept is the degree to which a message recipient is cognitively and affectively invested in a narrative. By invested we mean that attention is fully engaged and emotional responses are occurring consistent with the vicarious experience of the fictional events. It should be possible to measure absorption or transportation by using techniques such

as secondary task reaction time to measure attentional involvement (Basil, 1994) and physiological measures of arousal associated with climaxes in the story line (Hopkins & Fletcher, 1994), as well as by employing paper-and-pencil self-reports (Green & Brock, 2000; Slater & Rouner, 1997). A message recipient who is absorbed, or transported, by a narrative is likely to be distracted from recalling the message source and discounting the message, as Gilbert's (1991) findings suggest. As a result, that recipient is, as discussed below, certainly more likely to endorse beliefs consistent with the information provided in the message.

Absorption in Narratives, ELM, and Counterarguing. The ELM, in the context of issue involvement, predicts that greater issue involvement will result in greater attention to message-relevant arguments and potentially, depending on the quality of those arguments, lasting attitude change. The literature on narrative processing, on the other hand, suggests that involvement with the persuasive topic should matter less when the message is a narrative (Slater, 1997; Slater, in press-b). In other words, identification with characters and engagement with the narrative should predict responses consistent with a persuasive subtext (Green & Brock, 2000; Slater, 1997). Therefore, one can develop an elaboration likelihood model for persuasive narratives consistent with the underlying conceptual structure of the ELM (i.e., that emphasizes the importance of motivation-to-process on the nature of message elaboration), but that involves different mediators and moderators as a result of the different processing goals of the message recipient. Such predictions are consistent with the logic and practice of entertainment-education.

Classic discussions of the persuasion process acknowledge *counterarguing*, the generation of thoughts that dispute or are inconsistent with the persuasive argument, as being a key obstacle to persuasive efforts (Brock, 1967; Petty & Cacioppo, 1986; Roberts & Maccoby, 1973). We argue that absorption in narrative and counterarguing are fundamentally incompatible (Slater, 1997). If a message recipient is consciously aware and is generating rebuttals or counter examples in response to a persuasive subtext in a message, to that extent he or she is not absorbed or transported, and is unlikely to be identifying with characters. Suspension of disbelief has failed, for the recipient disengaged from the narrative as vicariously lived experience. If the recipient is transported by the narrative, we should not find counterarguing while the message is being experienced, even if the persuasive subtext is inconsistent with prior attitudes, beliefs, or values. The implications are that entertainment-education, by blocking counterarguing, provides an extraordinary opportunity to influence individuals who would ordinarily be resistant to persuasion.

Persuasion, Elaboration Likelihood and Narrative: Some Evidence

The role of absorption in narrative received a particularly thorough and rigorous test by Green and Brock (2000). These researchers first used a lengthy excerpt from a popular novel, which described the murder of a child at a mall by a psychiatric patient, and assessed beliefs about policies regarding release of psychiatric patients and the frequency of violent incidents. The excerpt was presented in different conditions, as being factual versus fictional, and the extent of absorption (or, as they call it, transportation, after Gerrig, 1993) was then assessed using a scale created for that purpose (Green & Brock, 2000). Persuasive effects, consistent with the arguments described above, were found to be associated with the degree of transportation, while the fictional versus nonfictional attribution had no effect. Efforts to obtain thought-listing data were unsuccessful, as too few responses directly pertained to the potential persuasion topics implicitly raised by the murder incident described.

In a second experiment, transportation was manipulated by instructing participants to: (a) read the text superficially or (b) become immersed in it. Participants were also asked to identify "false notes," or parts of the story that did not seem believable, after reading the text. While manipulation checks suggested that participants followed the instructions, the amount of transportation was not significantly affected. The power of the narrative apparently overwhelmed the intended instruction set. Effects of transportation in predicting persuasion were replicated, and a significant relationship between transportation and liking of the story characters was found. Predictive relationships between liking characters and persuasive effects were not tested. In addition, the more transported participants marked fewer false notes, consistent with our propositions above regarding reduced counterarguing and cognitive resistance in the context of a persuasive message. A third study, in which, in one condition, participants were told the excerpt was based on a dream in order the strengthen the inference that information was in fact fictional, again replicated the findings.

In a fourth experiment, Green and Brock (2000) employed a story that focused on values (loyalty between a boy and his dog) rather than outcomes such as personal safety, in hopes of reducing dramatic tension enough to successfully manipulate transportation and to test effects in a value-relevant, rather than an outcome-relevant, context (Johnson & Eagly, 1989). This time, the instruction to participants did manipulate transportation, and beliefs about the importance of loyalty were affected more in the condition that encouraged absorption in the narrative. Transportation also mediated effects of the manipulation on liking of characters, consistent with our proposed relationships in Figure 1. Further analy-

sis showed that transportation, consistent with Slater (1997), was distinct from either outcome or value involvement.

Narrative Interest in Antidrug PSAs and Narrative Processing. Studies of 30-second public service announcements (PSAs) represent a particularly demanding test for propositions regarding the processing of persuasive narrative content. As stimuli, PSAs represent perhaps the most minimal narratives that can be reasonably presented, although the audio-visual context and the production quality is more comparable to typical entertainment-education applications than the text excerpts used in the studies described previously. The ability of skilled advertisers and PSA producers to generate reasonably meaningful narratives, with character and situation, in 30 seconds also illustrates people's inherent inclination to readily process narrative.

Stephenson (2001) used scalar self-report items to examine responses to antimarijuana use PSAs among high school students and antiheroin PSAs among college students (Stephenson, in press). Of particular interest were audience members who were high in the sensation-seeking personality trait, as high sensation seekers are at higher risk for drug use (Donohew, Lorch, & Palmgreen, 1991) and are more responsive to messages that are high in drama, emotion, and activity (Everett & Palmgreen, 1995). Stephenson referred to these messages as high in perceived message sensation value, and noted the importance of narrative elements such as drama, suspense, and action.

Stephenson found that high sensation seekers, who tend to be at a higher risk for substance use and who therefore are probably more likely to resist the antidrug messages, were influenced by message content only indirectly via their response to narrative elements. In the study of antiheroin PSAs (Stephenson, in press) among high sensation seekers, the only predictors of impact on antiheroin attitudes were the amount of narrative processing and amount of sensory processing, or attention to production details, of the PSAs. The amount of cognitive processing regarding message arguments was not significantly related to change in attitudes. Again, these results emphasize the importance of responsiveness to narrative in predicting persuasive effects. These findings are also consistent with Slater and Rouner's (1996) results that narrative anecdotal arguments were more effective than fact-based arguments for counterattitudinal recipients, and operated indirectly through assessments of message quality.

Studying Cognitive Responses to Persuasion in Narrative. The Green and Brock (2000) study provided clear evidence regarding incidental persuasive effects of narrative, and for the mediating role of transportation or absorption in narrative. These investigators were unable to explore specifics of elaboration, given the highly implicit nature of their

persuasive content (neither of their stimuli attempted to address attitudes or beliefs that might otherwise be resisted by the audience). Had Green and Brock used topics that were intended for persuasive purposes and that might elicit cognitive resistance, their efforts to measure cognitive response might have met with more success (and their results might have been even more relevant for understanding the processing of entertainment-education messages). The Stephenson studies, while using topics that might more readily elicit cognitive resistance, used measurement strategies that depended on descriptive self-report types of processing, rather than directly measuring cognitive elaboration.

Some years ago, we conducted an exploratory study intended to permit such an analysis of cognitive responses to persuasive content imbedded within a narrative (Slater & Rouner, 1997). In addition, we wished to examine the role of identification with characters as well as the role of absorption in narrative in predicting argument-consistent cognitive responses.

We developed excerpts from a short story involving young adults (under drinking age) on a blind date. Their alcohol use resulted in mishaps (in two of three versions) that played an important role in plot development. Our intention was to create stories in which a persuasive element was clearly present, involving in this case negative behavior and consequences consistent with elements of entertainment-education, but to not make the persuasive element the sole focus of dramatic development. We measured involvement intensity and valence, discrepancy of involvement with positive or negative outcome, narrative interest, identification with and liking of same-sex and opposite-sex characters, and obtained cognitive responses with respect to the persuasive subtext (alcohol use), story presentation, plot and characters, and descriptive comments (Slater & Rouner, 1997). About half of the responses regarding the persuasive subtext were obtained using an additional probe regarding such responses (Cacioppo, Harkins, & Petty, 1981). Of course, a brief, two-page fictional excerpt is a weak stimulus indeed compared to a long-running television or radio serial comprised of half-hour episodes, or even the longer and more dramatic excerpts used by Green and Brock (2000). However, if predicted effects can be found in such impoverished stimuli, we can certainly anticipate finding similar but stronger effects in well-developed entertainment-education stimuli.

Normally, one would expect to find, among a group of college undergraduates, a considerable amount of counterarguing in response to any persuasive content critical of alcohol use, especially among those students more involved with alcohol use (e.g., Slater & Rouner, 1996). In these data, over one-third of the total cognitive responses concerned alcohol use (again, about half elicited by the probe). Only 6.6% of these

persuasive-content relevant responses (2.3% of the total responses) were categorized as counterarguments, consistent with our proposition that counterarguments would be relatively rare in the narrative context (Slater & Rouner, 1997).

Such results are considered preliminary. Directly manipulating absorption while also measuring counterarguments, as did Green and Brock (2000), would permit a much clearer test of the hypothesis regarding the suppression of counterarguing. Despite the lack of direct measurement of counterarguments, the Green and Brock findings were consistent with our proposition that counterarguing is suppressed to the extent that one is absorbed or transported by a narrative. Green and Brock (2000) found, as described earlier in this article, that effects on beliefs were enhanced by absorption and that fewer false notes in the narrative were identified by highly transported readers.

We also looked at males and females separately, as it appeared that females were much more engaged with our blind date story than were males. For females, our measure of perceived narrative quality was positively associated with cognitive responses consistent with the implicit persuasive argument regarding irresponsible use of alcohol. This finding, of course, corresponds to Green and Brock's result indicating that greater absorption in narrative predicts persuasive effect, and is consistent with our proposed theoretical model (Figure 1). The only other significant predictor of such responses was valence of involvement with the topic, which was negatively related to polarity of cognitive responses. For males, on the other hand, narrative interest predicted cognitive responses regarding the plot and characters, but was not consistent with alcohol-related responses. We believe this finding was due to the topic (blind dates) being relatively less interesting to males. A follow-up study that included another story theme (a boating accident among cousins) largely eliminated the gender differences (Slater & Rouner, 1999), and found generally consistent effects regarding the relationship of absorption in narrative and polarity of responses regarding the persuasive topic.

Identification with Characters and Elaboration Likelihood. Our factor analyses suggested that identification is a complex construct. Believing oneself to be similar to a character was not the same as liking a character; responses to same versus opposite sex characters were also distinctive (Slater & Rouner, 1997). Results regarding identification variables were only somewhat consistent with expectations. Identification variables were strongly associated with polarity of comments about characters and story line, as one would expect, but had no direct relationship with responses to persuasive content.

Results were more informative by gender. For females, opposite sex identification and liking the opposite sex character was positively, al-

though in some cases marginally, related to comments consistent with the persuasive content. For males, identification with, and liking of, the opposite sex character was related to positive responses to the narrative but not to the persuasive content of the message. The importance of response to opposite-sex characters as opposed to own-sex characters may be unique to a story focusing on a romantic relationship, but these findings suggest that empathetic responses to characters may be more important than similarity in terms of persuasive effects.

Stephenson's work, described previously, also provided some convergent support regarding the relative importance of empathetic responses as opposed to perceived similarity (i.e., homophily). Stephenson (2001) found that the effects of the antimarijuana PSAs was mediated by impact on what he called *empathic distress*, defined as sympathetic responses regarding the characters portrayed in the PSAs. These results also suggest that the key mediating variable with respect to responses to characters may not necessarily be identification with those characters, but empathetic response to the characters. In other words, personal similarity to characters in a narrative may be less important than how emotionally involved one becomes with those characters as a consequence of the degree of narrative absorption or transportation.

Entertainment-Education and Narrative Processing: Key Unanswered Questions

Experimental research on processing of persuasive narratives is in its infancy. As noted above, several additional research questions cry out for attention, if such research is to effectively study and inform the application of entertainment-education for social change.

Issues Regarding Identification and Entertainment-Education. Further examination of the identification process is especially important in understanding entertainment-education. Entertainment-education, especially when it uses an extended serial format, provides substantial opportunity for emotional investment in fictional characters.

Certain characters are typically crucial in terms of persuasive effects. Entertainment-education programming is designed to address both pro- and counter-attitudinal audience members. Audience members sympathetic to the viewpoints espoused by the entertainment-education programming are addressed by characters modeling desired behaviors and associated skills, with the desire to increase self-efficacy and the likelihood of enacting behaviors. Initially unsympathetic audience members are typically addressed through the use of transitional characters, who initially espouse counterattitudinal beliefs but model the process of attitude and behavior change, as well as negative role models who experi-

ence undesired consequences (Singhal & Rogers, 1999). Clearly, in these cases one would expect persuasive and behavior change effects to be a function of identification by readers or viewers with appropriate characters, or at least liking for, and sympathy with, those characters. As discussed previously, it may be that empathy with characters is a more appropriate way to conceptualize relatedness to narrative protagonists than a definition of identification that depends on external similarities. On the other hand, the importance of identification as perceived similarity may be less for persuasive effects than for impacts on self-efficacy and behavior. Social cognitive theory provides strong evidence that learning skills by viewing models similar to oneself is more likely to increase self-efficacy and willingness to attempt the behavior than when less similar models are viewed (see Bandura, 1986, for a review). This possible special importance of identification via homophily in supporting behavioral effects is also illustrated in Figure 1.

It also may be, once identification with a character or the actor/actress portraying that character is established, the subsequent use of that character in a sequel, or use of that performer in almost any story, will increase the likelihood of absorption by viewers or readers of the original narrative. This empirical proposition can be conceptualized in terms of additional variables that may predict absorption (Figure 1).

Use of Entertainment-Education Serials as Experimental Stimuli in Persuasion-Processing Studies. An obvious next step is to replicate narrative-processing studies with actual entertainment-education serials. Such studies could examine effects of narrative absorption and identification in the context of truly involving extended narratives. In particular, such research could also look, as noted above, at the contingent relationship between the recipient's attitudinal stance and identification with transitional, positive, and negative role models in the entertainment-education stories. Such tests could provide empirical foundation for many of the assumptions in entertainment-education story development (Singhal & Rogers, 1999) as well as providing a theoretical and methodological foundation for understanding and evaluating the effects of specific entertainment-education efforts. In addition, clarifying the relative importance of perceived similarity versus empathy with characters, and their role as exogenous or mediating variables in the context of fully developed narratives, are important objectives. Beyond purely theoretical importance, such findings could provide insight regarding the amount of emphasis that must be placed on similarity between audience members and persons portrayed in the narrative. Past research on entertainment-education has not utilized laboratory experimental design and such methods could further illuminate the mechanisms through which entertainment-education influences attitudes and behavior.

Experimental results regarding the effect which a high level of absorption in narrative could have on possible suppression of counterarguing are particularly suggestive. They imply a mechanism for achieving effects of entertainment-education on otherwise hard-to-reach counterattitudinal audiences. These results need replication and extension in the context of entertainment-education, preferably while incorporating cognitive response measurement or a reasonably equivalent alternative.

Such methodological exploration will also play an important role in further developing these lines of research. It is important for researchers to obtain more detailed information on processing of narrative messages. Green and Brock's (2000) experience highlights potential difficulties with use of traditional cognitive response measurement in the context of narrative, though our experience as described above suggests these difficulties will not be insuperable in entertainment-education contexts where persuasive content is more salient and more likely to be counterattitudinal. Use of techniques such as retrospective identification of false notes (Green & Brock, 2000) or self-reports regarding processing (Stephenson, in press) also have potential as alternatives or supplements to traditional cognitive response measurement.

Another possibility would be to examine, in addition to individual cognitive responses retrieved retrospectively, responses as a social phenomenon and as an extension of the parasocial interaction elicited by drama (Rubin et al., 1985). Anecdotal accounts of major entertainment-education successes usually include examples of how viewers discuss the characters as if they were real people (Singhal & Rogers, 1999). Recording and analysis of such discussions might provide ways of measuring the processing of serial dramas related to counterarguing, identification, and empathy with characters.

Studying Entertainment-Education and Narrative Persuasion as a Means of Extending Elaboration-Likelihood Models. This article has argued that the meaning of involvement in the ELM must be reconsidered in the context of narrative persuasion. Involvement with the issue topic is probably less important than involvement with the narrative story line (i.e., extent of absorption or transportation) in moderating persuasive effects of the message. However, several key theoretical issues here also deserve closer attention. The ELM conceptualizes central processing in terms of greater cognitive elaboration of message arguments, leading potentially to lasting attitude change. In the context of narrative processing, absorption in the narrative may motivate deeper processing of a different kind. The attention given to an engaging narrative has, as Graesser (1981) pointed out, an intensity that most creators of didactic messages could only dream of inducing. However, this intensity of attention is largely emotional, as the recipient vicariously experiences the

characters' joys and sorrows. The cognitive apparatus is also engaged with the events and situations of the story, but presumably in a way that is more receptive and less analytic than in the processing of persuasive information. Inferences about attitudes and behavior are likely to be a result of having internalized the values and experiences embodied in the story, rather than through a direct acceptance of arguments presented. Measurement of cognitive responses after exposure to the story may, then, capture thoughts and emotions arising in response to the vicarious experience rather than thoughts that actually crystallized during the processing of the narrative.

Narrative impacts may be powerful while the pulse is still racing and other physiological traces of the vicarious narrative experience still resonate in the reader or viewer. The next question regards factors influencing the durability of such effects, for without durability such effects cannot be considered, from an ELM perspective, as a central process.

Contingencies in Sustained Attitude/Behavior Change: The Role of Discussion and of Entertainment-Education Epilogues. Evaluations of entertainment-education programs (Kincaid, Yun, Piotrow, & Yaser, 1993; Piotrow et al., 1997; Singhal & Rogers, 1999) suggests that belief and behavioral changes are in fact substantive. A serial entertainment-education format provides opportunities for additional cognitive rehearsal of responses consistent with the implicit persuasive message, as well as cognitive rehearsal and social reinforcement through discussion of the serial with others. Entertainment-education serials commonly become the focus of such discussions (Singhal & Rogers, 1999). Such reinforcement opportunities may play an important moderating role in creating lasting attitudinal and behavioral effects (Figure 1).

Epilogues provide a means for entertainment-education producers to directly influence the cognitive rehearsal that takes place following message exposure (Singhal & Rogers, 1999). A typical epilogue consists of a 30-second monologue, often including rhetorical questions, at the end of an entertainment-education soap opera episode. During epilogues, a celebrity, or actors from the serial, emphasize the key points made regarding social behaviors during the story. The use of epilogues, however, poses a variety of critical theoretical questions.

First, it is remarkable that having actors step at least in part out of character to address the audience directly does not disrupt the absorption in the narrative during subsequent episodes. It seems that such absorption or transportation may be a remarkably robust phenomenon, surviving assaults to suspended disbelief so long as they do not take place while the narrative is actually unfolding. The boundary conditions under which such absorption survives deserves careful investigation.

Second, the apparent need for such didactic emphasis suggests that

the persuasive effects of narrative are not otherwise fully assimilated into audience member's belief structures. The work of Gilbert (1991) and his colleagues suggests that fictional information may be labeled and retrieved as such if processing is not distracted. It seems both theoretically and practically important to determine how absorption in narrative may be related to this phenomenon. Contingencies and alternative approaches to facilitating or inhibiting such assimilation, and understanding mechanisms behind the apparent effectiveness of epilogues, is especially important, both theoretically and in order to improve entertainment-education practice.

We believe the attempts of entertainment-education to influence social values and behaviors are justifiable. The human and social costs of AIDS, excessive population growth in the face of limited resources, and other entertainment-education issues, argue for such efforts at social influence. If entertainment-education can influence values, beliefs, and behavior, though, it seems to follow that other forms of serial entertainment narratives are also likely to have nontrivial effects on beliefs, attitudes and behavior. The study of entertainment-education and persuasive narratives may also provide a model for examining the much wider social impacts of television and film drama. These impacts have been studied for the most part as an aggregate phenomenon (Gerbner et al., 1994). Some individual-level studies have demonstrated cultivation-type effects (Shrum & O'Guinn, 1993). Research into the circumstances under which implicitly persuasive content of narratives influence viewer or reader beliefs, values, and behavior for good or ill has a much broader social significance than represented by studies of entertainment-education alone.

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