A Study Of The Impact Of Involvement And Sequence In Narrative Persuasion

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A STUDY OF THE IMPACT OF INVOLVEMENT AND SEQUENCE IN NARRATIVE PERSUASION

by
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B.F.A. University of Central Florida, 2005

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in the Nicholson School of Communication in the College of Sciences at the University of Central Florida Orlando, Florida

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ABSTRACT

The purpose of this research was to look more closely at the relationships between narrative and non-narrative persuasive messages, and to begin to determine how and why these message formats might work together. I situated this study within Rogers’ roadmap for future theoretical work on entertainment education (E-E), and specifically addressed Slater and Rouner’s call for more research on the impact of epilogues in E-E. Synthesizing components of the elaboration likelihood model with recent theorizing regarding persuasion through narrative, I made predictions regarding the effect of transportation and character identification on perceived salience, attitudes, behavioral intention, and behavior in narrative, argument, and narrative + argument conditions.

Undergraduate students were asked to watch one of seven videos. After watching the videos participants were asked to respond to questions reflecting their views of the subject matter in the videos, their experience while watching the videos, and their opinion of the video quality.

The questionnaire included scales measuring transportation into the narrative and character development, measures of perceived issue relevance, and persuasion toward the topic of mandatory H1N1 vaccinations. Findings showed no relationship between the narrative format and transportation or perceived salience, however, transportation did predict perceived salience in messages combining both argument and narrative + argument formats.

Recommendations were made for modification and future applications of the instruments used in the study and for continued research in the various stages of persuasion through narrative, argumentative, and combined format messaging.
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# TABLE OF CONTENTS

LIST OF TABLES ........................................................................................................................ vii

CHAPTER 1: INTRODUCTION ................................................................................................... 1

CHAPTER 2: LITERATURE REVIEW ........................................................................................ 4

Entertainment Education ............................................................................................................. 4
Elaboration Likelihood Model .................................................................................................... 8
Transportation ........................................................................................................................... 11
Character Identification ............................................................................................................ 14
Following Narrative with Non-Narrative Persuasion ............................................................... 18
Summary of Hypotheses ........................................................................................................... 21

CHAPTER 3: METHOD .............................................................................................................. 23

Study Design and Participants .................................................................................................. 23
Pretesting ............................................................................................................................... 23
Procedure .............................................................................................................................. 24
Independent Variables ........................................................................................................... 26
Dependent Variables ............................................................................................................... 27
Perceived Salience ................................................................................................................ 27
Attitude toward the Message ................................................................................................ 28
Transportation ....................................................................................................................... 28
Identification with the Character .......................................................................................... 28
Central Processing ................................................................................................................ 29
Intention to Act and Past Behavior ....................................................................................... 31
Manipulation Check ................................................................................................................ 31
CHAPTER 4: RESULTS .............................................................................................................. 33
  Preliminary Analyses ................................................................................................................ 33
  Manipulation Checks ............................................................................................................ 33
  Removal of Outliers .............................................................................................................. 34
  Hypothesis Testing ................................................................................................................ 34
CHAPTER 5: DISCUSSION ........................................................................................................ 41
  Limitations ................................................................................................................................ 44
  Future Research ........................................................................................................................ 44
APPENDIX A: ARGUMENT USED IN BOTH VIDEO AND RECALL PATTERNS .............. 46
APPENDIX B: SAMPLE THOUGHTS FROM THOUGHT LISTING ITEM ......................... 48
APPENDIX C: SAMPLE COMMENTS FROM THE LETTER TO THE EDITOR SURVEY. 51
APPENDIX D: SURVEY ............................................................................................................. 53
APPENDIX E: UCF IRB LETTER .............................................................................................. 88
LIST OF REFERENCES .............................................................................................................. 90
LIST OF TABLES

Table 1: Test of Relationship of Transportation and Character Identification to Criterion Variables .............................................................. 35

Table 2: Descriptive Statistics for Perceived Salience, Attitude, and Behavioral Intention........ 36

Table 3: Descriptive Statistics for Perceived Salience, Attitude, and Behavioral Intention........ 36

Table 4: Descriptive Statistics for Total Arguments Correctly Recalled, Total Relevant Thoughts, and Valence of Letter to the Editor .............................................................. 37

Table 5: Descriptive Statistics for Total Arguments Correctly Recalled, Total Relevant Thoughts, and Valence of Letter to the Editor .............................................................. 37

Table 6: Results of ANCOVAs Testing Effects of Video Format in the Low Relevance Condition .............................................................................................................................. 39

Table 7: Results of ANCOVAs Testing Effect of Video Format in High Relevance Condition . 40
CHAPTER 1: INTRODUCTION

Nearly a decade ago, Everett Rogers (2002) called for more scholarly attention to the mechanics of the persuasive process in entertainment education. Entertainment education (E-E), or the purposeful embedding of prosocial messages in entertainment vehicles, has proven to be an effective means of garnering audience attention, raising awareness, and promoting behavior change across much of the developing world (e.g. Lacayo & Singhal, 2008). The vast majority of such interventions have cited social cognitive theory (Bandura, 2004) as their theoretical foundation. Social cognitive theory posits that people learn through observation. It suggests that behavior change and self-efficacy can be developed in an individual through modeling certain behaviors and correlating those behaviors with the appropriate rewards or punishments. As Rogers pointed out, however, the mechanisms for exactly how that process occurs, and the parameters within which it is most effective have received relatively little attention in E-E scholarship (see also Slater & Rouner, 2002). Furthermore, as Slater and Rouner (2002) have observed, in practice it is not uncommon for E-E efforts to follow up narrative messages with non-narrative, informational epilogues. Studies have only begun to examine how narrative interacts with subsequent non-narrative messaging to influence audience attitudes and behavior (Feeley, 2006; Kopfman, 1998). Understanding how and when the combination of narrative and non-narrative persuasion is effective is important to facilitating maximum effectiveness of E-E efforts.

One reason for the lack of information on the mechanics of the persuasion process in E-E may be because traditional research into the persuasive process has focused on persuasion via non-narrative means, specifically arguments. Among the most influential of these traditional theories has been the elaboration likelihood model (ELM; Petty & Cacioppo, 1979). The ELM is
a dual-processing model that asserts that people process persuasive messages through either central or peripheral routes (Petty & Cacioppo, 1979). When a message is processed centrally, the person considers the issue carefully, evaluates the arguments presented, and generates new thoughts regarding the issue. If the thoughts generated are positive, the individual may be persuaded. When a message is processed peripherally, individuals base decisions about persuasion on cues that are less relevant to the message itself—for example speaker credibility or attractiveness—instead of the strength of specific arguments. Persuasion results when the cues elicit a positive response (Petty and Cacioppo, 1979). Whether a persuasive message will be processed through the central or the peripheral route is believed to depend to a great extent on the level of involvement an individual has with the issue in question (Petty & Cacioppo, 1979). When a person understands that an issue is important to his or her goals and beliefs he/she will tend to process information about that issue via the central route (Petty & Cacioppo, 1979).

Various scholars have asserted that narrative persuasion does not operate in the same way argument-based persuasion (e.g. Slater & Rouner, 2002). They posit that recipients of narratives are motivated by the desire to enjoy the characteristics of a good narrative rather than the self-interest that is typical of attention to argumentative persuasion. Thus, rather than issue involvement being key to persuasion, several theorists identify transportation (also referred to as narrative involvement or absorption; Green & Brock, 2000; Slater & Rounder, 2002) and identification with characters (Cohen, 2001; Dunlop, et. al, 2010; Moyer-Guse & Nabi, 2010) as crucial factors in the level of persuasion a narrative will generate. With persuasion processes in narrative and non-narrative persuasion being construed as operating so differently, it has been difficult to theoretically integrate the two in order to study the impact of epilogues and other combinations of the two persuasion processes.
I assert that these seemingly disparate processes can be theoretically integrated via the predictions of ELM. According to that theory, if one wanted to maximize the power of a single message, it would make sense to attempt to persuade an audience through the central route. However, for messages that audience members are not likely to view as relevant to them, that is, those in which their issue involvement is low, central route processing is unlikely unless some means are found to increase their sense of issue involvement. Although Slater and Rouner’s (2002) extended elaboration likelihood model (E-ELM) proposes that narrative and non-narrative persuasion are effected by completely different processes, ELM may actually allow for a way of considering the two within one persuasive framework. It may be that exposure to a transportive, persuasive narrative will increase the respondent’s perception of issue involvement. Once issue involvement has been established, participants may process more centrally when presented with a similarly themed non-narrative message. If that is the case, and if the subsequent non-narrative message is composed of good arguments, the respondent will be more likely to evidence persuasion than when exposed to either message by itself.

The purpose of this study, therefore, is to investigate the effects of transportation and character identification on participants’ issue involvement in narrative, nonnarrative, and combination narrative-plus-narrative persuasive message about a particular health issue.
CHAPTER 2: LITERATURE REVIEW

Entertainment Education

Entertainment-Education, otherwise known as E-E, is a communication strategy that combines the effects of educational and entertainment media to instigate attitude, belief, and behavior change in distinct populations (Singhal & Rogers, 1999). These efforts at social change can be made through street theatre, radio dramas, soap operas, or even music and video games (Singha & Rogers, 2004). Sometimes these efforts are multidisciplinary in nature, combining several types of entertainment media (Lacayo & Singhal, 2008). E-E interventions have two effects that are critical to the success of the intervention: the ability of the programming to attract the target audience and then motivate at least a portion of that audience to behavior change (Singhal & Rogers, 1999).

Summative research assesses outcomes of E-E interventions and has consistently shown that these initiatives can have a strong effect on their target audiences (Singhal and Rogers, 1999). For example, Soul City is a multimedia health advocacy project developed by doctor Garth Japhet in South Africa (Singhal & Rogers, 1999; Singhal & Rogers, 2004). It communicates health information to the South African public through radio dramas, soap operas, and news coverage of the issue, producing materials by commissioning the desired programming from local media organizations (Soul City, 2007). A quantitative national household survey and personal interviews about values and behaviors in 2007 (Markdata) indicated that Soul City has made an impact on knowledge and awareness of health issues, as well as assisted with behavior change among certain audiences. Specifically, the evaluation of Series 7 showed that people who had seen one or more episodes of Soul City that season were 19% more likely to be willing
to care for someone ill with AIDS. Also, the corresponding intervention materials were responsible for a 5%-8% increases in HIV testing (Markdata, 2007).

From early on the most commonly cited theoretical base for E-E efforts was social learning theory, later renamed social cognitive theory (Singhal & Rogers, 1999). Social cognitive theory suggests that humans learn by watching others, either in person or through film and video (Bandura, 1977). When others are rewarded for specific behaviors, those watching infer that they will be rewarded similarly for completing similar actions; when others are punished for specific behaviors, those watching infer that they will be punished similarly for completing similar actions (Bandura, 1977). The theory was first purposefully incorporated in a soap opera by Miguel Sabido, in his 1977 telenovela *Acompaname*. *Acompaname*, which used positive and negative role models to promote the idea of family planning in Mexico (Singhal & Rogers, 1999).

Although social cognitive theory was originally advanced to explain individual behavior, recent updates of the theory by its author, Albert Bandura, identify three main components involved in creating society-wide change. These components are the theoretical model, the translational and implementation model, and the social diffusion model (Bandura, 2004a). The theoretical model suggests that behavior is learned through social modeling, but that additional motivation is necessary for people to put that new information to use (Bandura, 2004b). These additional motivators are perceived self-efficacy (how strongly the individual feels he or she can follow through with the behavior successfully), collective efficacy (the collective feeling of the community that the behavior change is possible and worthwhile), goals and aspirations (effective breakdown of large, long term goals into achievable short term sub goals), outcome expectations, and perceived facilitators and impediments (Bandura 2004b). The translational and
implementation model suggests that there are certain characters and elements in a story that must
be present to impact a society. These aspects include differential modeling (the inclusion of
positive, negative, and transitional role models), vicarious motivators, attentional involvement
(which can be facilitated by the inclusion of dramatic elements intended to access the emotions
of the viewers), symbolic coding aids (additional material such as epilogues or supporting
information that help reinforce the information presented in the program), and environmental
support (Bandura, 2004b). The social diffusion model refers to the ability of members of the
society in question to produce and distribute their own programming for social change (Bandura,
2004b). Together these models explain how social change can be achieved through E-E.

Researchers have framed their investigations of E-E within other theoretical perspectives
as well, such as the elaboration likelihood model (Sood, 2002); stages of change theory (Lacayo
& Singhal, 2008); cognitive-experiential self-theory (Dunlop, et. al, 2010); dramatic theory,
belief system theory, theory of tones (Brown, 1990); hierarchy of effects, diffusion of
innovations (Piotrow, 1992); two-step flow, agenda setting (Valente, Kim, Lettenmaier, Glass, &
Dibba, 1994); self-efficacy (Thomas, Cahill, & Santilli, 1997); uses and gratifications (Bouman,
Maas, & Kok, 1998); health belief model, theory of reasoned action (Kane, Gueye, Speizer,
Pacque-Margolis, & Baron, 1998); parasocial interaction (Papa, Singahl, Law, Pant, Sood,
Rogers, & Shefner-Rogers, 2000); audience involvement, and third person effect (Gunther &
Storey, 2004).

One difficulty with many of the communication theories that have been applied to E-E,
according to Lacayo & Singhal (2008), is that these theories tend to assume that behavior change
is possible through systematic, linear, and predictable stages. For example, the stages of change
theory outlines a path people follow to behavior change and stresses the importance of
understanding where the target audience is along the path in order for messaging to be effective. The path described is linear and incremental, and expected to occur over a period of time (Lacayo & Singhal, 2002). Unfortunately for mass media efforts, individuals within a population start at different places and progress at different paces (Lacayo & Singhal, 2008). It is impossible for one campaign to induce change in an entire population simultaneously (Lacayo & Singhal, 2008).

In an introduction to a special edition of *Communication Theory* dedicated to highlighting a new agenda for E-E research, Rogers (2002) proposed a five-point research agenda for E-E. First, describing the multitude and variety of E-E efforts currently being used, he suggested that researchers identify and further explore how these different efforts work. For example, E-E organizations now frequently post their own web video products online, and the impact of this availability and viewing environment is likely different from the more controlled access possible with television or radio broadcast. Second, he suggested that resistance to E-E efforts be explored in more depth, specifically resistance to E-E from the audience, mainstream producers, and standard messages in mainstream media. Third, he pointed out that most E-E effects research approaches E-E from the cognitive standpoint and urged researchers to find additional lenses through which to look at how an E-E narrative functions. He cited Sood (2002) as a researcher investigating the rhetorical, play, and affective aspects of E-E. Fourth, Rogers reminded readers that E-E creates social change not just through influencing the individual, but by influencing the social environment as well. He suggested more research into how an E-E narrative functions in affecting the social environment. Finally, he proposed that researchers explore new or different methodologies when examining the results of E-E efforts (Rogers, 2002).
Elaboration Likelihood Model

In this study I address Rogers’ call to investigate non-cognitive explanations of how narrative works as persuasion, and secondarily his exhortation to investigate new channels or methods of E-E. Specifically I am interested in how cognitive factors like issue involvement can work together with non-cognitive factors in narrative persuasion like transportation and character involvement (Green, 2006). I begin by describing the cognitive explanation for persuasion provided by the elaboration likelihood model (ELM). I then review ways in which theorists have suggested that ELM does not provide an adequate explanation of how narrative works as persuasion, and present recent findings on alternative explanations for the power of narrative. Finally, I suggest a means of understanding certain effects of narrative within the framework of ELM.

ELM purports to explain recipient reaction to persuasive messaging (Hinyard, 2007). As a dual-process persuasion model (O’keefe, 2002) it predicts the likelihood that a person will think about a persuasive message, as well as the outcome of the attempted persuasion (Petty & Cacioppo, 1984). According to ELM, a message may be processed one of two ways: either centrally or peripherally (Petty, Cacioppo, & Schumann, 1983). When a person processes a message through the central route, he or she generally thinks carefully about the message and the arguments. The person decides whether the arguments presented are convincing enough to lead him or her to shift attitudes on the issue in question (Petty & Cacioppo, 1984).

Persuasion through the peripheral route occurs when the person is not sufficiently motivated, or is unable, to think carefully about the subject matter of the argument (Petty, Cacioppo, & Schumann, 1983). When processing a message peripherally, a person relies on cues from the message that may or may not have anything to do with the actual arguments. For
example, a person may report a more positive attitude towards a specific toothpaste brand after viewing an ad for that toothpaste featuring an attractive spokesperson. Another example might be a person choosing a hotel based on the number of amenities listed in an advertisement, even though the list includes standard items like air conditioning and television (Petty & Cacioppo, 1981). The term “elaboration” in the theory derives from the amount of issue relevant thinking, or elaboration, that a person dedicates to a persuasive message. Much elaboration is the hallmark of central route processing; little elaboration is peripheral processing.

Although the central and peripheral routes are often presented as if they are mutually exclusive, Petty and Cacioppo (1984) have clarified that individuals can engage in both types of processing at once. For example, a reader considering an ad for a refrigerator may take into account the celebrity endorsement of the refrigerator as well as the quality of the arguments in the advertisement. Nevertheless, ELM asserts that the dominant processing route of a given message will determine the outcome of attitude change through the message (Petty, Kasmer, Haugtvedt, & Cacioppo, 1987).

Persuasion through the central route is considered to be more stable over time, because the process of generating new thoughts makes it more likely that the person will relate the information to his or her own life (Petty & Caccioppo, 1984). Haugtvedt and Strathman (1990), for example, demonstrated that attitudes generated through greater elaboration (central route) experienced less decay over a period of two days than did attitudes generated through less elaboration (peripheral route). Similar results in decay reduction have been generated for individuals who expect to relay the message to others at a later point in time (transmitters; Bononger, Brock, Cook, Gruder, & Romer, 1990). Boninger et al. (1990) found that transmitters showed greater persuasion as well as slower decay over periods of 8 to 21 weeks than individuals
who were simply receivers of the message. This is relevant because the expectation of relaying a
message at a later time is thought to encourage elaboration, which in turn is thought to encourage
central route processing (O’Keefe, 2002).

ELM suggests that individuals will only process a message centrally if they are both
sufficiently able and motivated to do so (Petty and Cacioppo, 1984). The factor that is most
frequently mentioned as inducing motivation is personal involvement in an issue, or issue
involvement (Petty & Cacioppo, 1979). Suggesting that a message contains information that
directly involves the goals and aspirations of an individual can induce high issue involvement
(Petty & Cacioppo, 1979). Classic studies in ELM have manipulated issue involvement as an
independent variable. Issue involvement can also of interest as a dependent variable, as when a
researcher seeks to increase involvement with an issue. In order to distinguish between the two, I
will refer to issue involvement that is manipulated by the researcher as relevance and issue
involvement from the perspective of study participants as perceived salience.

Although ELM has been predictive for effects of non-narrative persuasive messaging, the
same measurements and processes have been less predictive with narrative messaging.
Researchers have reported difficulty measuring narrative impact with the scales and methods
generally used in non-narrative ELM studies (Green & Brock, 2000; Slater & Rouner, 2002).
For example, ELM suggests that issue-relevant thought following a message is indicative of the
persuasion that has taken place in the subject (Petty & Cacioppo, 1979). This assertion is
typically tested by asking participants to list their thoughts immediately following message
exposure, then coding those thoughts according to message relevance and favorability toward the
message (Brock, 1967). Thoughts reported after exposure to narratives, however, tend to be
emotion and story relevant as opposed to issue relevant, and therefore cannot be used to assess central processing (Green & Brock, 2000).

Slater & Rouner (2002) chose to address these problems by adding to ELM so that it could be applied to E-E and narrative persuasion efforts (Slater & Rouner, 2002). They labeled the resulting theory the Extended ELM (E-ELM). The E-ELM attempts to incorporate the concepts and logic found in the ELM and uses them to guide investigations into narrative persuasion. For example, E-ELM considers the likelihood that a person will process a narrative to be a type of elaboration likelihood. However, instead of measuring elaboration with thought listing, the E-ELM measures narrative elaboration by measuring identification with characters and engagement with the story line (Slater & Rouner, 2002). In sum, the main difference the E-ELM identifies is the difference in involvement for narrative and non-narrative messages, and suggests that although issue involvement is an important persuasive factor in non-narrative messaging, involvement with the narrative (i.e. transportation, absorption in the story line) is more important in assessing the persuasive effectiveness of a narrative (Slater & Rouner, 2002).

Transportation

Slater and Rouner’s (2002) expansion of ELM is based on recent research on narrative persuasion processes. An instinctive aspect of human communication (Costabile & Klein, 2008), narratives have been proven useful in experimental (Rouner, Slater, and Long, 2005) and real-world settings in shifting public opinion on controversial issues (Lacayo & Singhal, 2008). In particular, they have been shown to be more effective than non-narratives in generating persuasion for counterattitudinal issues (Braverman, 2008). Participants who hear narrative messages about positions with which they do not agree tend to engage in less counterarguing
than do participants who are the recipients of non-narrative messages (Green & Brock, 2000). In fact, narratives can influence individuals’ beliefs without their explicit awareness (Green & Brock, 2000). For example, Lee & Leets (2002) exposed adolescents to actual online hate group messages that had been manipulated to be either narrative or non-narrative, and the persuasive intent was manipulated to be either explicit or implicit. They found that the narrative implicit message was the most persuasive immediately after exposure, especially for those who disagreed with the message in the pretest (Lee & Leets, 2002). Slater & Rouner (1996) found that participants exposed to a value discrepant message on alcohol use found anecdotal evidence more persuasive than statistical evidence. Braverman (2008) suggested that individuals who were not interested in changing their drinking habits produced fewer counterarguments in response to narrative messaging, which resulted in greater persuasion. Often narrative programming is combined with a non-narrative message in an attempt to reinforce the issues being discussed in the narrative (Singhal & Rogers, 1999).

Slater and Rouner (2002) were not the first to suggest that the level of involvement in a narrative could be an important variable. Eighteen years ago Gerrig (1993) coined the term “absorption” to distinguish between the individual’s experience in response to a narrative as opposed to the response to dense information based messages. He suggested that narrative and non-narrative messages inherently induced different experiences (Gerrig, 1993). Slater (1997) used the term “engagement” to describe the level of involvement an individual felt with the storyline of the narrative. It was Green and Brock’s (2000) development of a validated transportation scale, however, that gave impetus to the study of transportation as a key to narrative effects (Slater & Rouner, 2002). Green & Brock (2000) developed the scale to measure how individuals experienced the different aspects of a narrative. Their goal was to measure
emotional and cognitive responses, as well as the mental imagery and lack of awareness of surroundings experienced by participants who read narrative messages (Green & Brock 2000). They tested the transportation scale via a series of four experiments. Results indicated that transportation into a narrative was associated with positive evaluations of the characters in the story, as well as with belief change consistent with story assertions (Green & Brock, 2000).

Transportation is considered an important measure in narrative persuasion because of its association with attitude and behavior change (Green, 2006). Beyond its incorporation into E-ELM (Slater & Rouner, 2002), it is also an integral component of the more recent entertainment overcoming resistance model (EORM; Moyer-Guse, 2008) which combines transportation and other predictions about audience interaction with a narrative and suggests how these interactions may generate story consistent attitudes and behaviors by reducing audience resistance to persuasion. It has been successfully used to predict persuasion and attitude shifts on a range of topics, including perceptions of violence and just world beliefs (Green & Brock, 2000). In particular transportation has been associated with generating belief change that contradicts a participant’s general ideology (Rouner, 2005). It has also been shown to influence belief change on controversial public issues like the death penalty (Rouner, 2005), and participants’ support and confidence in public knowledge (Appel, 2007; Green, 2000).

Transportation has also been proposed as an explanation for the finding that unlike the audience response to non-narrative messages, audiences of narratives do not necessarily monitor them for the accuracy (Marsh & Fazio, 2006). They sometimes accept as truth even simple falsities that contradict common knowledge when they are embedded in a narrative (Appel, 2007; Green & Brock, 2000). Green (2004) suggests that this may be because individuals seek out narratives for their entertainment value and personal enjoyment, part of which occurs through
transportation. Studies have shown that monitoring narratives for accuracy and other details reduces the transportive experience, an action that might in turn reduce the enjoyment of the narrative experience (Green & Brock, 2000).

**Character Identification**

In addition to transportation, authors of theories of narrative persuasion have cited character identification as mediating variable in the persuasive process. Character identification has long been considered an important factor in social cognitive theory, based on the idea that people are more receptive to emulating behavior modeled by people who are similar to them (Bandura, 1986). Because of the close connection between social cognitive theory and E-E, the concept of audience identification with characters was brought into E-E research as early as 1984 (Singhal & Rogers, 1999). Until recently, however, this concept in E-E was only loosely defined, including audience interaction with characters like parasocial interaction (PSI), liking the character, and wishful identification (Slater & Rouner, 2002). Slater & Rouner (1997) have specifically called for more research on the role of different aspects of character identification in E-E. They argue that identification with a character is distinct from liking a character, or wishing to be like that character.

The current understanding of character identification was articulated by Cohen (2001) as an attempt to compile the different studies and definitions of character identification into one comprehensive definition. In order to do so, Cohen drew on studies from as early as Maccoby and Wilson’s 1957 experiment, which found that children better remember characters with whom they identify. He also included studies that focused on individual aspects of character identification like isolating specific character traits (in this case, aggressiveness) and viewer
violence (Huesmann et al., 1984) and the adoption of health messages encouraged through identification with celebrity spokespeople (Basil, 1996). The resulting definition of identification with a character is “an imaginative process invoked as a response to characters presented within mediated texts” (pp. 250, Cohen, 2001).

Cohen (2001) describes identification in terms of experiential processes, and distinguishes it from perceived similarity, liking, and modeling, as these responses to characters are more spectator-like in nature. Character identification, in contrast, includes feeling with—not about—the character and internalizing the character’s point of view. Similar to descriptions of transportation, this type of identification involves loss of self-awareness in favor of awareness of the character, such that audience members feel as though they are actually experiencing the events in the story with the character and internalizing those experiences, as opposed to simply watching the character experience the events (Cohen 2001). Cohen (2001) theorized that the experience of identifying with the character leads audience members to feel understanding and empathy with the character in both emotional and cognitive ways. He also proposed items for a scale to measure identification with the character, including items that refer to feeling things with the character (eg. When the character was happy, I felt happy), and wanting the character to achieve his or her goals. The scale was later validated by Bussell and Bilandzic (2009).

Identification with the character, conceptualized in a similar way to Cohen’s description, is incorporated in E-ELM (Slater & Rouner, 2002) and EORM (Moyer-Guse, 2008) alongside transportation. In their test of EORM, Moyer-Guse & Nabi (2010) exposed participants to either a narrative or non-narrative programming emphasizing the difficulties of unplanned teen pregnancy. Participants who expressed more identification with the characters evidenced less counterarguing and greater perception of vulnerability (Moyer-Guse & Nabi, 2010).
Based on the predictions of transportation theory I pose my first hypothesis:

H1: Among participants exposed to narrative messages, attitudes toward the message will be positively related to a) level of transportation in the narrative, and b) level of character identification.

Sood (2002) has asserted that transportation, which she calls audience involvement, is part of the process through which audience members relate to narratives. When audience involvement is high it means audience members are both interacting with and reflecting on the narrative. She identifies five types of involvement: affectively oriented interaction (degree of audience identification with character[s]), cognitively oriented interaction (attention to detail and thought about educational message), behaviorally oriented interaction (talk about message, effort to continue exposure to program), referential reflection (considers narrative or characters to be similar to own life), and critical reflection (thinks about suggestions to make outcome of narrative different / better). High audience involvement can even indicate that the audience members are using the narrative at hand to make sense of their own life narratives. Her emphasis on cognitive as well as affective aspects of transportation opens up the possibility of a different connection between transportation and ELM than is posited by E-ELM. It may be that transportation and character identification can increase the perceived salience of a message.

This possibility is supported by Green’s (2006) assertion that transportation into a narrative may have the ability to help abstract concepts translate into real life, both by providing concrete imagery and assisting with mental simulation of the described events. Potter (1986) found a correlation between perceived realism of regularly viewed television programming and perceived reality. Viewers who reported that the television programs they watched were realistic were more likely to report perceived norms in line with those narratives; following exposure to
programming, television viewers who reported stronger beliefs in the realism of the programming estimated higher frequencies for various violent crimes in real life than did viewers who believed the programming was less realistic. Another study by Strange and Leung (1999) showed that simply exposing individuals to a story could influence that individual’s perception of urgency involving key issues. Participants were asked to read one of two articles, both emphasizing different causes for the problems the main character faced. Each story was defined as either fiction or non-fiction, depending on the condition. In a subsequent survey, participants rated the issues emphasized in the story as more urgent, regardless of whether the story was identified as fiction or non-fiction. These perceptions of urgency and realism seem very close to the idea of perceived salience, which I have describe above in the section on ELM (Petty, et al, 1986). This would suggest that the more transported individuals are into a narrative, and the more they identify with the characters, the greater the perceived salience of the topic for them. ELM would predict that perceived salience, in turn, would increase the likelihood of central processing. Based on this literature I advance the following additional hypotheses:

H2: Among participants exposed to narrative messages, perceived salience will be positively related to a) level of transportation in the narrative, and b) level of character identification.

H3: Participants exposed to a low-relevance narrative message will evidence higher perceived salience than will participants exposed to a low-relevance argument message.
Following Narrative with Non-Narrative Persuasion

Sometimes narrative and non-narrative formats are used together in an effort to maximize the effectiveness of persuasive messages (eg. Singhal & Rogers, 2004; Allen et al., 2000). For example, one of the first official E-E efforts, *Ven Conmigo*, a telenovela developed by Miguel Sabido in 1975, included an epilogue after each broadcast. This inclusion of the epilogue has become standard procedure in many E-E campaigns (Singhal & Rogers, 1999). Typically epilogues are non-narrative monologues delivered by an emotional authority figure from the narrative that summarizes the issues covered in the narrative, asks the audience rhetorical questions, and offers suggestions for follow through within the local area (Sabido, 2004; Vaughn et al. 2000). The purpose of the epilogue in *Ven Conmigo* was to give the audience a chance to verbally code the modeled activities for easy recall at a later time (Singhal & Rogers, 1999).

Although there appear to be no studies in E-E that specifically test the impact of the use of epilogues, the practice has been common in many successful interventions (Singhal & Rogers, 1999).

Research on combining narrative and non-narrative messages is scant, and repeated calls have been made for more research on how narrative messages interact with non-narrative messages (Hinyard, 2007; Slater & Rouner, 2002; Green, 2006). Outside of E-E, however, some research has tested the effects of combining narrative and argument. Allen (2000) examined the effectiveness of combining narrative and statistical message formats within one message. College undergraduates were exposed to one of four persuasive message conditions: neither statistical nor narrative evidence, statistical evidence, narrative evidence, and both narrative and statistical evidence. They then completed scales referring to their perception of the credibility of the author as well as their attitude toward the conclusion of the message. Although the message
type did not affect the perceived credibility of the message, the type of message evidence did affect attitude toward the issue. Results showed that the most persuasive condition was the one that combined narrative and statistical evidence, followed by the message including only statistical evidence, then the message including only narrative evidence (Allen et al., 2000).

The impact of combining message types was also examined by Feeley, Marshal, and Reinhart (2006). The goal of their study was to correct a methodological time-order imbalance in the experiment conducted by Kopfman, et al.’s 1998 study. Feeley et al. re-created the Kopfman et al (1998) study exactly, with the exception of the time order correction they added. In both studies, undergraduates were asked to take a pretest regarding their opinions toward organ donation. In Kopfman et al’s (1998) study, participants then read first a statistical message and then a story, always in that order. Feeley et al. (2006) corrected the time-order mistake in their study and added a condition for a newspaper editorial style article (referred to as actual) message. Students in both studies completed a thought listing exercise, another survey measuring their reactions regarding causal relevance, message ratings, and anxiety after reading each message. The second set of messages in the Feeley, et al (2006) study was one of the other two messages in the experiment set. Participants in both studies completed the same thought listing and survey measures after reading the second message. Kopfman’s (1998) results suggested that more cognitive thought occurred after exposure to the statistical measures, but Feeley et al’s (2006) results showed that students listed more thoughts following their first exposure to a message, regardless of the message format (Feeley et al., 2006), and that students found the narrative message more causally relevant, more positive, and more credible than the actual message (Feeley et al., 2006). This reinforces the value of narrative messaging in
comparison to non-narrative message formats in some situations, and introduces a possible time-order effect.

A possible explanation for the effectiveness of a combination narrative-argument message may be that experiencing an event through transportation in a narrative as well as character identification operates to increase perceived salience of the issue (Green, 2006; Busselle, 2009). ELM would suggest that the process of acknowledging that the issue is important to one’s life goals may be a part of the process of persuading people to take preventative health measures (Petty & Cacioppo, 1986)

If a narrative can induce perceived salience, this might provide an explanation for the anecdotal success of E-E interventions with combining message formats. When non-narrative persuasive messages are then introduced to these audiences for whom salience of the issue has been heightened individuals may be more inclined to centrally process these messages. ELM does not predict that central processing will lead to any greater initial persuasion than will peripheral processing. Persuasion through central route processing is, however, thought to be less susceptible to decay and counterarguing following message exposure (Petty et al, 1995). In the light of this, I advance one research question and two more hypotheses:

**RQ1:** What difference in attitude toward the low-relevance message will there be between participants exposed to the narrative, argument, and narrative + argument message?

**H4:** Participants exposed to a low relevance narrative message followed by an argument message will evidence more central processing of the message than will a) participants exposed to the low relevance narrative message only, and b) participants exposed to the low relevance argument message only.
H5: Participants exposed to a low relevance narrative message followed by an argument message will evidence more of the advocated behavior than will a) participants exposed to the narrative message only, and b) participants exposed to the argument message only.

ELM suggests that for messages that are already highly relevant for participants, that is, topics on which participants already have high issue involvement, central processing is likely to occur. Because central processing should already be set in motion, delivering the message in a combination of narrative and non-narrative messages is not likely to increase behavioral intention more than the increased relevance already did.

RQ2: What will be the relationship in the high relevance condition between type of message and a) attitude toward the message, b) perceived issue salience, c) central processing, and d) intention to act?

Summary of Hypotheses

In summary, this study attempts to address some of the research needs in Entertainment-Education as set forth by Everett Rogers (2002) by integrating constructs associated with narrative persuasion with ELM.

H1: Among participants exposed to narrative messages, attitudes toward the message will be positively related to a) level of transportation in the narrative, and b) level of character identification.

H2: Among participants exposed to narrative messages, perceived salience will be positively related to a) level of transportation in the narrative, and b) level of character identification.
H3: Participants exposed to a low-relevance narrative message will evidence a) higher perceived salience and b) more positive attitudes toward the message than will participants exposed to a low-relevance argument message.

H4: Participants exposed to a low relevance narrative message followed by a argument message will evidence more central processing of the message than will a) participants exposed to the low relevance narrative message, and b) participants exposed to the low relevance argument message.

H5: Participants exposed to a low relevance narrative message followed by an argument message will evidence more intention to act on the message than will a) participants exposed to the narrative message, and b) participants exposed to the argument message.
CHAPTER 3: METHOD

Study Design and Participants

This study is a 2 (relevance: high, low) x 3 (argument, narrative, narrative plus argument) + 1 (control group) posttest only design. A convenience sample of 291 university undergraduates was recruited from large undergraduate classes at the University of Central Florida. Participants who did not complete at least two of the scales within the experiment were removed from the study. This policy resulted in the removal of 27 cases, leaving a total of 266 participants. Of the sample, 53.5% were male and 45.7% were female, and .8% did not answer. The race/ethnicity breakdown of the participants was 15 (5.9%) Asian, 15 (5.9%) African American, 159 (62.9%) white, 42 (16.4%) Hispanic, 12 (4.7%) mixed, and 9 (3.5%) other. Participants ranged in age from 18 to 57 years ($M=22.04$, $SD=5.41$). Most participants were in their junior year in school (54.3%), but participants included freshmen (15.6%), sophomores (20.7%), seniors (8.2%), and non-degree seeking students (1.2%) as well. The majority of students (98%) reported that they were planning to enroll in school for the following term.

The majority of participants were enrolled in participating classes in the College of Nursing, College of Engineering and Computer Science, or the Department of Writing and Rhetoric. Most participants were offered extra credit for completion of the experiment, with alternate extra credit assignments available for those under 18 years of age. Ethical permission for the study was obtained from the UCF Institutional Review Board (IRB).

Pretesting

The experiment was pretested in a laboratory environment with groups of 10 students. Participants were asked to complete the experiment and jot down notes as they went along about
any errors or confusing wording. Once all participants in the room had completed the experiment, a short focus group was held to discuss their experience. Participants noted one typographical error and suggested a few minor wording changes. They also indicated that they were watching others complete the experiment and were pacing themselves according to the other screens they could see. Participants also commented on the sound heard from other headphones. Based on the responses to the pretest, the survey was updated and several items were adjusted. Participant response also influenced the decision to conduct the experiment in a completely online format, as opposed to conducting it in a laboratory setting.

Procedure

In the main experiment, students were notified about the study through an emailed announcement forwarded by their instructors. The announcement stated that a mass communication graduate student was performing an experiment to complete her degree. It explained that the purpose of the study was to measure audience responses to web videos. Students were provided with a link to the survey, which was hosted on SurveyMonkey.com. Participants were tested at their convenience in a completely online process. This means that they were able to participate in this experiment at any time in any location where they had computer access and an Internet connection. Possible testing locations include the library, apartment, and miscellaneous campus locations. This approach provides high externally validity because students were viewing videos in a way similar to how they would typically view web videos. In addition, students were able to participate in the experiment in an environment they found comfortable.
The first page in the online experiment contained the informed consent information for the study. The consent form explained that they were taking part in a study evaluating audience responses to web videos. Participants were not required to sign a consent form, as this experiment was deemed exempt by the IRB. They were then asked to select the provided link and follow the directions listed to watch a video and complete a questionnaire through SurveyMonkey.

Participants were randomly assigned one of 7 experimental conditions. Braverman (2008) noted that the majority of persuasion research conducted involves written modes of communication, and that other modalities such as video should be explored in future research. Stimulus materials for each experimental condition in this study, therefore, were embedded in the questionnaire and presented in online video format.

Participants in all conditions were asked to read an introduction explaining that they were taking part in a study evaluating audience responses to web videos. They were asked to enjoy the video and respond to the questions that followed as honestly as possible. Participants completed a few preliminary demographic questions. Based on their birthday month, participants were randomly assigned to one of the 7 experimental treatments.

Participants assigned to the control group were directed immediately to the measures for attitude toward the message, central processing, perceived salience, intention to act, and past behavior. Following these items, participants in the control condition watched an episode of The Guild, a free web video series available online. The episode was on a topic unrelated to flu vaccinations and was of comparable length to the experimental videos. All other treatments were directed to the video page first. There they were presented with a video in either the argument, narrative, and narrative + argument message condition.
Following exposure to the messages, participants in all conditions but the control completed a survey including measures for attitude toward the message, central processing, perceived salience, intention to act, past behavior, transportation, and identification with the characters. Once students completed the survey they were given the option of receiving extra credit by clicking on a link to a different survey. The survey recording student names for extra credit was not connected to the survey responses for the experiment, but could only be accessed by individuals who finished the experiment. Therefore participant anonymity was maintained.

Independent Variables

Two independent variables were manipulated in the experiment: message relevance (high vs. low) and message type (narrative, argument, narrative + argument). Videos within each condition were identical, but used visual cues to manipulate the event location between the high-relevance condition (University of Central Florida) and the low-relevance condition (University of Illinois). The narrative, argument, and narrative + argument formats emphasized four specific arguments developed from information provided on the CDC website.

Participants in the argument condition watched an entertaining news report recorded in the style of the popular Internet news program, “Rocketboom.” In this video the host of the program, a student opinionist, explained that the university was undergoing a reevaluation of student health policies, and one change being considered was requiring a mandatory flu vaccination for the class registration for Spring 2011, which begins in October, 2010. The student opinionist attempted to persuade viewers that this proposal is the best.

Participants in the narrative condition watched a narrative about students at a university in fall 2010. The story followed the positive role model, negative role model, transitional role
model structure suggested for Entertainment-Education media by Singhal & Rogers (1999). The students in the story encounter the new flu vaccination requirement. The positive role model happily followed through with the requirement, the negative role model found a loophole and chose not to comply with the requirement. The transitional role model initially planned not to comply with the requirement, but changed her mind by the end of the episode. The characters who complied with the requirement were rewarded, and the character who did not comply with the requirement experienced negative results. Specifically, the positive role model in this video got a job, the transitional role model found a love interest, and the negative role model got sick enough to miss work.

Participants in the narrative + argument condition watched a combined version of the narrative and argument videos. These versions were edited so that when watched together, time spent watching the videos was similar to both the independent narrative and argument videos.

**Dependent Variables**

**Perceived Salience**

Perceived salience was measured via a six-item semantic differential scale adapted by Katt (2003) from Zaichkowsky (1985). Items were preceded by a statement asking participants to indicate what they thought about the idea of the University of Central Florida requiring all students to be vaccinated against the H1N1 virus prior to this fall’s registration for Spring 2011 classes by selecting the appropriate number on a seven-point scale between the pairs of adjectives below the statement. Items included beneficial/not beneficial, trivial/fundamental, oppose/support, and relevant/irrelevant. Reported reliabilities of the scale in previous usages were .88 and .84 (Katt, 2003). Cronbach’s alpha for this study was .90.
Attitude toward the Message

Participant attitude toward the message was measured with the opinion items scale used by Park, Levine, Westerman, Orfgen, & Foregger, (2007). Participants responded to items on a semantic differential scale. Items included “oppose-support”, “disfavor-favor”, and “disagree-agree”. In previous use this scale produced a coefficient alpha of .98 (Park, etc, 2007). Cronbach’s alpha for this study was .98.

Transportation

Transportation was measured by the modified transportation scale developed by Green and Brock (2000). The 12 items included “I could picture myself in the scene of the events described in the narrative / video”, and “I wanted to learn how the narrative / video ended.” Participants were asked to rate all items on a scale of 1 to 7, where 1 indicated that the statement did not represent their opinion about the narrative they just saw, and 7 indicated that the statement strongly represented their opinion about the narrative they just saw. In the original studies, a Cronbach's alpha of .76 was reported at the original presentation of the scale (Green & Brock, 2000). Cronbach’s alpha for this study was .80.

Identification with the Character

Identification with the character was assessed via a scale developed by Cohen (2001), and tested by Busselle (2009). Items included “At important moments in the film, I could feel the emotions the characters / people in the video felt,” and “I understood the reasons why the characters / people in the video did what they did.” Participants were asked to rate all items on a scale of 1 to 7, where 1 indicated that the statement did not represent their opinion about the video they just saw (strongly disagree), and 7 indicates that the statement strongly represented
their opinion about the video they just saw (strongly agree). This scale was found to be reliable in Busselle’s 2009 study with a Cronbach’s alpha of .72. Cronbach’s alpha for this study was .86.

Central Processing

The level of central processing experienced by participants was measured through two techniques outlined by Petty & Cacioppo (1986). Immediately following the video, participants were asked to write down any thoughts they might have had while watching the video, whether they were relevant to the video or not. They were provided with 12 text boxes, and were asked to include only one thought in each text box. Instructions and technique were adapted for this experiment from those used by Petty and Cacioppo (1977).

Thought listing responses were coded from 0 to 5. Thoughts coded as 0 were considered irrelevant to mandatory H1N1 vaccinations. Negative thoughts towards mandatory H1N1 vaccinations were coded as 1. Negative thoughts towards vaccinations in general were coded as 2. Thoughts that mentioned either the flu or vaccinations, but that did not indicate an opinion were considered to be processing thoughts and were coded as 3. Positive thoughts toward vaccinations in general were coded as 4. Positive thoughts toward mandatory H1N1 vaccinations were coded as 5. Thoughts that included more than one opinion were separated and coded independently.

Because thought listing has produced mixed results when used to measure persuasion through narrative (Green & Brock 2000), a second measure of cognitive thought was included at the end of the survey. Participants were asked to write down any arguments for or against mandatory H1N1 vaccinations that they could remember from the video they had watched. This
technique was also adapted from the cognitive processing measures described by Petty and Cacioppo (1986).

The arguments used in both videos were as follows:

1. Students are more likely to get infected at school, where germs spread easily. Each student who brings the infection to school transmits it to a few others, who carry it from the classroom to a pool of contacts at home.

2. Influenza is a respiratory infection that sickens millions of people each year and can cause serious complications. Fortunately, the flu vaccine — available in the form of a flu shot or a nasal spray — offers protection against the flu.

3. Young adults between 19 and 24 years are in the high risk category for H1N1.

4. In 2009, the number of infected people peaked in October. On a college campus, this is generally the time students are taking midterms.

A coding category was also included for arguments students listed that were not made in all four videos.

Intercoder reliability was established through an iterative process. After training coders separately coded 20% of participant responses and Scott’s Pi was used to assess reliability. Scott’s Pi has been suggested as appropriate for establishing intercoder reliability on nominal-level variables (Krippendorf, 2004). The researcher and coders discussed categories on which initial agreement was insufficient, and the codebook was amended to clarify ambiguous areas. This process was continued until acceptable reliability was reached on all coded variables. Scott’s Pi for thought listing was .97, and for argument recall was .73.
**Intention to Act and Past Behavior**

Participants responded to two items regarding their past behavior and two items regarding their intention to act on the information in the video. Items regarding past behavior asked about past flu vaccinations and past H1N1 vaccinations. Items regarding intention to act asked participants whether they intended to be vaccinated against the standard flu, as well as H1N1 this year, and also whether they intended to follow through with a letter of support for the mandatory H1N1 vaccination policy proposed in the videos. Intention to receive the vaccinations was measured through a 7 point, Likert-type scale. Letters to the editor were coded using the same criteria used to code the thought listing at the beginning of the questionnaire, except that instead of coding for irrelevant comments, coders used the same notation (0) to mark the absence of a comment, or the participant’s choice to not follow through with a response to the editor. Scott’s $\pi$ for letter to the editor was 1.0.

**Manipulation Check**

Participants filled out items measuring potential confounding variables of content and production value and narrative/argument manipulation. I used a measure of content and production value developed by Pinkleton, Austin, and Fujioka (2001). Items included “This video had good acting,” and “This video was of high production quality.” Participants were asked to rate all items on a scale of 1 to 7, where 1 indicated that the statement did not represent their opinion about the narrative they just saw (strongly disagree), and 7 indicated that the statement strongly represented their opinion about the narrative they just saw (strongly agree). In the original study, a Cronbach’s alpha of .92 was reported for the production value scale, and
a Cronbach’s alpha of .76 was reported for the content scale (Pinkleton, etc., 2001). Cronbach’s alpha for the production value scale for this study was .79.

Participants were also asked where the video took place and whether they consider the video they just watched to be a narrative, a nonfiction editorial, or a combination of narrative and nonfiction editorial. Interrater reliabilities for these items as assessed by Scott’s pi were: video location = 1.0; video watched = 1.0; message type watched = 1.0; video location recalled = 1.0.
CHAPTER 4: RESULTS

Preliminary Analyses

Manipulation Checks

In order to verify that the video locations had been accurately manipulated by including various cues identifying the university at which the videos took place, I ran a crosstab to locate participants who incorrectly identified the location of the video they had watched. Seven incorrect locations were identified, and those cases were manually deleted from the dataset. Sixty-six other individuals answered the open-ended question of “where did the video take place” in a generic way (ie: “a university” or “an apartment”). I ran two independent samples $t$-tests to compares scores on the perceived salience scale in each involvement condition. No significant differences emerged between those who gave vague answers and those who gave the correct specific answer in either the high involvement ($t (117) = -.355$, $p = .723$) or low involvement ($t (95) = -.772$, $p = .442$) conditions. Therefore the participants who gave general answers were left in the data set. I removed from analysis two participants who reported that they would not be registering for classes next semester because they would not be affected by mandatory H1N1 vaccination before registration.

In order to verify that perceived video quality was constant across experiment conditions, I performed a one-way ANOVA with video format as the independent variable and video quality as the dependent variable. No significant differences emerged ($F (3, 243)=1.99, p=.12$).

To determine whether transportation was higher in the narrative condition, a one-way ANOVA was run with video format as the independent variable and transportation as the dependent variable. There was a statistically significant difference between groups ($F (3, 250) = 3.45, p = .02$). Post hoc analysis with the Bonferroni adjustment indicated that the difference
resided between the narrative (\(M=3.67, SD=.97\)) and the argument condition (\(M=3.24, SD=.94\)), as might be expected. (Values are on a 7-point scale.)

**Removal of Outliers**

Prior to running the analysis outliers were identified by means of studentized residuals. Cases with residuals higher than 2.0 were removed analysis by analysis. The number of cases I removed is as follows: 3 from salience, 8 from issue relevant thoughts, 9 from total arguments, and 2 from behavioral intention.

To determine whether participants in the treatment conditions were more favorable toward H1N1 vaccination than participants in the treatment conditions, I ran a one-way ANCOVA with video format (control, narrative, argument, narrative + argument) as the independent variable, attitude toward mandatory H1N1 vaccinations as the dependent variable, and past behavior regarding H1N1 vaccination as covariate. Levene’s test indicated homogeneity of variance could be assumed. No significant omnibus effect were found (\(F(3, 235) = 2.39, p=.069, \eta^2 = .03\)) although a non-significant trend was evident that showed the means of format with narratives higher than the other conditions (control: \(M = 3.78, SD = 2.17\); argument \(M = 3.69, SD = 1.98\); narrative: \(M = 4.36, SD = 1.98\); argument + narrative: \(M = 4.27, SD = 2.09\)).

**Hypothesis Testing**

H1 and H2 predicted that within the narrative condition, both transportation and character identification would be positively related to attitudes about and perceived salience of the message respectively. To test these hypotheses I split the data file according to video format. I then ran correlation analyses between all four variables in each video format condition. Results
are presented in Table 1 below. Neither H1 nor H2 was supported. Post hoc analyses, however, revealed effects in the argument and narrative + argument conditions, as indicated in the table.

Table 1: Test of Relationship of Transportation and Character Identification to Criterion Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Transportation</th>
<th>Character Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>r</td>
</tr>
<tr>
<td><strong>Narrative Condition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>77</td>
<td>.032</td>
</tr>
<tr>
<td>Perceived Salience</td>
<td>76</td>
<td>.069</td>
</tr>
<tr>
<td><strong>Argument Condition</strong></td>
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<td></td>
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<tr>
<td>Attitude</td>
<td>86</td>
<td>.271</td>
</tr>
<tr>
<td>Perceived Salience</td>
<td>84</td>
<td>.378</td>
</tr>
<tr>
<td><strong>Narrative + Argument Condition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>57</td>
<td>.246</td>
</tr>
<tr>
<td>Perceived Salience</td>
<td>57</td>
<td>.373</td>
</tr>
</tbody>
</table>

H3, H4, H5, and RQ1 all involved comparisons between video format in the low relevance condition. Descriptive statistics are presented in Tables 2, 3, 4, and 5 below.
Table 2: Descriptive Statistics for Perceived Salience, Attitude, and Behavioral Intention

<table>
<thead>
<tr>
<th>Vaccinated against H1N1 Last Year</th>
<th>Salience</th>
<th>Attitude</th>
<th>Behavioral Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Y</td>
<td>N</td>
<td>M</td>
</tr>
<tr>
<td><strong>Narrative</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Relevance</td>
<td>12</td>
<td>25</td>
<td>4.81</td>
</tr>
<tr>
<td>Low Relevance</td>
<td>7</td>
<td>35</td>
<td>4.35</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>19</td>
<td>60</td>
<td>4.58</td>
</tr>
<tr>
<td><strong>Argument</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Relevance</td>
<td>3</td>
<td>36</td>
<td>4.47</td>
</tr>
<tr>
<td>Low Relevance</td>
<td>9</td>
<td>40</td>
<td>4.12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
<td>76</td>
<td>4.27</td>
</tr>
</tbody>
</table>

Table 3: Descriptive Statistics for Perceived Salience, Attitude, and Behavioral Intention

<table>
<thead>
<tr>
<th>Vaccinated against H1N1 Last Year</th>
<th>Salience</th>
<th>Attitude</th>
<th>Behavioral Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Y</td>
<td>N</td>
<td>M</td>
</tr>
<tr>
<td><strong>Narrative + Argument</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Relevance</td>
<td>12</td>
<td>34</td>
<td>5.15</td>
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<tr>
<td>Low Relevance</td>
<td>0</td>
<td>14</td>
<td>4.21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
<td>48</td>
<td>4.93</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Relevance</td>
<td>27</td>
<td>95</td>
<td>4.83</td>
</tr>
<tr>
<td>Low Relevance</td>
<td>16</td>
<td>89</td>
<td>4.22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>43</td>
<td>184</td>
<td>4.56</td>
</tr>
<tr>
<td>Control</td>
<td>7</td>
<td>14</td>
<td>4.34</td>
</tr>
</tbody>
</table>
Table 4: Descriptive Statistics for Total Arguments Correctly Recalled, Total Relevant Thoughts, and Valence of Letter to the Editor

<table>
<thead>
<tr>
<th></th>
<th>Total Arguments Correctly Recalled</th>
<th>Total Relevant Thoughts</th>
<th>Letter to the Editor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$n$</td>
</tr>
<tr>
<td><strong>Narrative</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Relevance</td>
<td>.79</td>
<td>.96</td>
<td>38</td>
</tr>
<tr>
<td>Low Relevance</td>
<td>1.10</td>
<td>1.06</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>.95</td>
<td>1.02</td>
<td>78</td>
</tr>
<tr>
<td><strong>Argument</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Relevance</td>
<td>1.10</td>
<td>1.00</td>
<td>41</td>
</tr>
<tr>
<td>Low Relevance</td>
<td>1.40</td>
<td>1.23</td>
<td>47</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1.26</td>
<td>1.13</td>
<td>88</td>
</tr>
</tbody>
</table>

Table 5: Descriptive Statistics for Total Arguments Correctly Recalled, Total Relevant Thoughts, and Valence of Letter to the Editor

<table>
<thead>
<tr>
<th></th>
<th>Total Arguments Correctly Recalled</th>
<th>Total Relevant Thoughts</th>
<th>Letter to the Editor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$n$</td>
</tr>
<tr>
<td><strong>Narrative + Argument</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Relevance</td>
<td>.86</td>
<td>.90</td>
<td>42</td>
</tr>
<tr>
<td>Low Relevance</td>
<td>.69</td>
<td>.86</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>.82</td>
<td>.884</td>
<td>55</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Relevance</td>
<td>.92</td>
<td>.95</td>
<td>121</td>
</tr>
<tr>
<td>Low Relevance</td>
<td>1.19</td>
<td>1.13</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>1.04</td>
<td>1.05</td>
<td>221</td>
</tr>
</tbody>
</table>
H3 stated that participants exposed to a low-relevance narrative message would evidence a) higher perceived salience and b) more positive attitudes toward the message than would participants exposed to a low-relevance argument message. H4 stated that participants exposed to a low relevance narrative + argument message would evidence more central processing of the message than would a) participants exposed to the low relevance narrative message, and b) participants exposed to the low relevance argument message. H5 stated that participants exposed to a low relevance narrative + argument message would evidence more intention to act on the message than would a) participants exposed to the low relevance narrative message, and b) participants exposed to the low relevance argument message.

In order to test the hypotheses I split the data file so that high-relevance and low-relevance conditions were analyzed separately. I then ran six one-way ANCOVAs with video format as the independent variable and perceived salience, attitude toward mandatory H1N1 vaccination, two measures of central processing (total number of issue relevant thoughts, total number of arguments accurately recalled), likelihood of being vaccinated, and whether or not the participant wrote a letter to the editor as the dependent variables. I entered the three items related to past behavior as covariates. Those items were “have you ever had H1N1,” “were you vaccinated against H1N1 during the past flu season,” and “do you usually get a flue vaccination during flu season.” Levene’s test indicated that equal variance in the groups could be assumed for all variables except whether or not students wrote a letter to the editor. Although examination of p-plots and histograms indicated that distributions of the attitude scale, thought processing measures, and letter to the editor were not normal, ANCOVAs with samples over 100 are robust to violations of the assumption of normality. Therefore I judged it appropriate to use parametric
statistics. One of the covariates, “were you vaccinated against H1N1 during the past flu season” had statistically significant effects on salience and intention to be vaccinated.

Results of hypothesis testing are presented in Table 6 below. As indicated in the table, none of the hypotheses was supported. Research question 1 asked what difference in attitude toward the low-relevance message would there be between participants exposed to the narrative, argument, and narrative + argument message. As indicated in Table 3, no significant differences emerged between message conditions.

Table 6: Results of ANCOVAs Testing Effects of Video Format in the Low Relevance Condition

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>F</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>2, 97</td>
<td>1.27</td>
<td>.287</td>
<td>.02</td>
</tr>
<tr>
<td>Perceived Salience</td>
<td>2, 95</td>
<td>.81</td>
<td>.450</td>
<td>.02</td>
</tr>
<tr>
<td>Behavioral Intention</td>
<td>2, 100</td>
<td>.85</td>
<td>.430</td>
<td>.02</td>
</tr>
<tr>
<td>Total Relevant Thoughts</td>
<td>2, 96</td>
<td>1.49</td>
<td>.231</td>
<td>.03</td>
</tr>
<tr>
<td>Total Arguments Correctly Recalled</td>
<td>2, 93</td>
<td>2.93</td>
<td>.058</td>
<td>.06</td>
</tr>
<tr>
<td>Valence of Letter to the Editor</td>
<td>2, 27</td>
<td>1.68</td>
<td>.206</td>
<td>.11</td>
</tr>
</tbody>
</table>

Research question 2 explored what the relationship in the high relevance condition would be between message format and a) attitude toward the message, b) perceived issue salience, c) central processing, and d) intention to act. To answer this question, I split the data according to message relevance. I then ran six one-way ANCOVAs with video format as the independent variable and perceived salience, attitude toward mandatory H1N1 vaccination, two measures of
central processing (total number of issue relevant thoughts, total number of arguments accurately recalled), likelihood of being vaccinated, and whether or not the participant wrote a letter to the editor as the dependent variables. Results are presented below in Table 7.

Table 7: Results of ANCOVAs Testing Effect of Video Format in High Relevance Condition

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>F</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>2, 123</td>
<td>3.30</td>
<td>.040</td>
<td>.05</td>
</tr>
<tr>
<td>Perceived Salience</td>
<td>2, 113</td>
<td>3.11</td>
<td>.048</td>
<td>.05</td>
</tr>
<tr>
<td>Behavioral Intention</td>
<td>2, 114</td>
<td>.16</td>
<td>.856</td>
<td>.00</td>
</tr>
<tr>
<td>Total Relevant Thoughts</td>
<td>2, 111</td>
<td>1.89</td>
<td>.155</td>
<td>.03</td>
</tr>
<tr>
<td>Total Arguments Correctly Recalled</td>
<td>2, 106</td>
<td>2.51</td>
<td>.086</td>
<td>.04</td>
</tr>
<tr>
<td>Valence of Letter to the Editor</td>
<td>2, 39</td>
<td>3.07</td>
<td>.058</td>
<td>.14</td>
</tr>
</tbody>
</table>

Pairwise comparisons revealed that participants in the narrative + argument condition had significantly more positive attitudes than participants in the argument condition, and that participants in the narrative + argument condition reported significantly perceived salience than participants in the argument condition.
CHAPTER 5: DISCUSSION

The purpose of this research was to look more closely at the relationships between narrative and non-narrative persuasive messages, and to begin to determine how and why these message formats might work together. I situated this study within Rogers (2004) roadmap for future theoretical work on E-E, and specifically addressed Slater and Rouner’s (2002) call for more research on the impact of epilogues in entertainment education. Synthesizing components of the elaboration likelihood model with recent theorizing regarding persuasion through narrative (Green & Brock, 2000; Slater & Rouner, 2002; Moyer-Guse & Nabi, 2010), I made predictions regarding the effect of transportation and character identification on perceived salience, attitudes, behavioral intention, and behavior in narrative, argument, and narrative + argument conditions.

While none of the hypotheses in the study were supported, there were some significant results that indicate possible support for the concepts theorized in this study. The hypotheses primarily dealt with the low relevance condition. The goal was to test if relevance could be manufactured for a situation and topic completely irrelevant to the participant. While manipulation of perceived salience in this condition was not achieved, perceived salience was manipulated in the high relevance condition in the same pattern predicted in the hypotheses.

Within the high relevance condition, perceived salience was lowest in the argument condition, higher in the narrative condition, and highest in the narrative + argument condition. This pattern seems to imply that exposing people to a persuasive narrative before exposing them to persuasive factual information can make them more vulnerable to the message. This may be because of the influence of transportation and character identification, but further study would be necessary to pinpoint the specific causal relationship.
Regarding the specific hypotheses for this study, while it is possible that the lack of support is due to faulty theorizing, it could also be due to (a) failure of the manipulation of the video conditions or (b) the choice of persuasive topic. First, although perceived salience did correspond strongly with the video relevance manipulation, whether video conditions were successfully manipulated to operationalize narrative and argument is less clear. Persuasion literature varies in its definition of narrative, and most informational pamphlets and videos include some narrative aspects to attract viewer attention. It is possible that the testimonials I included in the argument video muddied the line between narrative and argument enough to skew results. Viewers did report the narrative video to be more transportive than the argument video, however the difference in means was just .45 on a 7-point scale, and no difference in transportation emerged between the narrative + argument condition and any other condition.

Even though I did conduct a pretest of the study, little pre-testing was done during the character development stage of the videos. Ideally pilot programs, like the videos used in this study, undergo extensive pretesting when they are used for E-E purposes. Potential actors, scripts, or even the finished videos may be presented to focus groups to verify maximum effectiveness (Singhal & Rogers, 2004). None of these procedures were included in my message preparation. The videos were based on my personal college experience and included details that made my 19 year old brother giggle, but the thought listing comments indicated that some students found the humor and the characters distracting. A more thorough procedure might increase character identification enough to overcome stronger attitudes.

In addition, a closer look at the format of the videos used revealed that the argument video did include small aspects of format sometimes considered narrative. The video included testimonials from college students in support of the issue. While these testimonials were short
and did not follow any narrative format proven to encourage behavior change, they may have represented enough of a format breach to skew the results slightly. The videos could have been made even more relevant through pre-testing. They were written, directed, and produced by professionals in the entertainment field, but they were made quickly and all of the labor was volunteered.

Second, the topic of mandatory H1N1 vaccination turned out to be problematic. Examination of descriptive statistics indicated the attitude distribution of the group was extremely polarized. Among my respondents, 40% reported attitudes on the extreme ends of the attitude scale, resulting in a histogram that resembles a reverse bell curve. Considering that no significant difference in attitude emerged between the control and treatment conditions, it is very possible that this is an attitude on which it was going to be difficult to accomplish any movement with a single, five-minute intervention.

I discovered that it is very difficult to test intention to act when referring to a school health policy. Unlike the exit examination policy manipulation used in many early ELM studies to manipulate issue relevance, school health policies like H1N1 vaccination involve two levels of action. At the institutional level, decisions on policy are not in the hands of the students. However, unlike university exit exams, students can nevertheless choose to individually act on the health issue by voluntarily getting vaccinated. Many participants made this distinction in their comments and thought listings. To pull these issues apart, I gave participants the opportunity to demonstrate immediate action by writing a letter to the editor. This might have been more successful if the issue at hand had been less emotional and polarizing. Participants who felt strongly left messages both for and against the policy, without regard to the fact that the solicitation had been for letters in favor of the policy only. Once the unsolicited negative results
were deleted there were too few items to actually measure behavior. An attempt was made to re-code and include the negative responses, but this attempt was not helpful.

**Limitations**

This study has several limitations. The first was that I chose to conduct this experiment in a completely online format without simultaneous administration. This means that participants could have participated in the same room or watched a friend participate. Students may have spoken to other participants before they participated in the survey themselves.

Also, this survey measured past behavior and intentions to act, but relied on self-reporting methods to do so. Participants could have remembered events incorrectly. They may have intended to write letters or get vaccinated, but unless they completed the letter in the survey their actions could not actually be measured. In addition, it is possible that the participants did not think this was a real issue. They may not have taken the questions seriously. I assessed attitude and behavioral intention only immediately after participants viewed the videos. Any delayed persuasion would not have been measured.

**Future Research**

Because of the results from this current study, the first task of future research is to replicate this experiment, but with more simplified media on a more diverse range of topics. I remain convinced that the theoretical connection I proposed is viable, and this is the first step toward exploring that. It was perhaps too ambitious to begin with a video format. A better approach might be to begin this with an online blog format to verify general population attitude and response, and then add the factor of web video once the time, expense, and formative
research was there to support the effort. Additionally, this study should be repeated with different media formats such as television and other forms of video, radio, and print.

Second, it would be interesting to compare the effects of different types of mixed mode efforts. What, if any, is the difference in receptiveness and perceived salience between following a show with the standard E-E talkback instead of the unconnected news article on same topic? The talkback technique is frequently used in E-E settings, but a possibly more realistic or real-world setting might involve news articles immediately following television or web video broadcast. An additional real-world question could include the effect of time delay between viewing a narrative and viewing argument messages on a topic. For example, what is the effect on attitude and perceived salience of watching a narrative on Monday that advocates for a specific health behavior, and casually reading a pamphlet on Tuesday that advocates the same health behavior?

The purpose of this research was to look more closely at the relationships between narrative and non-narrative persuasive messages, and to begin to determine how and why these message formats might work together. Even though none of the hypotheses in this study were supported, efforts should continue to add to the discovery of the relationships between persuasive message formats. In our media saturated society, individuals are bombarded with hundreds of persuasive messages daily, and some of these messages advocate similar behaviors through different messaging tactics. While increased perceived salience still may be one effect of a transportive narrative, this effect is likely only one of many that assists in the collaborative effort towards shifting the behavior of an individual or a population.
APPENDIX A: ARGUMENT USED IN BOTH VIDEO AND RECALL PATTERNS
<table>
<thead>
<tr>
<th>Students are more likely to get infected at school, where germs spread easily. Each student who brings the infection to school transmits it to a few others, who carry it from the classroom to a pool of contacts at home.</th>
<th>Students are more likely to get infected at school, where germs spread easily. Each student who brings the infection to school transmits it to a few others, who carry it from the classroom to a pool of contacts at home.</th>
<th>Young adults between 19 and 24 years are in the high risk category for H1N1</th>
<th>In 2009, the number of infected people peaked in October. On a college campus, this is generally the time students are taking midterms.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campuses are public environments and a disease would put many others at risk.</td>
<td>It can keep you sick for a week, with a chance of needing a hospital visit</td>
<td>Virus prone to my age</td>
<td>October was peak flu time in '09</td>
</tr>
<tr>
<td>It would make college campuses less of a breeding ground for flu and H1N1</td>
<td>There are different forms of the vaccine</td>
<td>Danger zone was age 19-24, college students</td>
<td>Getting sick would cause a student to miss a week or more of crucial time at school.</td>
</tr>
</tbody>
</table>
APPENDIX B: SAMPLE THOUGHTS FROM THOUGHT LISTING ITEM
<table>
<thead>
<tr>
<th>Thought Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>Thought Code</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

Portraying the “less than attractive” guy as the one who gets sick was a bit predictable. The school should advise students to take the vaccine, but not require it in order to take classes. I personally have no problem with the being mandatory if it is not out of my pocket.
APPENDIX C: SAMPLE COMMENTS FROM THE LETTER TO THE EDITOR SURVEY
<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The University of Central should adopt this policy. The side effects of this</td>
<td>It is wrong! The H1N1 vaccination should be considered the same way as the Hepatitis</td>
</tr>
<tr>
<td>flu are too detrimental and those individuals whose immune systems are not</td>
<td>B series vaccination is dealt. There should be a waiver form the student signs</td>
</tr>
<tr>
<td>up to par may be affected the worse. Also, it will be very hard for</td>
<td>understanding the risks involved in not receiving the vaccination. There are</td>
</tr>
<tr>
<td>individuals without health insurance to see proper medical attention, which</td>
<td>multicultural and religious reasons why some students may not feel comfortable</td>
</tr>
<tr>
<td>may result in deathy consiquences.</td>
<td>being forced to being vaccinated. Peoples rights should be upheld and respected</td>
</tr>
<tr>
<td></td>
<td>and the decision made by the student should not interfere with their education.</td>
</tr>
<tr>
<td>I feel as though getting the H1N1 vaccine would be beneficial to all. Who</td>
<td>From my limited, but still credible and informative perspective, I must denounce</td>
</tr>
<tr>
<td>wants to feel sick? Possibly die? Or have to miss class and fall behind? I</td>
<td>this supposed mandatory edict of enforcing the vaccination against the pestilence</td>
</tr>
<tr>
<td>don't. I couldn't imagine getting sick when already there's not enough time</td>
<td>of H1N1 upon the alumni populace of any university or educational establishment.</td>
</tr>
<tr>
<td>in the day to get everything done, especially knowing that my illness was</td>
<td>I firmly hold the conviction that the individual student should be an ubermensh</td>
</tr>
<tr>
<td>preventable.</td>
<td>who stoicly dictates whether to protect themselves with this facilitated</td>
</tr>
<tr>
<td></td>
<td>vaccination or let their bodies remain unchanged from a needle.</td>
</tr>
<tr>
<td>I think that mandatory H1N1 vaccines on campus is a good idea because it</td>
<td>I do not support this notion. America is a land of FREE-THOUGHT and PERSONAL-</td>
</tr>
<tr>
<td>would help to decrease the students chances of contracting the disease.</td>
<td>CHOICE. This is dancing along the lines of Socialism. Good day.</td>
</tr>
</tbody>
</table>
1. Informed Consent

INFORMED CONSENT

INTRODUCTION: Researchers at the University of Central Florida (UCF) study many topics. To do this we need the help of people who agree to take part in a research study. You are being invited to take part in a research study which will include about 300 people at the University of Central Florida. You have been asked to take part in this research study because you are a UCF student.

*You must be 18 years of age or older to be included in the research study.

*Participation in this study is completely voluntary; whether or not you take part is up to you. So you should take part only if you want to, and if you change your mind once you start you can stop participating. You can also skip questions if you so desire. Whatever you decide it will not be held against you.

*This document will explain the study to you and you should feel free to ask all the questions you want before you decide to continue.

The person doing this research is Rebekah Lane, a master's candidate in the UCF Nicholson School of Communication. Because the researcher is a masters student, she is being guided by Dr. Ann Miller, a UCF faculty supervisor in the Nicholson School of Communication.

PURPOSE OF THE RESEARCH STUDY: The purpose of this study is to evaluate audience responses to different types of message formats, specifically, student videos delivered in a web based format. Very little research has evaluated audience response to the web video format.

WHAT YOU WILL BE ASKED TO DO IN THE STUDY: You will be asked to answer basic demographic questions. You will then be asked to watch one of 7 standard web videos. Following the video, you will be asked to answer several survey questions relating to the video you watched. All of your answers will be anonymous. Your part in this study will be complete following your debrief when you exit the room. We expect that these activities will take you approximately 30 minutes or less. Time spent in this study will be outside class time.

COMPENSATION AND RISK: There are no reasonably foreseeable risks or discomforts involved in taking part in this study, there are no direct benefits for participation, and there is no direct compensation for taking part in this study. It is possible, however, that extra credit may be offered for your participation at the discretion of your instructor. If you choose not to participate, you may notify your instructor and ask for an alternative assignment of equal effort for equal credit. There will be no penalty.

STUDY CONTACT FOR QUESTIONS ABOUT THE STUDY OR TO REPORT A PROBLEM: If you have questions, concerns, or complaints, or think the research has hurt you, talk to: Rebekah Lane, Graduate Student, Mass Communication Program, Nicholson School of Communication, Rebekah.Lane@knights.ucf.edu, or Dr. Ann Miller, Faculty Supervisor, Nicholson School of Communication at (407) 823-2602 or by email at amiller@mail.ucf.edu

IRB CONTACT ABOUT YOUR RIGHTS IN THE STUDY OR TO REPORT A COMPLAINT: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB.

FOR INFORMATION ABOUT THE RIGHTS OF PEOPLE WHO TAKE PART IN RESEARCH, please contact: Institutional
2. ASSESSMENT OF STUDENT VIDEO PRODUCTIONS

1. Do you plan to register for classes for this coming semester, Spring 2011?

2. What is your gender?

3. What is your year in school?

4. What is your age?

5. What is your ethnicity?

☐ nic
6. In what month were you born?

☐ September
3. High Involvement Narrative

Please watch the video below. When you have finished this video, scroll down and answer the questions on this page.
7. Before getting into the specific questions, I am interested in what you were thinking about while you were watching the video. You might have had ideas all favorable to the video, all opposed, all irrelevant to the video, or a mixture of the three. Any case is fine; simply list what you were thinking.

*Simply write down the first idea that comes to mind in the first box, etc.
*Please put only one idea or thought in a box.
*You should try to record only those ideas that you were thinking while watching the video.
*Please state your thoughts and ideas as concisely as possible...a phrase is sufficient.
*Ignore spelling, grammar, and punctuation.

Take about 2 - 3 minutes to write your thoughts. We have deliberately provided more space than we think most people will need to ensure that everyone would have plenty of room to write the ideas they had during the video. So don’t worry if you don’t fill every space. Please be completely honest and list all of the thoughts you had.

8. The following questions relate to your opinion of the ACTORS in the student video you just watched. For each of the statements below please select the number on a seven-point scale that best represents your opinion about the video you just watched, where 1 = not at all and 7 = very much.
9. Did you enjoy the video?
9. UCF Questions for Everybody - Video opinions

25. The following questions have to do with your OVERALL OPINION of the student video you just watched. For each of the statements below please select the number on a seven-point scale that best represents your opinion about the video you just watched, from 1 = not at all to 7 = very much.
10. UCF Everybody Semantic differential rigging

26. The following questions ask about your opinion on the SUBJECT MATTER in the video. Please indicate what you think about the idea of the University of Central Florida REQUIRING all students to be vaccinated against the H1N1 virus prior to this fall’s registration for Spring 2011 classes. For each of the words below please select the number on a seven-point scale that best represents your opinion about the video you just watched, from 1 = not at all to 7 = very much.

"The University of Central Florida REQUIRING all students to be vaccinated against the H1N1 virus prior to this fall’s registration for Spring 2011 classes (is) __________.”
27. Please continue to indicate what you think about the idea of the University of Central Florida REQUIRING all students to be vaccinated against the H1N1 virus prior to this fall’s registration for Spring 2011 classes. For each of the words below please select the number on a seven-point scale that best represents your opinion about the video you just watched, from 1 = not at all to 7 = very much.

"I _________ (with) the idea of the University of Central Florida REQUIRING all students to be vaccinated against the H1N1 virus prior to this fall’s registration for Spring 2011 classes."
28. "I think the idea of the University of Central Florida REQUIRING all students to be vaccinated against the H1N1 virus prior to this fall's registration for Spring 2011 classes is __________." 

29. Have you ever had H1N1, or the swine flu?

☐ No
13. U of I Questions for Everybody - Video opinions

30. The following questions have to do with your OVERALL OPINION of the student video you just watched. For each of the statements below please select the number on a seven-point scale that best represents your opinion about the video you just watched, from 1 = not at all to 7 = very much.
14. U of I Everybody Semantic differential rigging

31. The following questions ask about your opinion on the SUBJECT MATTER in the video. Please indicate what you think about the idea of the University of Illinois REQUIRING all students to be vaccinated against the H1N1 virus prior to this fall’s registration for Spring 2011 classes. For each of the words below please select the number on a seven-point scale that best represents your opinion about the video you just watched, from 1 = not at all to 7 = very much.

"The University of Illinois REQUIRING all students to be vaccinated against the H1N1 virus prior to this fall’s registration for Spring 2011 classes (is) __________."
32. Please continue to indicate what you think about the idea of the University of Illinois REQUIRING all students to be vaccinated against the H1N1 virus prior to this fall’s registration for Spring 2011 classes. For each of the words below please select the number on a seven-point scale that best represents your opinion about the video you just watched, from 1 = not at all to 7 = very much.

"I ________ (with) the idea of the University of Illinois REQUIRING all students to be vaccinated against the H1N1 virus prior to this fall’s registration for Spring 2011 classes."
33. “I think the idea of the University of Illinois REQUIRING all students to be vaccinated against the H1N1 virus prior to this fall’s registration for Spring 2011 classes is __________.”

34. Have you ever had H1N1, or the swine flu?

☐

☐ I don't remember
17. **Everyone - Vaccination History**

Please provide information about your own PAST HISTORY with flu vaccines by checking the appropriate space in the table below.

**35. This year, how likely are you to be vaccinated against...**

**36. Were you vaccinated for H1N1 during the past flu season?**

**37. Do you usually get a flu vaccination in flu season?**
18. Everyone - Video recall / Argument Listing

This set of questions inquires into what you recall about the video.

38. This video was about possible events at what location?

39. Please list any points you can remember that the video made that would argue for or against mandatory H1N1 vaccinations on a university campus.

We have deliberately provided more space than we think most people will need to ensure that everyone would have plenty of room to write the arguments they heard during the video. So don’t worry if you don’t fill every space.

40. What was the title of the video you watched?

☐ You Should Know
19. Narrative Questions Transportation

41. Now think back about how you FELT when you were watching the video. For each of the statements below please select the number on a seven-point scale that best represents your opinion about the video you just watched, where 1 = not at all and 7 = very much.

[Scale representation]
20. Narrative Questions - Character Identification

42. For the next set of questions, please recall how you felt about the CHARACTERS when you were watching the video. For each of the statements below please select the number that best represents your opinion about the video you just watched, where 1 = not at all and 7 = very much.

The event(s) in this video could really happen.

43. The video you watched was about a new university policy requiring students to get H1N1 vaccinations before they could register for their next semester. This is a policy actually being considered at the university in the video.

The producers of this video are collecting letters of support for this policy. As part of our agreement with the video producers, we have agreed to allow viewers in this experiment to respond to this issue here. If you would like to respond to the video producers with the note supporting mandatory campus H1N1 vaccinations you may do so in the following text box.

44. Were you offered extra credit for your participation in this experiment?
21. Mixed Mode Questions - Transportation

45. Now think back about how you FELT when you were watching the video. For each of the statements below please select the number on a seven-point scale that best represents your opinion about the video you just watched, where 1 = not at all and 7 = very much.
46. For the next set of questions, please recall how you felt about the CHARACTERS when you were watching the video. For each of the statements below please select the number that best represents your opinion about the video you just watched, where 1 = not at all and 7 = very much.

47. The video you watched requested that viewers email letters of support for mandatory H1N1 vaccinations. The purpose of these support letters was to encourage the university to adopt that policy for the upcoming semester.

As part of our agreement with the video producers, we have agreed to allow viewers in this experiment to respond to this request here. If you would like to respond to the video producers with the note supporting mandatory campus H1N1 vaccinations you may do so in the following text box.

48. Were you offered extra credit for your participation in this experiment?
23. Non-narrative Questions - Transportation

49. Now think back about how you FEELT when you were watching the video. For each of the statements below please select the number on a seven-point scale that best represents your opinion about the video you just watched, where 1 = not at all and 7 = very much.
24. Non-narrative Questions - Character Identification

50. For the next set of questions, please recall how you felt about the PEOPLE IN THE VIDEO when you were watching the video. For each of the statements below please select the number that best represents your opinion about the video you just watched, where 1 = not at all and 7 = very much.

51. The video you watched requested that viewers email letters of support for mandatory H1N1 vaccinations. The purpose of these support letters was to encourage the university to adopt that policy for the upcoming semester. As part of our agreement with the video producers, we have agreed to allow viewers in this experiment to respond to this request here. If you would like to respond to the video producers with the note supporting mandatory campus H1N1 vaccinations you may do so in the following text box.

52. Were you offered extra credit for your participation in this experiment?
24. Non-narrative Questions - Character Identification

50. For the next set of questions, please recall how you felt about the PEOPLE IN THE VIDEO when you were watching the video. For each of the statements below please select the number that best represents your opinion about the video you just watched, where 1 = not at all and 7 = very much.

51. The video you watched requested that viewers email letters of support for mandatory H1N1 vaccinations. The purpose of these support letters was to encourage the university to adopt that policy for the upcoming semester. As part of our agreement with the video producers, we have agreed to allow viewers in this experiment to respond to this request here. If you would like to respond to the video producers with the note supporting mandatory campus H1N1 vaccinations you may do so in the following text box.

52. Were you offered extra credit for your participation in this experiment?
25. Control Group Semantic differential rigging

53. As part of the university, we have been asked to survey students about the following subject matter. In an effort to improve the health and safety on this campus, the President Hitt is considering several new health policies for next semester. One idea being seriously considered is having the University of Central Florida REQUIRE all students to be vaccinated against the H1N1 virus prior to this fall’s registration for Spring 2011 classes. Please indicate what you think about this idea. For each of the words below please select the number on a seven-point scale that best represents your opinion about this policy, from 1 = not at all to 7 = very much.

"The University of Central Florida REQUIRING all students to be vaccinated against the H1N1 virus prior to this fall’s registration for Spring 2011 classes (is) __________."
54. As part of the university, we have been asked to survey students about the following subject matter. In an effort to improve the health and safety on this campus, the President Hitt is considering several new health policies for next semester. One idea being seriously considered is having the University of Central Florida REQUIRE all students to be vaccinated against the H1N1 virus prior to this fall’s registration for Spring 2011 classes. Please indicate what you think about this idea. For each of the words below please select the number on a seven-point scale that best represents your opinion about this policy, from 1 = not at all to 7 = very much.

“I __________ (with) the idea of the University of Central Florida REQUIRING all students to be vaccinated against the H1N1 virus prior to this fall’s registration for Spring 2011 classes.”

55. “I think the idea of the University of Central Florida REQUIRING all students to be vaccinated against the H1N1 virus prior to this fall’s registration for Spring 2011 classes is __________.”
27. Control Group Flu History Questions

Please provide information about your own PAST HISTORY with flu vaccines by checking the appropriate space in the table below.

56. This year, how likely are you to be vaccinated against...

57. Were you vaccinated for H1N1 during the past flu season?
   ☐ Yes
   ☐ No

58. Do you usually get a flu vaccination in flu season?
28. Control Group video (The Guild)

Please watch the videos below. When you have finished these videos, scroll down and answer the questions on this page.
59. Before getting into the specific questions, I am interested in what you were thinking about while you were watching the video. You might have had ideas all favorable to the video, all opposed, all irrelevant to the video, or a mixture of the three. Any case is fine; simply list what it was that you were thinking during the last few minutes.

*Simply write down the first idea that comes to mind in the first box, etc.
*Please put only one idea or thought in a box.
*You should try to record only those ideas that you were thinking while watching the video.
*Please state your thoughts and ideas as concisely as possible...a phrase is sufficient.
*Ignore spelling, grammar, and punctuation.

Take about 2 - 3 minutes to write your thoughts. We have deliberately provided more space than we think most people will need to ensure that everyone would have plenty of room to write the ideas they had during the video. So don’t worry if you don’t fill every space. Please be completely honest and list all of the thoughts you had.
60. The following questions relate to your opinion of the ACTORS in the student video you just watched. For each of the statements below please select the number on a seven-point scale that best represents your opinion about the video you just watched, where 1 = not at all and 7 = very much.

61. Did you enjoy the video?
29. Control Group Video Quality Questions

62. The following questions have to do with your OVERALL OPINION of the student video you just watched. For each of the statements below please select the number on a seven-point scale that best represents your opinion about the video you just watched, from 1 = not at all to 7 = very much.
30. Control Group - Transportation

63. Now think back about how you FEELT when you were watching the video. For each of the statements below please select the number on a seven-point scale that best represents your opinion about the video you just watched, where 1 = not at all and 7 = very much.
31. Control Group - Character Identification

64. For the next set of questions, please recall how you felt about the CHARACTERS when you were watching the video. For each of the statements below please select the number that best represents your opinion about the video you just watched, where 1 = not at all and 7 = very much.

65. Were you offered extra credit for your participation in this experiment?

☐ 9
32. Official Debrief

DEBRIEFING FORM

FOR THE STUDY ENTITLED:
"The role of narrative persuasion in ELM"

Dear Participant;

During this study, you were asked to watch one of 6 student-produced web videos. Following the video, you were asked to answer several survey questions relating to the video you watched. You were told that the purpose of the study was to evaluate audience responses to different types of message formats, specifically, student videos delivered in a web based format. The actual purpose of the study was to evaluate the persuasive effects of these videos.

We did not tell you everything about the purpose of the study because when people are aware of persuasive intent they are more likely to actively counterargue and are less likely to evidence persuasion. This is especially true about persuasion through narrative formats; awareness of the persuasive intent of a narrative has been shown to effectively neutralize persuasion.

You are reminded that your original consent document included the following information:

"Participation in this study is completely voluntary: whether or not you take part is up to you. So you should take part only if you want to, and if you change your mind once you start you can stop participating. You can also skip questions if you so desire. Whatever you decide it will not be held against you."

If you have any concerns about your participation or the data you provided in light of this disclosure, please discuss this with us. We will be happy to provide any information we can to help answer questions you have about this study.

If your concerns are such that you would now like to have your data withdrawn, and the data is identifiable, we will do so.

STUDY CONTACT FOR QUESTIONS ABOUT THE STUDY OR TO REPORT A PROBLEM: If you have questions, concerns, or complaints or think the research has hurt you: Rebekah Lane, Graduate Student, Mass Communication Program, Nicholson School of Communication, 813-714-1400 or Dr. Ann Miller, Faculty Supervisor, Nicholson School of Communication at 407-823-2602 or by email at aemiller@mail.ucf.edu.

IRB CONTACT ABOUT YOUR RIGHTS IN THE STUDY OR TO REPORT A COMPLAINT: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3248 or by telephone at (407) 823-2901.

Please again accept our appreciation for your participation in this study.
Thank you for completing our survey!

When you select the "Done" button you will be redirected to a different survey. This new survey will apply to you only if you were offered extra credit by your instructor for completing this survey. This survey is not connected to the information you just provided. It will allow you to add your name to the list of students who completed this experiment.
APPENDIX E: UCF IRB LETTER
Approval of Human Research

From: UCF Institutional Review Board #1
FWA00006351, IRB09000118

To: Rebekah M. Lane

Date: September 01, 2010

Dear Researcher,

On September 1, 2010, the IRB approved the following human participant research until 8/31/2011 inclusive:

- **Type of Review:** Submission Response for UCF Initial Review Submission Form
- **Project Title:** The role of narrative persuasion in ELM
- **Investigator:** Rebekah M. Lane
- **IRB Number:** SBE-10-07088
- **Funding Agency:** None

The Continuing Review Application must be submitted 30 days prior to the expiration date for studies that were previously expedited, and 60 days prior to the expiration date for research that was previously reviewed at a convened meeting. Do not make changes to the study (i.e., protocol, methodology, consent form, personnel, site, etc.) before obtaining IRB approval. A Modification Form cannot be used to extend the approval period of a study. All forms may be completed and submitted online at [http://irb.research.ucf.edu](http://irb.research.ucf.edu).

If continuing review approval is not granted before the expiration date of 8/31/2011, approval of that research expires on that date. When you have completed your research, please submit a Study Closure report to IRB so that IRB records will be accurate.

Use of the approved, stamped consent document(s) is required. The new form supersedes all previous versions, which are now invalid for further use. Only approved investigators (or other approved key study personnel) may solicit consent for research participation. Participants or their representatives must receive a copy of the consent form(s).

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Joseph Biedrzycki, DVM, UCF IRB Chair: this letter is signed by:

Signature applied by Jessica Turchin on 09/01/2010 10:08:32 AM EDT

IRB Coordinator
LIST OF REFERENCES


Green, M.C. (2004). Transportation into narrative worlds: The role of prior knowledge and perceived realism. *Discourse Processes*, 38, 247–266.


