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THE ROLE OF SOCIAL DISTANCE IN NARRATIVE PERSUASION
FOR RISK PREVENTION

A Thesis
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
Communication, Technology, and Society

by
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Accepted by:
Dr. Erin M. Ash, Committee Chair
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ABSTRACT

This research was designed to examine how narrative messages about safe driving in media can influence favorable persuasive outcomes related to driving without cell phone use. Based on the entertainment overcoming resistance model (EORM) and construal level theory (CLT), three hypotheses were proposed that considered the role of narrative engagement and persuasive resistance in increasing favorable outcomes associated with safe driving. For this study in particular, CLT and EORM predicted that a narrative featuring low social distance would be more effective in increasing favorable persuasive outcomes by increasing narrative engagement and decreasing persuasive resistance. It was also predicted that narrative engagement and persuasive resistance would mediate the relationship between social distance and persuasive outcomes.

An experiment was conducted among college students using different versions of news stories as the stimuli to test the hypotheses. Results from a series of hierarchical regressions revealed that the low social distance narrative actually increased persuasive resistance, which was contrary to what was predicted. It was also found that one form of persuasive resistance was a significant mediator in the relationship between social distance and persuasive outcomes. This study suggests that when testing the propositions of construal level theory under the context of narratives, it is important to think about how CLT propositions will interact with narrative features and produce unique persuasive outcomes through narrative mechanisms.

Key words: narrative persuasion, social distance, health risk communication

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TABLE OF CONTENTS

TITLE PAGE	i
ABSTRACT	ii
ACKNOWLEDGMENTS	iii
TABLE OF CONTENTS	iv
CHAPTER	1
I. INTRODUCTION	1
II. LITERATURE REVIEW	4
Narrative Persuasion and Health Risk Communication.....	4
Narrative Engagement	7
Resistance to Persuasion	11
Construal Level Theory and Social Distance	16
III. METHODS	23
Participants	23
Design and Procedure.....	23
Stimulus Materials.....	23
Measures.....	24
IV. RESULTS	29
V. DISCUSSION.....	38
Theoretical Implication	39
Practical Implication	42
Limitations	42
Future Directions	44
REFERENCES	47

APPENDICES	61
A. Informed Consent Document	62
B. Stimulus	63
C. Post-Test Questionnaire	67

CHAPTER ONE

INTRODUCTION

Identified as one of the major causes of road traffic incidents (e.g., Patten, Kircher, Östlund, & Nilsson, 2004), distracted driving is estimated to account for about one quarter of all vehicle crashes (Stutts, Reinfurt, Staplin, & Rodgman, 2001). Talking and texting on a cell phone while driving can divert drivers' attention away from the road and the primary task of driving, which has been associated with a two to fourfold increase in the chance of road crash (McEvoy et al., 2005; Svenson & Patten, 2005). The National Highway Traffic Safety Administration (NHTSA) estimated that in 2015 approximately 3,477 people were killed and 391,000 individuals were injured by distracted driving. However, there are still approximately 660,000 drivers using electronic devices while driving during the day as estimated by NHTSA. Harris (2014) conducted a survey about people's texting while driving behavior and found 90% of respondents believed that sending and/or receiving text messages while driving is at least a dangerous behavior. However, although they considered it dangerous behavior, 45% of the adults surveyed had read text messages and 37% indicated they had sent a text message while driving. Therefore, it is important to study how to reduce people's distracted driving behaviors, such as talking on a phone, texting, social media use, internet searching, and other forms of mobile media use. These behaviors can be most effectively predicted by individual's behavioral intentions (Ajzen, 1991), such as their attitudes toward cell phone use while driving, their perceptions of the acceptability of using a cell phone while driving, and

their feelings about how much control they have when deciding the cell phone use while driving (Tian & Robinson, 2017).

Researchers are paying more attention to narrative persuasion in communication research and theory. Narrative can take on many forms, be it either long messages such as long stories, films, dramas, or episodes (e.g., Moyer-Gusé, Chung, & Jain, 2011; Murphy, Frank, Chatterjee, & Baezconde-Garbanati, 2013; Slater, Rouner, & Long, 2006), or short messages or stories that connect events and characters (e.g., Dunlop, Wakefield, & Kashima, 2008; Niederdeppe, Shapiro, & Porticella, 2011). As a narrative form of persuasive communication, personal stories have unique characteristics that can influence message processing and persuasion (Slater & Rouner, 2002). Narrative persuasion scholarship suggests narrative is a basic cognitive structure (Schank & Abelson, 1995) or story with “an identifiable beginning, middle, and end that provides information about scene, characters, and conflict” (Hinyard & Kreuter, 2007, p.778). Narrative can influence individual real-world beliefs and behaviors through audience immersion, perceived realism, and individual identification with characters in the story (Green & Brock, 2000; Moyer-Gusé, 2008; Slater & Rouner, 2002). There is a growing literature about narrative persuasion in health risk communication context focuses on how it can change people’s attitudes and intentions related to health behaviors (e.g., Hinyard & Kreuter, 2007; Kreuter et al., 2007; Murphy et al., 2013; Niederdeppe et al., 2011; Shen, Sheer, & Li, 2015). Based on the extended elaboration likelihood model (E-ELM; Slater & Rouner, 2002) and social cognitive theory (SCT; Bandura, 1986, 2004; Sood, Menard, & Witte, 2004), entertainment overcoming resistance model (EORM; Moyer-Gusé, 2008)

proposed that several narrative entertainment features (e.g., narrative involvement, identification, PSI, and similarity) should lead to story-consistent attitudes and behaviors by overcoming different types of resistance such as reactance, counterarguing, and selective avoidance. Since past research has consistently demonstrated that narrative messages are overall more persuasive than nonnarrative messages, current research explores the effects of unique features within narrative stories. In light of construal level theory (CLT; Trope & Liberman, 2003, 2010), this study examines the effects of character social distance in narratives.

This research was designed to examine how narrative persuasion about safe driving in media can influence audience behavioral intentions of driving without cell phone use. Based on the entertainment overcoming resistance model and CLT, we propose a series of hypotheses about that process that considers narrative engagement and persuasive resistance in increasing favorable outcomes toward safe driving. An experiment was conducted among college students using different versions of news stories as the stimuli to examine effects on participants' attitudes and intentions to test the effect of narrative messages feature different social distance.

CHAPTER TWO

LITERATURE REVIEW

Narrative Persuasion and Health Risk Communication

Narrative can be formally defined as “a representation of connected events and characters that has an identifiable structure, is bounded in space and time, and contains implicit or explicit messages about the topic being addressed” (Kreuter et al., 2007, p. 222). There is a wide range of narrative types, including “entertainment education” (e.g. soap operas, cartoons, or dramas that educate the public about health or social issues), reporting and journalism, literature, case histories, testimonials and storytelling (Kreuter et al., 2007). Narrative can be either long messages such as long stories, films, dramas, or episodes (e.g., Moyer-Gusé et al., 2011; Murphy et al., 2013; Slater et al., 2006), or short messages or stories that connect events and characters (e.g., Dunlop et al., 2008; Niederdeppe et al., 2011). There are various forms of narrative applications to promote health communication specifically, such as official stories, invented stories, firsthand experiential stories, secondhand stories of others that we retell, and culturally common stories (Schank & Berman, 2002). In comparison, non-narrative messages tend to be solely factual or evidence-based. Both narrative and non-narrative messages can carry the same health risk information. However, instead of delivering certain information by presenting and defending arguments about how and why to encourage or avoid behaviors, a narrative will convey it by representing a series of connected events, characters, and consequences. So far, it is well-established that narratives can influence audience’ real-

world beliefs and attitudes, which is known as narrative persuasion (e.g., Appel & Richter, 2007; Strange & Leung, 1999).

Narrative persuasion has been applied to various topics including communicating stigma, science learning, advertising and marketing, and promoting health behaviors (e.g., Chang, 2013; Escalas, 2004; Green, 2006; Kreuter et al., 2007; McComas & Shanahan, 1999; Nan, Futerfas, & Ma, 2017; Oliver, Dillard, Bae, & Tamul, 2012). The simplest reason for using narrative approaches in health communication is that narrative is the primary mode of human interaction through which we communicate with each other in everyday lives, and it is a comfortable and familiar way of giving and receiving information (Hinyard & Kreuter, 2007). The epistemological reason to apply narratives in health behavior interventions is that storing and retrieving stories from memory is necessary for understanding any situation. Schank and Berman (2002) suggest that “we construct and tell stories, in part, to teach ourselves what we know and what we think” (p. 294).

According to Kreuter et al. (2007), narrative has four distinctive capabilities: overcoming resistance, facilitating information processing, providing surrogate social connections, and addressing emotional and existential issues. Researchers have proposed that engaging, transporting stories are particularly valued since they may reduce audience resistance, help process new or difficult information, and produce cognitive and emotional effects which can in turn result in more positive attitudes and intentions; it can also provide social connections and role models for behavior change (Green, 2006; Kreuter et al., 2007). The EORM (Moyer-Gusé, 2008) focuses on how different reactions

to media narratives can overcome individual resistance to persuasion. Narrative content can cause multiple audience reactions such as identification with characters, parasocial interaction, transportation, perceived persuasive intent. These reactions can overcome audience reactance, counterarguing, perceptions of invulnerability, and selective avoidance to persuasion, which can in turn result in attitude or behavior change. More details will be discussed later in this section.

Past research studies have provided evidence that narratives are overall more effective than non-narratives by comparing narrative in the form of news exemplars or personal stories with non-narrative news. For example, Niederdeppe et al. (2011) conducted an experiment comparing a non-narrative evidence condition to a narrative condition, a print-based personal story of a patient. They found the narrative condition increased participants' belief that societal or environmental factors (e.g., barriers to diet and exercise) are in part responsible for obesity. Oliver et al.'s (2012) research comparing narrative news story (news exemplar about a health care issue using a specific person's experiences) with nonnarrative news story (news on the same issue including similar information). Results indicated that narrative condition created more compassion and more favorable attitudes towards stigmatized individuals and group, greater beneficial behavioral intentions, and more information-seeking behavior. Kim, Bigman, Leader, Lerman, and Cappella (2012) conducted two experiments which consistently showed that compared to those who read news articles without an exemplar, smokers reading news exemplars with personal stories about successful smoking cessation experienced greater narrative engagement, which was positively associated with intention to quit smoking.

Shen et al. (2015) conducted a meta-analysis ($N = 9,330$) to examine the persuasive effects of narratives in health communication, finding narrative has an overall small but significant overall impact on persuasion in health communication ($r = .063, p < .01$); when it comes to different health topics, narratives advocating detection and prevention behaviors led to significant effects, while those advocating cessation behaviors did not have significant effects. The communication field has witnessed the growing role of narrative persuasion or entertainment education in health promotion (Green, 2006; Hinyard & Kreuter, 2007; Kreuter et al., 2007). According to Kreuter et al. (2007), in order to establish the relative efficacy of narratives versus nonnarratives in health risk communication, we must first address the question of whether narratives are “indeed more effective than non-narrative communication for overcoming resistance, facilitating information processing, providing social connections, and representing emotional and existential issues” (p. 223). Among past research, narrative messages are proved to be overall more effective than nonnarrative messages, then we must also examine theoretical mechanisms that lead to their persuasive influence, such as narrative engagement and persuasive resistance.

Narrative Engagement

Narrative engagement, which encompasses individuals' involvement with both storylines and story characters, is considered as the most important mechanism of narrative persuasion (Busselle & Bilandzic, 2008; Green & Brock, 2000; Moyer-Gusé, 2008; Slater & Rouner, 2002; Tal-Or & Cohen, 2010). Narrative engagement can predict audience reactions and responses consistent with the persuasive goal (Green & Brock,

2000; Slater, 1997). For example, Kim et al. (2012) found that narrative form of message had a significant main effect on audience engagement, which was positively associated with their smoking cessation intention. Narrative engagement includes several distinct constructs such as transportation, identification, perceived similarity, parasocial interaction, and liking. It is important to distinguish between these related concepts because they are essentially different. Perceived similarity refers to the degree to which an individual perceives that he or she is similar to a character in various aspects, including physical attributes, demographic variables, beliefs, personality, or values (Eyal & Rubin, 2003; Hoffner & Cantor, 1991). Horton and Wohl (1956) defined parasocial interaction (PSI) as “the seeming face-to-face relationship between spectator and performer” (p. 215), which refers to the interaction between a viewer and a media character that can form a pseudo-relationship. Liking is the positive evaluations of a character (Cohen, 2001; Giles, 2002; Hoffner & Cantor, 1991). Under the current study’s context, identification and transportation will be the main focus.

Identification. Identification is suggested to be one of the important mechanisms through which narratives can change individual attitudes (Green, 2006; Slater & Rouner, 2002). In narrative communication, identification is an imaginative process through which readers adopt the perspective of a character and see the narrative events through the character’s eyes (Busselle & Bilandzic, 2008; Cohen, 2001). While identifying with a media character, a viewer imagines him/herself being that character and replaces his or her personal identity/role. Identification with media roles enables us to experience social reality from other perspectives which can in turn shape self-identity development and our

social attitudes (Erikson, 1994). In the past, researchers found identification with narrative characters is positively related to change in attitudes and beliefs (e.g., de Graaf, Hoeken, Sanders, & Beentjes, 2012; Igartua & Barrios, 2012), as well as intentions and actual behavior (e.g., Moyer-Gusé et al., 2011). For example, Nan et al. (2017) found that first-person narrative message resulted in significantly greater identification than the non-narrative message. Basil (1996) found that viewers had increased adoption of health messages promoted by celebrities they identified with in narrative messages. Moyer-Gusé et al. (2011) also found that narrative identification led to increased intention and actual behavior in discussion about sexual health. de Graaf et al. (2012) conducted an experiment about narrative persuasion and identification having participants read a narrative story that was told from one of two perspectives, with both characters having opposing opinions; they found that audience members identified more with the narrative character from whose perspective told the story; identification with certain character then led to posttest attitude more consistent with the character. In a study using the film highlighted the contribution of Mexican immigrants to the economies of the host countries, Igartua (2010) found positive association between viewers' identification with the characters in the film and their attitudes and beliefs with respect to immigration.

In sum, identification with characters in a narrative facilitates transportation and absorption into the story, which in turn leads to persuasion, as asserted by transportation-imagery theory (Green & Brock, 2002) and the E-ELM (Slater & Rouner, 2002).

Transportation. The notion “narrative transportation” was first coined by Gerrig (1993) within the context of novels. Transportation theory is defined by Green and Brock

(2000) as “a convergent process, where all the person’s mental systems and capacities become focused on the events occurring in the narrative” (p. 701). They suggest that once the audience gets involved with storylines in cognitive, affective, and image-based ways, the transportation experience may lead to individual psychological distance or even loss from real-world beliefs and/or knowledge. Green and Brock (2000) and other researchers (Kreuter et al., 2007) argued that transported viewers tend to use more of their cognitive resources and pay closer attention to the unfolding story. Slater and Rouner (2002) include transportation in their model of persuasion, the extended elaboration likelihood model (E-ELM). The E-ELM predicts that “in the context of narrative processing, absorption in the narrative may motivate deeper processing of a different kind” (p. 187), which can lead to audience supportive attitudes and behaviors according to the information provided in the message. Several previous investigations have shown that narrative format produces higher levels of transportation, which are positively associated with beliefs and attitudes. For example, Oliver et al. (2012) found that narrative story format led to higher levels of transportation, which can indirectly influence attitude through enhancing compassionate affect; this attitude can then predict stronger intentions to engage in actions associated with helping the target group. Kim et al. (2012) found the similar results within the context of anti-smoking. Transportation is found to be strongly related to viewers’ cancer knowledge, cancer diagnosis attitudes, and relevant behaviors such as seeking information and talking about cancer (Murphy et al., 2011). Nan, Futerfas, and Ma (2017) found a first-person perspective narrative message led to greater transportation than the non-narrative message. According to a meta-analysis ($N = 132$)

about narrative transportation conducted by van Laer, de Ruyter, Visconti, and Wetzels, (2014), narrative transportation increases when message receivers can identify with the story characters, imagine the plot, and perceive the story events may actually happen; transportation also increases when audience are more familiar with a story topic and pay more attention to the story. They also found that the increase of narrative transportation can lead to more story-consistent affective responses, decreased critical thoughts, and increased story-consistent beliefs, attitudes, and intentions. According to E-ELM and EORM, narrative engagement can eventually influence persuasive results through another important mechanism – resistance to persuasion.

Resistance to Persuasion

Under certain conditions narrative could be particularly effective in persuading people, particularly those who otherwise might show resistance towards persuasion (Green, 2006; Kreuter et al., 2007; Moyer-Gusé & Nabi, 2009; Slater & Rouner, 1996). In general, resistance can be defined as a reaction against change or simply opposing persuasion due to some perceived pressure for change (Knowles & Linn, 2004). An individual might show their resistance to behaviors by refusing to take an action or denying the effectiveness of the behavior; resistance towards persuasive messages may include completely overlooking the messages, counter-arguing the message statements, or denying the validity of the message due to the message source (Kreuter et al., 2007). Both E-ELM and EORM posit that viewers are less likely to resist the embedded persuasive message contained in narratives because they are in a more immersive and less critical state when engaging with the narrative plots (Shrum, 2004). Less resistance

makes it easier to influence personal beliefs, attitudes, and behavior. Previous studies pointed out narrative engagement was successful in enhancing behavioral intentions by reducing various types of resistance such as reactance, counterarguing, perceived invulnerability, and low self-efficacy (e.g., McQueen, Kreuter, Kalesan, & Alcaraz, 2011; Moyer-Gusé et al., 2011; Moyer-Gusé, Jain, & Chung, 2013; Moyer-Gusé & Nabi, 2009; Nan et al., 2017).

Reactance. Psychological reactance is one of the most important features of resistance, which is aroused when someone perceives the freedom is being threatened since humans have a need for freedom to choose their own attitudes and behaviors (Brehm, 1966; Brehm & Brehm, 1981). As a result of reactance, some persuasive messages are not only unsuccessful in promoting desired intention and behavior changes, but even cause an increase in the unhealthy or risky behaviors they are intended to prevent (Bensley & Wu, 2006; Burgoon, Alvaro, Grandpre, & Voulodakis, 2002; Bushman, 1998; Bushman & Stack, 1996). The EORM posits that message produced in a narrative format enables an audience member to become absorbed to the narrative world in which the story takes place; this can lead to the decrease of audience members' perceived persuasiveness of the message (Moyer-Gusé, 2008). It has been proven that message receivers are more likely to accept the influence if they perceive a message to have less persuasiveness (McGrane, Toth, & Allely, 1990; Weinstein, Grubb, & Vautier, 1986). In a research study using TV show episodes featuring drunk-driving behavior, Moyer-Gusé et al. (2013) found less perception of persuasive intent from the narrative message predicted less reactance among audience. Another research about

narrative and safe-sex intention revealed that reactance significantly inhibited behavioral intentions (Moyer-Gusé & Nabi, 2009).

Counterarguing. According to Slater and Rouner (2002), counterarguing is a form of resistance characterized by the “generation of thoughts that dispute or are inconsistent with the persuasive argument” (p. 180), such as negative or critical thoughts against narrative arguments. It is a key obstacle to achieve the persuasive goal (Brock, 1967; Petty & Cacioppo, 1986). The Extended Elaboration Likelihood Model (E-ELM) posits that when audiences are very absorbed in a narrative (i.e. transportation) and connected with characters in a narrative (i.e. identification), counterarguing would be suppressed and the persuasive effects would be enhanced (Slater & Rouner, 2002). Identification can reduce audience motivation to counterargue because identifying with the character is an enjoyable and immersive process (Cohen, 2001; Igartua, 2010; Moyer-Gusé & Nabi, 2009). Researchers argued that audience absorption in narrative and counterarguing are essentially incompatible and are inversely related processes (Dal Cin, Zanna, & Fong, 2004; Slater, 2006), because a message recipient is not being absorbed or transported if he/she is consciously aware and is raising refutation against a persuasive argument. Since identification is characterized by a loss of self-awareness, it should reduce motivation to generate counterarguments (Slater & Rouner, 2002). Empirical evidence offers support for the relationship between narrative engagement, counterarguing, and behavioral intention. Moyer-Gusé and Nabi (2009) found that identification with the narrative characters negatively predicted counterarguing, while transportation was positively associated with counterarguing. In a research about

entertainment narrative about sexual health, researchers found identification with the two main characters was associated with less counterarguing with the message, which led to significantly greater behavioral intentions (Moyer-Gusé et al., 2011). Another empirical research found that being more engaged with the narrative video (i.e. transportation) featuring breast cancer survivors was negatively associated with subsequent counterarguing, whereas identification with the characters was positively associated with counterarguing; counterarguing was positively associated with mammography barriers for breast cancer (McQueen et al., 2011).

Perceived invulnerability. Perceived invulnerability refers to the tendency that individual believes him/herself is unique, invulnerable, and that negative consequences of risky behavior will not affect him or her – which is also known as “personal fable” or “optimistic bias” (Goossens, Beyers, Emmen, & van Aken, 2003). The EORM posits that audience members would experience increased perceived vulnerability to certain threat if they identify with a character who is vulnerable to that threat, which can be explained by the vicarious cognitive and emotional process characterized by identification (Moyer-Gusé, 2008). Audience can vicariously experience the thoughts, emotions, behaviors, and consequences of the character during identification (Cohen, 2001). Based on this logic, the viewer may also feel the vulnerability the character is facing by identification. Evidence from recent research studies supports or partially supports this proposed process. Moyer-Gusé and Nabi (2009) found that identification with the main characters in the dramatic narrative significantly increased perceived vulnerability two weeks after participants were exposed to the narrative message, which in turn increased safe sex

intentions. Another empirical study revealed that narratives (versus nonnarratives) effectively increased audience skin cancer risk perception by influencing their ability to imagine themselves developing cancer (Janssen, van Osch, de Vries, & Lechner, 2013). Moreover, past studies revealed that perceived vulnerability is positively associated with individual behavioral intentions. Nan et al. (2017) found that perceived risk of getting HPV was a significant mediator of the relationship between text-based narrative message and intentions of getting free HPV vaccine. de Wit, Das, and Vet (2008) found that narratives are more powerful than nonnarrative messages in increasing homosexual men's perceived risk regarding infecting with hepatitis B virus and then increasing their intention in getting vaccination.

Self-efficacy. Self-efficacy refers to viewers' confidence in his or her ability to enact certain behavior, which may be influenced by media roles (Bandura, 1986). A lack of self-efficacy may be accounted for individual's unwillingness in conducting certain behavior. For example, when it comes to sexual health and safer sex topics, people often perceive that they lack the appropriate social script for this conversation and then avoid actually discussing about it (Allen, Emmers-Sommer, & Crowell, 2002; Baxter & Wilmot, 1985). Bandura's (1986) social cognitive theory (SCT) helps explain how narrative engagement with narrative characters can influence viewers' self-efficacy. SCT posits that people may develop rules to direct their own following actions through observing others' behaviors, including what have been done by media figures. According to this theory, audiences are more driven to perform certain behaviors when attractive or similar models are rewarded by performing relevant behaviors, and, on the contrary,

audiences are unmotivated to perform it when models or characters are punished or fail to get rewards from doing so (Bandura, 2004). Bandura (2004) further claims that identification with attractive and rewarded characters as well as perceived similarity with them can enhance audience's perceived relevance of certain behaviors and their self-efficacy for performing them, which can in turn boost behavioral effects proposed by SCT. Moyer-Gusé et al. (2011) found that identification with narrative characters who modeled sexual discussions predicted greater self-efficacy that resulted in greater behavioral intentions which in turn led to actual behavior two weeks later. Based on this logic and SCT, identification may facilitate people's self-efficacy not only in modeling beneficial behaviors but also in avoiding risky behaviors which can cause negative consequences.

Construal Level Theory and Social Distance

Construal level theory (CLT) is a framework that suggests perceived psychological distance can influence thoughts and behavior and is also an important factor in evaluating objects and events (Yaacov Trope & Liberman, 2010; Yaacov Trope, Liberman, & Wakslak, 2007). CLT distinguishes between high and low levels of construal framing. High-level construals are characterized as abstract, schematic, and decontextualized information that extract the gist from the available information; high-level construals can also represent things about distant future. As compared to high-level construals, low-level construals are rich in details and usually contain secondary, incidental, and peripheral features; low-level construals can also represent near future events (Trope & Liberman, 2003). For example, when describing doctoral students' lives,

the high-level construal would be “they work very hard” (abstract and representing the gist), while the low-level construal would be “they take four classes and work as graduate assistants for 20 hours per week” (rich in details and showing secondary information).

These two different construals can lead to differing perceptions of psychological distance. In turn, according to CLT, psychological distance can determine whether primary/essential characteristics, or secondary/peripheral characteristics are used as the basis of evaluation. There are different dimensions of psychological distance, including time (temporal distance), space, social distance, and hypotheticality. The most common construal types that have been considered in health communication are temporal framing and social distance. Previous work has shown how each can affect people’s mental construal and associated evaluative consequences (Trope et al., 2007). According to CLT, high-level construals should be more influential when making judgments about a psychologically distant entity (e.g. others or groups). In contrast, low-level construals should be more persuasive when making judgments about entities with small psychological distance (e.g. self or individual). These propositions are supported by a number of studies which will be discussed in detail next.

The exploration of construal level theory originated with a particular focus on temporal distance. According to the theory, people have very distinct psychological associations with temporal distances, that is, the actual distance between a reference point (e.g. today) and the point of occurrence of the event under consideration (e.g. tomorrow or next year) (Liberman & Trope, 1998; Trope & Liberman, 2000). When we apply psychological effects of temporal distance to temporal frames in health and risk

communication, it is likely to trigger subjective associations between the use of temporal reference frames (like day or year) and a near or distant future that can result in temporal distance effects. For example, past research showed the use of temporal framing can influence the perceived proximity and concreteness of the event (Chandran & Menon, 2004). In health risk information, a day frame would be considered a low construal level frame since the risk is construed as more proximal (closer in time) and concrete (e.g., every day, more than 38,000 people become newly infected with a given disease); whereas a year frame would be considered high construal level because it moves the event further off in time (less proximal) and makes it more abstract (e.g., every year, more than 14 million people become newly infected with a given disease). This can influence individuals' risk perceptions and behavioral intentions. Chandran and Menon (2004) found that when the outcome is framed negatively (i.e., succumbing to heart disease), the day frame (low-level construals) is more persuasive than the year frame (high-level construals) by making the health hazard look more threatening. On the other hand, when the outcome is framed positively (i.e., averting heart disease), the day frame (low-level construals) makes the health hazard less threatening than the year frame (high-level construals). Gerend and Cullen (2008) found that a message featuring short-term consequences is more effective than message featuring long-term consequences in persuading college students to have fewer drinks per drinking occasion. This indicates that messages with low construal frames tend to be more persuasive in changing personal behavioral intentions.

Social distance (e.g., self vs. other, in-group vs. out-group), which is the focus of the current study, is another important focus of construal level theory, including in health and risk communication. Social distance, like temporal distance, is expected to influence the way people mentally represent the same information or event. Based on the premise of CLT, when social distance increases, information will be represented in more abstract, schematic, and decontextualized terms and considered as high-level construals. However, when social distance decreases, information will be represented in more concrete, detailed, and contextualized terms and considered as low-level construals. Nan (2007) explored one form of social distance – self and others – in construal level theory. Nan’s experiment ($N = 135$) showed that a societal frame (abstract and decontextualized high-level construals, e.g., if we take a bus instead of driving a car, the atmosphere on our earth will be cleaner) is more persuasive when people make judgments for socially distant entities (e.g. others) versus proximal entities (e.g. selves). However, the persuasiveness of an individual frame (concrete and contextualized low-level construals, e.g., if we take a bus instead of driving a car, the atmosphere around you will be cleaner) did not significantly affect judgments about issues with high or low social distance. Zhou and Niederdeppe (2017) considered personalization as a form of social distance. They conducted an experiment that manipulated whether a narrative was identifiable (by including or not including the main character’s name(s), photo, gender, and age(s) to make the character identifiable or unidentifiable), individualized (by featuring just one character or eight characters to make the narrative versions as individual or collective), and included the character’s inner states descriptions (by directly citing the character’s

expression of her thoughts and concerns or simply substituting these quotes with general descriptions). They found that depersonalized depictions using unidentifiable collective characters without inner states descriptions (high construal level) were more persuasive in increasing policy support. This result suggests that a message with high social distance is more effective in promoting public policies. Since public policy is a societal issue, people's policy support is considered as a judgement about high social distance. Their findings are consistent with Nan's (2007) conclusion that messages with high-level construal are more persuasive when people make judgments about socially distant entities. Taken together, these research results are also consistent with CLT predictions in general – that high-level construals will have greater impact on judgments as psychological distance increases. However, more evidence is needed to support the CLT proposition that low-level construals (message features associated with low social distance) will be more influential in judgments about psychologically proximal entity (e.g. self).

To that end, the current study considers the social distance of characters within a narrative. Based on CLT research, it is predicted that a story with a socially proximal protagonist (low-construal) will be more effective than a story featuring a socially distant protagonist (high-construal). Specifically, audiences exposed to the narrative with a socially proximal character (i.e., college student) are likely to mentally construct the issue using concrete, detailed, and contextualized features. Consequently, they should elaborate more on individual responsibilities for the negative consequences of engaging in risky behaviors, which should produce more favorable persuasive outcomes.

In sum, based on CLT and previous literature on narrative persuasion, message with low-level construals (i.e., a socially proximal character) should be more persuasive in influencing self-evaluations of attitudes and behaviors. Therefore, it is expected:

H1: A narrative featuring a socially proximal character will be more effective than a narrative featuring a socially distant character in increasing favorable outcomes related to safe driving.

According to Moyer-Gusé (2008) entertainment overcoming resistance model, narrative messages can produce a unique feature, narrative engagement, which includes elements such as transportation and identification. Based on the logic of CLT, audiences should tend to perceive concrete and contextualized low-level construals when reading socially proximal narrative, but perceive abstract and decontextualized high-level contruals when reading socially distant narrative. Audiences would therefore feel a closer psychological distance to the character in a low social distance narrative, which would make them more likely to identify with the character and engage in the story. EORM also suggests that narrative can reduce audience resistance towards persuasion, including counterarguing, reactance, low self-efficacy, and perceived invulnerability. Based on CLT, low social distance narratives may create more perceived similarity, which can reduce persuasive resistance at an even greater level. In line with the literature of EORM and CLT, it is predicted that:

H2: A narrative featuring a socially proximal character will be more effective than a narrative featuring a socially distant character in (a) increasing narrative engagement and (b) reducing persuasive resistance.

Through a review of past narrative research, we also know that narrative engagement and persuasive resistance are key mechanisms in the persuasive power of narratives. A convincing body of research suggests increased narrative engagement leads to more favorable outcomes regarding personal attitudes and behavior. Evidence also suggests decreased persuasive resistance that accompanies narratives produces favorable outcomes. Following this logic and based on CLT, we expect that:

H3: The effect of character social distance on favorable outcomes related to safe driving will be mediated by (a) narrative engagement, and (b) persuasive resistance.

CHAPTER THREE

METHODS

Participants

Participants were students ($N = 123$) from undergraduate communication courses at a large southeastern U.S. university. They were awarded a nominal amount of extra credit for completing the study. Participants were female (58%) and male (42%) college students aged over 18 years ($M = 19.66$, $SD = 2.10$). Most of the participants identified themselves as white/Caucasian (83.2%), followed by African American/Black (6.3%), Asian (3.5%), American Indian/Alaskan (1.4%), Pacific Islander (0.7%), and 4.9% indicated they identified as another race. Participants could identify with multiple racial and ethnic categories or skip these items, so numbers need not total to 100%.

Design and Procedure

A between-participants experiment was conducted online to test the hypotheses. Participants anonymously accessed a survey website (Qualtrics). After providing informed consent, participants answered questions about their demographic background and frequency of cell phone use while driving. They were randomly assigned to read one of two experimental messages about distracted driving representing a high social distance narrative condition ($n = 59$) and a low social distance narrative condition ($n = 64$). After reading the message, participants answered questions about their engagement with the message, resistance to persuasion, attitudes toward distracted driving and behavioral intentions.

Stimulus Materials

Participants read a news story about a car crash caused by texting and driving that resulted in a woman's death. The story featured a character with either high social distance or low social distance to participants, who were college students. The news story focused on a woman, Amy Clark, who was killed in a car accident due to her texting and driving behavior. The news story featuring a high social distance character described Amy Clark as a 39-year-old local bank teller. The other version of the same story featuring a low social distance character describes Amy Clark as a 19-year-old college student. Since participants are college students of a similar age, they should perceive low social distance with the narrative version with Amy Clark as a 19-year-old college student compared to the other version with Amy Clark as a 39-year-old local bank teller. The stimuli materials are available in the Appendix.

Measures

Narrative engagement. Narrative engagement was represented by two variables related to involvement in story lines and with the character: transportation and identification.

Transportation. Transportation was measured using ten items adapted from de Graaf et al. (2012) to assess the following aspects of transportation – imagery, being in narrative world, and attentional focus. Each item was measured on a 7-point Likert-type scale (1 = Strongly disagree; 7 = Strongly agree). Example items include: “I had a vivid image of the events in the story”; “I pictured the described events”; “While I was reading the story, I visualized the events that took place in it”; and “My attention was focused on

the events that were described in the story”. These ten items comprised a reliable composite measure ($M = 5.12$, $SD = 1.05$, Cronbach’s $\alpha = .92$).

Identification. The items used to measure identification were adapted from Cohen (2001) with five statements on a 7-point Likert-type scale (1 = Strongly disagree; 7 = Strongly agree). Example items include: “In my imagination it was as if I was the person(s) in the story”; “I had the feeling I went through what the person(s) in the story went through at certain moments”; and “While I was reading the story, I pictured what it would be like for the person(s) in it to experience what was described.” These five items comprised a reliable composite measure ($M = 4.48$, $SD = 1.19$, Cronbach’s $\alpha = .85$).

Persuasive resistance. Persuasive resistance was represented by four variables related to people’s reaction against change or opposing persuasion intended by media messages: perceived (in)vulnerability, reactance, counterarguing, and self-(in)efficacy.

Perceived (in)vulnerability. Perceived vulnerability was measured with three items adapted from Witte, Meyer, and Martell (2001) on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree). For example, “I might get into car accident at some point if I conduct distracted driving behaviors such as using cell phone while driving”. These three items did not comprise a reliable composite measure (Cronbach’s $\alpha = .625$). Therefore, the variable was not included in analyses.

Reactance. Reactance was measured with four items on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree) adapted from previous research (Hall et al., 2017; Moyer-Gusé et al., 2013; Moyer-Gusé & Nabi, 2009). Sample items include, “The story tried to pressure me to think a certain way,” and “The story tried to force its

opinions on me”. These four items comprised a reliable composite measure ($M = 3.42$, $SD = 1.28$, Cronbach’s $\alpha = .83$).

Counterarguing. Counterarguing was measured with four items on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree) adapted from previous research (Moyer-Gusé & Nabi, 2009; Nabi, Moyer-Gusé, & Byrne, 2007). For example, “I sometimes found myself thinking of ways I disagreed with how the issue was presented” and “I found myself looking for flaws in the way information was presented in the story”. These four items comprised a reliable composite measure ($M = 3.04$, $SD = 1.35$, Cronbach’s $\alpha = .89$).

Self-(in)efficacy. Items for self-efficacy were adapted from Dillard and Nabi (2006) as well as Tian and Robinson (2017) on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree), including “The story made me feel able to avoid reading text messages while driving” and six other items. Similar questions were asked on intention to send text messages, to answer phone calls, to make phone calls, to read/view social media while driving, to interact with friends on social media, and to post on social media while driving. These seven items comprised a reliable composite measure ($M = 5.84$, $SD = .85$, Cronbach’s $\alpha = .80$).

Persuasive outcomes. Persuasive outcomes were represented by two variables related to people’s story-related attitude and behavioral intentions.

Attitude. Attitudes toward using cell phone while driving were measured with seven statements on a 7-point scale adapted from Tian and Robinson (2017). Sample questions include “For me, reading text messages while driving would be,” with each

statement is assessed with five attitude scales (bad/good; negative/positive; awful/nice; harmful/beneficial; foolish/wise) (Beck, 1981). Similar questions were asked for intention to send text messages, to answer phone calls, to make phone calls, to read/view social media while driving, to interact with friends on social media, and to post on social media while driving. These seven items comprised a reliable composite measure ($M = 5.90$, $SD = .77$, Cronbach's $\alpha = .87$).

Behavioral intentions. The outcome measure is the respondent's behavioral intention to avoid cell phone use while driving. Measures of behavioral intention were adapted from White, Walsh, Hyde, and Watson (2012), the responses were reported on a 7-point scale ranging from 1 (extremely unlikely) to 7 (extremely likely). Sample items include, "It is likely that I will read a text message while driving in the next week". Other six similar questions were asked on intention to send text messages, to answer phone calls, to make phone calls, to read/view social media while driving, to interact on social media, and to post on social media while driving. These seven items comprised a reliable composite measure ($M = 3.37$, $SD = 1.29$, Cronbach's $\alpha = .87$).

Frequency of cell phone use while driving. Responses to how frequent participants use cell phone while driving were reported with seven items on a 7-point scale ranging from 0 (never) to 6 (always). Sample items include, "How often do you read a text message while driving?" Six other similar questions were asked to assess how frequently participants send text messages, answer phone calls, make phone calls, read/view social media while driving, interact on social media, and post on social media

while driving. These seven items comprised a reliable composite measure ($M = 1.94$, $SD = 1.16$, Cronbach's $\alpha = .86$).

CHAPTER FOUR

RESULTS

Independent samples t-tests revealed no effects of gender on narrative engagement, persuasive resistance, and outcomes. The results of univariate linear regression tests also did not reveal effects of age on narrative engagement, persuasive resistance, and outcomes. However, results of univariate linear regression tests revealed that frequency of driving under the distraction of cell phone use is a significant predictor for self-efficacy ($B = -.63, p < .01$), attitudes ($B = -.50, p < .01$), and behavioral intentions ($B = -.76, p < .01$) toward safe driving. In light of research that has found persuasive effects differ based on past or current behaviors related to the message, the role of frequency was considered in all analyses (e.g., past sexual behavior, Moyer-Gusé & Nabi, 2010; past drinking-and-driving behavior, Moyer-Gusé, Jain, & Chung, 2012).

Table 1

Correlations for key variables

	1	2	3	4	5	6	7
1. Transportation							
2. Identification	.44**						
3. Attitude	.20*	.04					
4. Behavioral Intentions	.06	.02	.41**				
5. Counterargument	-.04	.07	-.22*	-.20*			
6. Self-Efficacy	.06	.03	.42**	.52**	-.14		
7. Reactance	-.01	-.01	-.16	-.07	.60**	-.05	
8. Frequency	.03	.04	-.50**	-.76**	.12	-.63**	.03

Note. $p < .01$ **, $p < .05$ *

To test the hypothesis that a narrative featuring a socially proximal character will be more effective than a narrative featuring a socially distant character in increasing

favorable persuasive outcomes (H1), character social distance was first dummy coded with the high social distance narrative serving as the reference (omitted) category. Subsequently, a hierarchical multiple regression analysis was conducted because we also consider whether participants' frequency of using cell phone while driving moderates the relationship between social distance and persuasive outcomes. In the first step, two lower-order terms were included: social distance and frequency of behavior. Results revealed that social distance and frequency accounted for a significant amount of variance in persuasive outcomes, including attitude, $R^2 = .25$, $F(2, 120) = 19.48$, $p < .001$, and behavioral intentions, $R^2 = .58$, $F(2, 120) = 83.18$, $p < .001$. Frequency was the only significant predictor for both attitude ($\beta = -.50$, $p < .001$) and behavioral intention ($\beta = -.76$, $p < .001$), but social distance did not significantly predict either attitude ($\beta = .00$, $p = .96$) or behavioral intention ($\beta = .00$, $p = .98$). Next, the interaction term between social distance and frequency of behavior was added to the regression model. Table 2 reports the results of this analysis and shows that, Social Distance X Frequency interaction didn't account for a significant proportion of the variance in narrative engagement, in predicting attitude, $\Delta F(1, 119) = .11$, $\Delta R^2 = .00$, $p = .74$, or behavioral intentions, $\Delta F(1, 119) = .00$, $\Delta R^2 = .00$, $p = .99$. Therefore, we failed to support H1.

To test the hypothesis that a narrative featuring a socially proximal character will be more effective than a narrative featuring a socially distant character in increasing narrative engagement (H2a), character social distance was first dummy coded with the high social distance narrative serving as the reference (omitted) category. Subsequently, a hierarchical multiple regression analysis was conducted because we also consider

whether participants' frequency of using cell phone while driving moderates the relationship between social distance and narrative engagement. In the first step, two lower-order terms were included: social distance and frequency of behavior. These two variables did not account for a significant amount of variance in transportation, $R^2 = .00$, $F(2, 120) = .05$, $p = .95$, nor identification, $R^2 = .01$, $F(2, 120) = .82$, $p = .45$. Next, the interaction term between social distance and frequency of behavior was added to the regression model. Table 2 reports the results of this analysis and shows that, Social Distance X Frequency interaction did not account for a significant proportion of the variance in transportation, $\Delta F(1, 119) = .71$, $\Delta R^2 = .01$, $p = .40$, nor identification, $\Delta F(1, 119) = .32$, $\Delta R^2 = .00$, $p = .57$. Therefore, H2a was not supported.

Table 2

<i>Hierarchical regression for Social Distance X Frequency on Persuasive Outcomes</i>				
	Persuasive Outcomes			
	Attitude		Behavioral Intentions	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Step 1				
Constant	228.78	4.72	43.96	1.18
Social Distance	.21	4.25	-.02	1.07
Frequency	-1.63***	0.26	-.85***	.07
R^2	.25		.58	
Step 2				
Constant	229.92	5.84	43.96	1.46
Social Distance	-2.19	8.33	-.03	2.09
Frequency	-1.72***	.36	-.85***	.09
Social Distance X Frequency	.18	.53	.00	.13
R^2	.25		.58	
R^2 change	.00		.00	

Note. $p < .001$ ***

Table 2 Continued

Hierarchical regression for Social Distance X Frequency on Narrative Engagement

	<u>Narrative Engagement</u>			
	Transportation		Identification	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Step 1				
Constant	50.60	2.12	21.35	1.19
Social Distance	.22	1.91	1.29	1.07
Frequency	.04	.12	.03	.07
R^2	.00		.01	
Step 2				
Constant	49.32	2.61	21.83	1.47
Social Distance	2.91	3.73	.27	2.10
Frequency	.13	.16	-.01	.09
Social Distance X Frequency	-.20	.24	.08	.13
R^2	.01		.02	
R^2 change	.01		.00	

Table 2 Continued

Hierarchical regression for Social Distance X Frequency on Persuasive Resistance

	<u>Persuasive Resistance</u>					
	Self-Efficacy		Counterargument		Reactance	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Step 1						
Constant	47.78	.93	10.85	1.08	13.94	1.03
Social Distance	-1.19	.84	.52	.97	-1.01	.93
Frequency	-.46***	.05	.08	.06	.02	.06
R^2	.40		.02		.01	
Step 2						
Constant	46.29	1.13	12.27	1.32	14.85	1.27
Social Distance	1.94	1.61	-2.46	1.88	-2.92	1.81
Frequency	-.35***	.07	-.03	.08	-.05	.08
Social Distance X Frequency	-.23*	.10	.22 [#]	.12	.14	.11
R^2	.43		.04		.02	
R^2 change	.02		.03		.01	

Note. $p < .001$ ***, $p < .05$ *, $p < .10$ [#]

The same hierarchical multiple regression analysis technique was employed to test the hypothesis that a narrative featuring a socially proximal character will be more

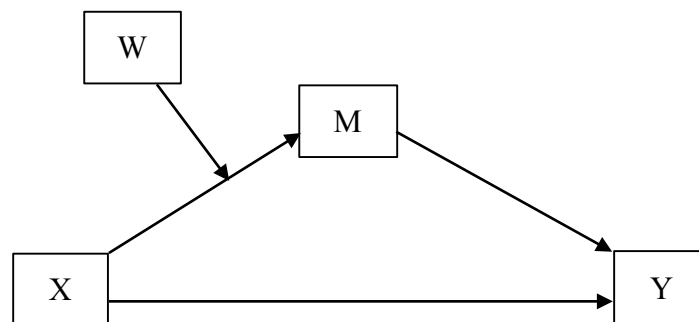
effective than a narrative featuring a socially distant character in reducing persuasive resistance (H2b), when current driving behavior serves as a moderator in the relationship between social distance and persuasive resistance. In the lower-order model, social distance and frequency accounted for a significant amount of variance in one type of narrative resistance, self-(in)efficacy, $R^2 = .40$, $F(2, 120) = 40.53$, $p < .001$; while these two variables did not account for a significant amount of variance in other types of narrative resistance, specifically counterargument, $R^2 = .02$, $F(2, 120) = .95$, $p = .39$, and reactance, $R^2 = .01$, $F(2, 120) = .66$, $p = .52$. After the interaction term was added to the regression model, Table 2 reports the results of this analysis and shows that, a significant Social Distance X Frequency interaction for self-efficacy was obtained, $\Delta F(1, 119) = 5.10$, $\Delta R^2 = .02$, $p < .05$. Examination of the interaction plot showed that as frequency of using cell phone while driving increased, high social distance tended to be more persuasive in reducing persuasive resistance. This is contradictory to what was predicted in H2b. For those who don't frequently use cell phone while driving, the persuasiveness of different social distances was not significantly different. The Social Distance X Frequency interaction did not account for a significant proportion of the variance in the other types of persuasive resistance, including counterargument, $\Delta F(1, 119) = 3.40$, $\Delta R^2 = .03$, $p = .07$, and reactance, $\Delta F(1, 119) = .32$, $\Delta R^2 = .00$, $p = .57$. Although H2 was not supported, it should be noted that high social distance was more effective in increasing the self-efficacy of those participants who use cell phone while driving very frequently.

To test the hypothesis that narrative engagement and persuasive resistance mediate the relationship between social distance and persuasive outcomes (H3), Hayes

(2013) PROCESS macro for SPSS for conducting conditional process analyses was used. In each model for this analysis, character social distance represented the independent variable (X), attitudes or behavioral intentions were entered as the dependent variable (Y), a form of narrative engagement (identification or transportation) or of persuasive resistance (self-efficacy, counterarguing, or reactance) as mediator (M), and frequency of distracted driving served as the moderator (W). Figure 1 presents a conceptual diagram of the proposed models. The model used 5,000 bootstrapped samples and bias-corrected confidence intervals set to 95% to test effects.

Figure 1

Conceptual diagram for mediation analysis

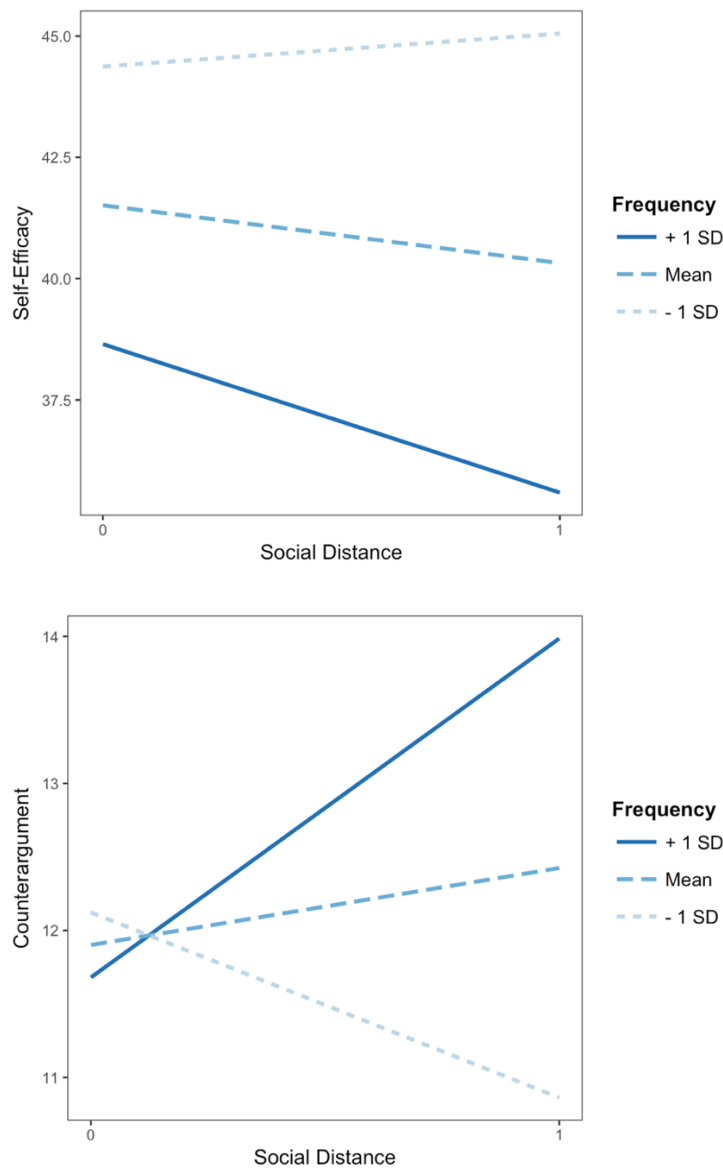


The results show social distance indirectly influencing persuasive outcomes toward distracted driving through its effect on self-(in)efficacy, one type of persuasive resistance. As can be seen in Figure 2, for those participants who use cell phones while driving more frequently, being exposed to narrative with socially distant character led to stronger self-efficacy in avoiding texting and driving compared to those exposed to narrative with a socially proximal character. In turn, participants who reported greater self-efficacy showed more favorable attitudes ($B = 1.92, p < .001$) and behavioral

intentions ($B = .80, p < .001$) toward safe driving. There was no evidence that narrative type influenced favorable attitude ($p = .55$) and behavioral intentions ($p = .47$) to safe driving independent of its effect on self-efficacy.

Figure 2

Moderation effects for social distance and frequency on persuasive resistance variables



Note. 0 = High Social Distance, 1 = Low Social Distance

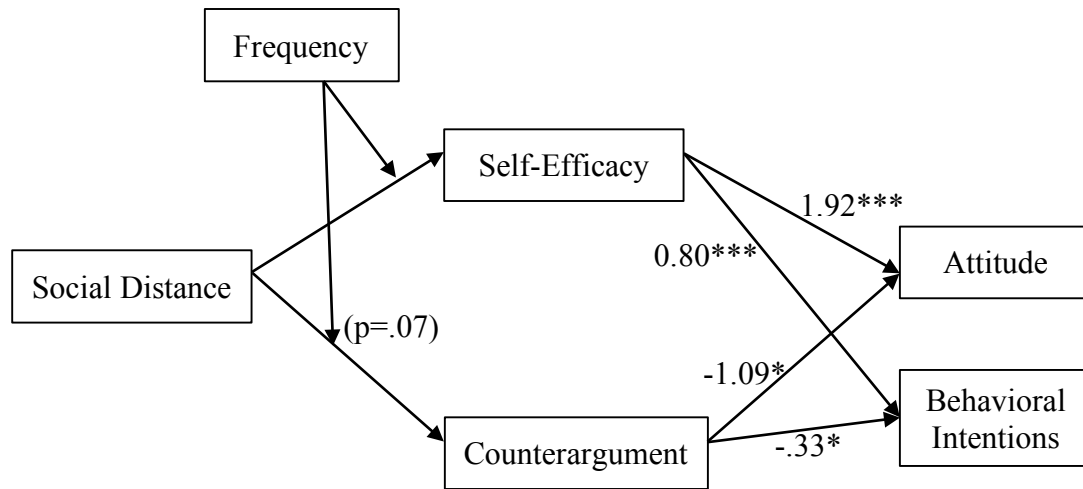
Results revealed the same pattern for another type of persuasive resistance: counterargument. As can be seen in Figure 2, for those participants who use a cell phone while driving more frequently, being exposed to narrative with a socially distant character elicited less counterarguing compared to those who exposed to the narrative with a socially proximal character, though this effect was not statistically significant ($B = .22$, $p = .07$). Participants who reported more counterargument showed less favorable attitudes ($B = -1.09$, $p < .05$) and behavioral intentions ($B = -.33$, $p < .05$) toward safe driving. There was no evidence that narrative type directly influenced favorable attitude ($p = .82$) or behavioral intentions ($p = .85$) to safe driving.

However, no significant indirect effects of social distance on persuasive outcomes through another type of persuasive resistance (reactance) were revealed. Thus, H3b was partially supported. Two types of persuasive resistance, self-efficacy ($p < .05$) and counterargument ($p = .07$), are mediators in the relationship between social distance and persuasive outcomes, moderated by frequency of distracted driving behavior.

The PROCESS macro for SPSS was also used to test the if narrative engagement, including transportation and identification, mediated the relationship between social distance and persuasive outcomes. However, no significant indirect effects of social distance on persuasive outcomes through narrative engagement (both transportation and identification). Thus, H3a was not supported.

Figure 3

Indirect effects for social distance on persuasive outcomes through persuasive resistance



Note. $p < .001$ ***, $p < .05$ *

CHAPTER FIVE

DISCUSSION

This study examined how social distance in narratives influences persuasive outcomes related to safe driving behavior through narrative engagement and persuasive resistance. Results failed to support the first hypothesis; social distance narrative was not more effective than high social distance narrative in increasing favorable persuasive outcomes toward safe driving. The second hypothesis was also not supported, narrative featuring a socially proximal character does not seem to be more effective than a socially distant narrative in increasing narrative engagement and reducing persuasive resistance. However, it is important to notice that high social distance was significantly more effective in increasing the self-efficacy of those participants who conduct distracted driving behavior very frequently, which is contrary to H2b. H3 was partially supported, as persuasive resistance served as a significant mediator in the relationship between social distance and persuasive outcomes. Further, it was found that the relationship between social distance and persuasive outcomes is fully mediated by one type of persuasive resistance, self-(in)efficacy. For those participants who conduct the behavior of using cell phone while driving more frequently, being exposed to narrative with a socially distant character elicited stronger feelings of self-efficacy in avoiding texting and driving compared to those exposed to a narrative with a socially proximal character. Greater self-efficacy (i.e., less persuasive resistance) can in turn lead to more favorable persuasive outcomes toward safe driving behavior. Couterarguing, another type of persuasive resistance, showed the same mediation pattern, though there was no

significant moderation effect of social distance and frequency on counterargument. These findings suggest the importance of studying the role of persuasive resistance in narrative and exploring the effects of distinct features within narrative stories (like using different social distance). At the same time, we should also consider target audience's past and current behavior related to the message goal. This study has both theoretical and practical contributions to narrative communication and CLT scholarship.

Theoretical Implications

One of the findings discussed above is contrary to what was predicted by the hypotheses. It was predicted that a narrative featuring a socially proximal character would be more effective than a narrative featuring a socially distant character in increasing narrative engagement and reducing persuasive resistance, which would in turn lead to more favorable persuasive outcomes. However, we found high social distance is actually more effective in reducing narrative resistance for those who conduct risky behavior frequently. One possible explanation for this effect is that our story was framed in a loss way. That is, the character conducted risky behavior and subsequently suffered negative consequences from that behavior. From the CLT literature, when messages framed as loss, low-level construals can make the issue more threatening (Chandran & Menon, 2004). This will probably make people aware that the story was trying to persuade them to avoid that behavior. However, one key reason for the success of narrative is that, narrative can make people have less intention or feeling that they are being persuaded, so that they will have less resistance towards persuasion (Moyer-Gusé, 2008). High-level construals, on the other hand, can make a loss-framed issue less

threatening (Chandran & Menon, 2004). This will probably lower the level of perceived persuasiveness of the narrative and give those who conduct risky behavior frequently less feelings persuasive intention. Therefore, though low social distance is theoretically more effective in making a message more persuasive, when it comes to narrative, low social distance might reduce the effects narrative itself carries, such as low persuasive intent. By receiving more persuasive intent in narrative, audiences will then have even more resistance towards persuasion. Therefore, it is important to consider the uniqueness of narrative persuasion when applying construal level theory in the context of narrative communication.

Although results revealed indirect effects of social distance on persuasive outcomes through persuasive resistance, the current study revealed no direct effects of social distance on persuasive outcomes, which does not align with what was predicted based on CLT. One possible explanation is that the unique feature of narrative might make low-level construals less salient. Specifically, we know that low-level construals are concrete and contextualized; while as narrative story, the story itself is also very concrete and contextualized – character's thoughts, what happened, how the story flowed – everything was very detailed and vividly shown in front of audience. Thus, even though the story features a socially distant character, audience might still perceive the overall media message as very concrete and contextualized. This is likely to weaken the salience of a low-level construal, and eventually made high social distance and low social distance stories not differ that much as for their effects on persuasive outcomes.

Moreover, it was predicted that a narrative featuring a socially proximal character would be more effective than a narrative featuring a socially distant character in increasing narrative engagement. However, results did not reveal significant effects of social distance on narrative engagement. As the most important mechanism of narrative persuasion, narrative engagement encompasses individuals' involvement with both storylines and story characters. Since the storylines were same for both versions of narrative story, audience may engage into the storyline at the same level and experience the same level of transportation. Identification is an imaginative process through which readers adopt the perspective of a character and see the narrative events from character's perspective (Busselle & Bilandzic, 2008; Cohen, 2001). Since the story also revealed the same information happened to both versions of story character and described the same thoughts the character had, audience may adopt the same perspective based on the information provided by story even though characters feature different social distance. Because the involvement with storyline and adopting characters' perspective are the keys to narrative engagement, understanding the same storyline and revealing the character's inner state might be the main explanatory mechanism of narrative engagement, even among audiences exposed to character with different social distances.

In sum, when testing the propositions of construal level theory under the context of narratives, the unique features of narrative should be considered. Instead of making hypotheses purely according to the proposition of CLT, it is important to think about how CLT propositions will interact with narrative features and produce unique persuasive

outcomes through narrative mechanisms. The role of persuasive resistance should also be better analyzed since it played an important role in current study.

Practical Implications

This study has potential implications for road safety organizations/departments and campaign designers who intend to increase individual favorable attitudes and intentions toward safe driving behavior. We found that for those who conduct certain risky behavior very frequently, narratives with socially distant characters are more effective in indirectly changing attitudes and behavioral intentions by reducing resistance towards persuasion; however, using socially proximal narrative might have an opposite effect on those audiences. When designing narrative messages for road safety, socially distant character (e.g. others instead of self, collective instead individual) can be featured since it can effectively reduce persuasive resistance for those who conduct more risky driving behavior. For those who don't use cell phone while driving frequently, different social distance did not reveal significantly different impact on narrative mechanisms and persuasive outcomes. Therefore, it is important to focus more on designing messages that can be most persuasive for people who conduct risky behaviors frequently.

Limitations

Although this study made not just theoretical contributions to current narrative and CLT scholarship, but also made practical contributions to campaigner designers and road safety officers, several limitations should be noted.

First, participants were recruited in college by offering extra credit. Some shortages such as avoiding repetitive participation should be considered. However, we

should also notice the efforts have been made for the quality of answers. For example, to make sure participants paid attention to the story and the study, reading time was set and there was one attention filter in the middle of the questionnaire. More importantly, when it comes to other age group or participants with other social identity, the setting of high-low social distance would be different from the current story and may not reveal similar results. In other words, future research is needed to determine whether the current results are generalizable. For example, if we conduct a study among staff in a non-government organization, we should construct the main character as a NGO worker as low social distance versus a retired senior citizen as high social distance. Such a study would clarify how these variables interact when in a different setting.

Second, the designing of narrative characters with different social distance was based on past literature and CLT conceptualization. A manipulation check should be conducted among participants to clarify whether the target audience perceive the manipulated narrative character as socially proximal or socially distant. The actual perceived social distance (not only about whether two conditions are distinct in social distance, but also about how much they are distinct from each other) might also be an important factor whether social distance can reveal significant effects on narrative engagement and persuasive outcomes.

Third, the measurement of self-(in)vulnerability should be better adapted and constructed. The variable reliability for vulnerability in current study was only .63, which makes later analysis very difficult. However, perceived self-(in)vulnerability has traditionally served an important role in health risk communication.

Finally, our study should better consider the role of frequency of using a cell phone while driving. In the analysis for counterargument, the moderation effect for social distance and frequency was close to significant regarding counterargument ($p = .07$). Counterargument showed the same mediation pattern as self-(in)efficacy did. By plotting the moderation effects using frequency as the moderator (high frequency, mean frequency, low frequency), it can be seen participants with high frequency showed very different levels of counterargument, compare to those participants with low frequency. Also, instead of just treating past behavior as a continuous moderator, analysis could also be run by excluding those participants who never texted while driving in the past. Therefore, the measurement and statistical analysis for frequency can be improved to make it as a more effective variable.

Future Directions

Apart from what has been mentioned in the above limitation section, there are several other future efforts researchers can make. First, different types of social distance or psychological distance should be tested. The current study tested one form of social distance: characters with same social identity and similar age (i.e., 19-year-old college student) or different social identity with audience. In past research, Nan (2007) used self-versus-others as a form of social distance, and Zhou and Niederdeppe (2017) used individual-versus-collective as a form of social distance. In the future, more types of social distance can be manipulated and tested to generalize the CLT and broaden the overall understanding of the role of social distance in narrative persuasion.

Second, the role of past/current behavior related to the persuasive goal of narrative messages should be more clearly measured and considered in the relationship between narrative message and persuasive outcomes. The current research revealed people's frequency of conducting the risky behavior related to the persuasive goal moderated the narrative mechanisms (self-efficacy), which in turn mediated persuasive outcomes. In the future, literature about this factor can be better reviewed and examined.

Third, emotions, especially discrete emotions can be studied in future narrative research. It is well known that emotions can influence persuasive outcomes (Nabi, 2002). Emotional responses are a valued and essential part of narrative experience and impact (e.g., Cupchik, 1995; Oatley, 1999), but have not been a central focus of narrative research yet (Nabi & Green, 2015). Murphy et al. (2013) suggested that emotion and transportation are related but distinct constructs in narrative processing. In the future, in order to have a better understanding of narrative mechanisms, more empirical research can be conducted to examine the relationship between emotional responses driven by narrative and viewers' attitudes and behavioral intentions.

Fourth, the interaction effects of different types of psychological distance should also be examined, such as the interaction of social distance and spatial distance. Past research revealed that social distance and spatial distance are conceptually linked (e.g., Bar-Anan, Liberman, Trope, & Algom, 2007; Matthews, & Matlock, 2011). In the future, more empirical research can be conducted in order to have a better understanding of the interaction effects of different types of psychological distance, at the same time

generalize the CLT and broaden the overall understanding of the role of psychological distance in narrative communication.

Finally, future research should explore the extent to which the current findings can be generalized to other risk prevention issues, such as drunk driving, unsafe sexual behavior, using illegal drugs, just to name a few. Topics are ever changing, it is important to explore how narrative persuasion and CLT can be generalized to different risk prevention topics so that researchers and practitioners can design more effective narrative messages to reach the persuasive goal.

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APPENDICES

Appendix A

Informed Consent Document

Information about Being in a Research Study Clemson University

Perceptions of Media Messages

Description of the Study and Your Part in It

Dr. Erin Ash and Yiwei Xu invite you to take part in a research study. Dr. Ash is a faculty member in the Department of Communication and Yiwei Xu is a master's student in the Department of Communication. The purpose of this research is to gather information about participants' attitudes and intentions after reading media messages.

Your part in the study will be to read a news story and then respond to a series of questions.

It will take you no longer than 15 to 20 minutes to complete this study.

Risks and Discomforts

We do not know of any risks or discomforts to you in this research study.

Possible Benefits

We do not know of any way you would benefit directly from taking part in this study. However, this research may help us to better understand the impact of media messages.

Incentives

You will receive one point of extra credit for your COMM [X] course for your participation in this research. If you decline to participate, you can complete an alternative assignment for extra credit. The alternate assignment requires you to locate a communication-focused scholarly article and write a brief summary about its findings. Please contact Yiwei Xu at yiweix@clemson.edu for additional information about the alternate assignment.

Protection of Privacy and Confidentiality

Your participation in this study is confidential. If this research is published, no information that would identify you will be written. All data related to this study will be kept in locked closets and/or secured computers of the investigator or in the investigator's university offices and/or private residences. Your confidentiality will be kept to the degree permitted by the technology used. We will do everything we can to protect your privacy and confidentiality. We will not tell anybody outside of the research team that you were in this study or what information we collected about you in particular.

Choosing to Be in the Study

You do not have to be in this study. You may choose not to take part and you may choose to stop taking part at any time. You will not be punished in any way if you decide not to be in the study or to stop taking part in the study.

Contact Information

If you have any questions or concerns about this study or if any problems arise, please contact Dr. Erin Ash at Clemson University at 864-656-1567 or .

If you have any questions or concerns about your rights in this research study, please contact the Clemson University Office of Research Compliance (ORC) at 864-656-0636 or irb@clemson.edu. If you are outside of the Upstate South Carolina area, please use the ORC's toll-free number, 866-297-3071.

Appendix B

Stimulus

Version 1: Stimuli features low social distance



Texting Blamed for Crash that Killed Local College Student



ARLINGTON, Va.—Arlington native Amy Clark’s texting came to an abrupt end when her Chevrolet Tahoe rolled three times before landing on its roof last year. She had run a stop sign and was broadsided by another driver. Metal caved in around her but the roof stayed intact and she survived with just scrapes and bruises.

Clark, a 19-year-old college student, wrote extensively on her blog about the experience.

“I hate the thought of dying without my family knowing how I felt about them,” she wrote in February of 2017.

“I believe everything happens for a reason and the reason for my car accident is to let me know that I need to slow down and pay more attention. I know that I need to change the

way I have been living my life. My phone and texting to my friends put me in danger. I realize how easy it is for my life to be over because I wasn't paying attention."

So when she got back in her car after the accident, she pledged to put her phone away.

"I thought this would be a wakeup call for her," Clark's brother Brian, 22 said. "And it was for a short time she wouldn't text while driving, she was more cautious. But she got more confident in her driving and a sense of 'Hey, I survived one, I'm invincible, nothing is going to happen to me now.'"

One year later, almost to the day, Clark was driving in Arlington. When she took the Highway 29 bypass to Interstate 66 she lost control of her car and crashed. Cell phone records show she was texting at the time of the collision.

First responders said it took them 40 minutes to free Clark from her crumpled car, but by that point she hadn't been breathing for 20 minutes. She died the next day.

One of Clark's professors, Julie Beckner, said Clark was an excellent student, and that she was immediately impressed by Clark from the first day of class.

"Amy was so hardworking and she was always so willing to help others," Beckner said. "She was always energetic and she brought happiness and laughter to everyone."

She was entering final grades when she heard the tragic news.

"I couldn't believe it," Beckner said. "I couldn't do grades I was so stunned that she had passed away because she was just so full of life that it's hard to imagine her not being here with us."

"Everyone who knew Amy loved her," a classmate said. "We're going to miss her very much, very much."

Fighting tears at times, her younger sister, Laura, 16, said Amy "had a big heart and a sense of humor no one could forget."

She also said Amy was the best older sister and role model she could have. "From the time we were in grade school, I remember my sister being like a rock star—she was a real doer and had great talent in sports and piano. She could do everything.

"You were my angel," Laura said at a vigil held in honor of sister. "Thank you for being protective over me. Thank you for bringing so much laughter into my life."

Version 2: Stimuli features high social distance



ARLINGTON, Va.—Arlington native Amy Clark’s texting came to an abrupt end when her Chevrolet Tahoe rolled three times before landing on its roof last year. She had run a stop sign and was broadsided by another driver. Metal caved in around her but the roof stayed intact and she survived with just scrapes and bruises.

Clark, a 39-year old bank teller, wrote extensively on her blog about the experience.

“I hate the thought of dying without my family knowing how I felt about them,” she wrote in February of 2017.

“I believe everything happens for a reason and the reason for my car accident is to let me know that I need to slow down and pay more attention. I know that I need to change the way I have been living my life. My phone and texting to my friends put me in danger. I realize how easy it is for my life to be over because I wasn’t paying attention.”

So when she got back in her car after the accident, she pledged to put her phone away.

“I thought this would be a wakeup call for her,” said Clark’s brother Brian, 42, said. “And for a short time she wouldn’t text while driving, she was more cautious. But she got more confident in her driving and a sense of ‘Hey, I survived one, I’m invincible, nothing is going to happen to me now.’”

One year later, almost to the day, Clark was driving in Arlington. When she took the Highway 29 bypass to Interstate 66 she lost control of her car and crashed. Cell phone records show she was texting at the time of the collision.

First responders said it took them 40 minutes to free Clark from her crumpled car, but by that point she hadn’t been breathing for 20 minutes. She died the next day.

Clark’s supervisor, Julie Beckner, said Clark was an excellent co-worker, and that she was immediately impressed by Clark from the day she first met her.

“Amy was so hardworking and she was always so willing to help others,” Beckner said. “She was always energetic and she brought happiness and laughter to everyone.”

She was entering annual performance evaluations when she heard the tragic news.

“I couldn't believe it,” Beckner said. “I couldn't do the evaluations I was so stunned that she had passed away, because she was just so full of life that it's hard to imagine her not being here with us.”

“Everyone who knew Amy loved her,” another co-worker said. “We're going to miss her very much, very much.”

Fighting tears at times, her younger sister, Laura, 36, said Amy “had a big heart and a sense of humor no one could forget.”

She also said Amy was the best older sister and role model she could have. “From the time we were in grade school, I remember my sister being like a rock star—she was a real doer and had great talent in sports and piano. She could do everything.

“You were my angel,” Laura said at a vigil held in honor of sister. “Thank you for being protective over me. Thank you for bringing so much laughter into my life.”

Appendix C

Post-Test Questionnaire

Transportation

Please indicate your agreement with each of the following statements using the scale provided: 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neither agree nor disagree, 5 = somewhat agree, 6 = agree, 7 = strongly agree.

1. I had a vivid image of the events in the story.
2. I pictured the described events.
3. While I was reading the story, I visualized the events that took place in it.
4. During reading, I had the feeling as if I was present at the events in the story.
5. While I was reading the story, I was in the world of the story in my imagination.
6. During reading, I saw before me what was described in the story.
7. During reading, it was as if I was present in the spaces that were described.
8. When I was reading the story, it seemed as if I was there in my thoughts.
9. My attention was focused on the events that were described in the story.
10. During reading, it felt as if I made a journey to the story world.

Identification

Please indicate your agreement with each of the following statements using the scale provided: 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neither agree nor disagree, 5 = somewhat agree, 6 = agree, 7 = strongly agree.

1. I was able to understand the events in the news story in a manner similar to that in which Amy Clark understood them.
2. I think I have a good understanding of Amy Clark.
3. While reading the story I could feel the emotions Amy Clark portrayed.
4. During reading, I felt I could really get inside Amy Clark's head.
5. At some moments in the story, I can feel exactly what Amy Clark was going through.

Perceived vulnerability

Please indicate your agreement with each of the following statements using the scale provided: 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neither agree nor disagree, 5 = somewhat agree, 6 = agree, 7 = strongly agree.

1. I might get into car accident at some point if I conduct distracted driving behaviors such as using cell phone while driving.
2. I am worried about my road safety if drivers have distracted driving behaviors.
3. I might get into car accident at some point because of other people's distracted driving behaviors such as using cell phone while driving.

Attitude

Please indicate your response on a 7-point scale ranging from 1 to 7 for five sets of adjectives for seven statements. Five sets of adjectives include: 1 = bad to 7 = good (4 = neither good nor bad), 1 = negative to 7 = positive (4 = neither positive nor negative), 1 = awful to 7 = nice (4 = neither nice nor awful), 1 = harmful to 7 = beneficial (4 = neither beneficial nor harmful), 1 = unwise to 7 = wise (4 = neither wise nor unwise).

1. I believe reading a text message while driving would be:
2. I believe sending a text message while driving would be:
3. I believe answering phone calls while driving would be:
4. I believe making phone calls while driving would be:
5. I believe reading/viewing social media while driving would be:
6. I believe interacting with friends on social media while driving would be:
7. I believe posting on social media while driving would be:

Behavioral intention

Please indicate your agreement with each of the following statements using the scale provided: 1 = extremely unlikely, 2 = moderately unlikely, 3 = slightly unlikely, 4 = neither likely nor not likely, 5 = slightly likely, 6 = moderately likely, 7 = extremely likely.

1. Read a text message while driving in the next week.
2. Send text messages while driving in the next week.
3. Answer phone calls while driving in the next week.
4. Make phone calls while driving in the next week.
5. Read/view social media while driving in the next week.
6. Interact with friends on social media while driving in the next week.
7. Post on social media while driving in the next week.

Self-efficacy

Please indicate your agreement with each of the following statements using the scale provided: 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neither agree nor disagree, 5 = somewhat agree, 6 = agree, 7 = strongly agree.

1. I feel able to avoid cell phone use while driving
2. I feel able to avoid reading a text message while driving.
3. I feel able to avoid sending a text message while driving.
4. I feel able to avoid answering phone calls while driving.
5. I feel able to avoid making phone calls while driving.
6. I feel able to avoid reading/viewing social media while driving.
7. I feel able to avoid interacting with friends on social media while driving.
8. I feel able to avoid posting on social media while driving.

Reactance

Please indicate your agreement with each of the following statements using the scale provided: 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neither agree nor disagree, 5 = somewhat agree, 6 = agree, 7 = strongly agree.

1. The story tried to pressure me to think a certain way.
2. The story tried to force its opinions on me.
3. The story annoys me.
4. The story is trying to manipulate me.

Counterargument

Please indicate your agreement with each of the following statements using the scale provided: 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neither agree nor disagree, 5 = somewhat agree, 6 = agree, 7 = strongly agree.

1. I sometimes found myself thinking of ways I disagreed with how the issue was presented.
2. I found myself looking for flaws in the way information was presented in the story.
3. While reading the story, I sometimes felt like I wanted to 'argue back' to what was going on in the story.
4. While watching the program, I couldn't help thinking about ways that the information being presented was inaccurate or misleading.

Participants' frequency of cell phone use while driving

Please indicate how often do you use cell phone while driving on a 7-point scale ranging from 0 (never) to 6 (always).

1. How often do you use your cell phone while driving?
1. How often do you read a text message while driving?
2. How often do you send a text message while driving?
3. How often do you answer phone calls while driving?
4. How often do you make phone calls while driving?
5. How often do you read/view social media while driving?
6. How often do you interact with friends on social media while driving?
7. How often do you post on social media while driving?