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My Risk or Theirs? An Experimental Investigation of Character-driven and Plot-driven Engagement as Explanations for Risk Perceptions

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MY RISK OR THEIRS? AN EXPERIMENTAL EXAMINATION OF CHARACTER-DRIVEN AND PLOT-DRIVEN FORMS OF ENGAGEMENT
AS EXPLANATIONS FOR RISK PERCEPTIONS

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ABSTRACT

Two distinct bodies of research examine means of increasing people's health-related risk perceptions through persuasive message design. First, Construal Level Theory (CLT) posits that reducing perceived psychological distance from a health risk can increase people's perceived relevance of the health issue. Second, models of narrative persuasion posit that narratives elicit audience engagement, which reduces counter-arguing and increases risk perceptions. So and Nabi's (2013) Risk Convergence Model (RCM) was proposed to merge the two bodies of research: the model posits that viewers' engagement with narratives diminishes perceived social distance from characters, resulting in a convergence of risk between characters and viewers. Character-driven engagement (e.g., identification) and plot-driven engagement (e.g., transportation) are theoretically distinct and may have separate implications for different dimensions of psychological distance (i.e., spatial distance). The current study seeks to expand the RCM, distinguishing between character-driven and plot-driven forms of narrative engagement. Manipulating transportation and identification as experimental factors, this research proposes that while (1) character-driven variables reduce social distance from characters, increasing personal risk perceptions and promoting behavior change, (2) plot-driven variables reduce spatial distance from characters, increasing societal risk perceptions and promoting policy support. Results of two PROCESS models revealed that character-driven engagement and plot-driven engagement produce distinct persuasive outcomes and that separate mechanisms drive these effects. Namely, character-driven engagement promotes individual behavior change by creating perceived spatial proximity to at-risk characters, subsequently causing viewers to internalize exemplified health risks. Conversely, plot-driven engagement drives societal health risk perceptions by promoting perceptions of spatial proximity. Additionally, plot-driven engagement, but not character-driven engagement, increases support for health-related policies. Theoretical implications and calls for future investigations are presented.

Keywords: Construal Level Theory, Identification, Narrative Persuasion, Risk Convergence Model, Transportation

DEDICATION

This thesis is dedicated to my parents (Katie and Christian) and stepmom (Jess), who offer infinite support for my career goals. Additionally, I dedicate this thesis to my advisor, Dr. Erin Ash, whose emotional support, mentorship, and academic expertise empowered me to achieve my most ambitious goals.

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CHAPTER ONE

INTRODUCTION

Previous research suggests that some people, referred to as unrealistic optimists, mistakenly underestimate their susceptibility to adverse health outcomes relative to similar others (Weinstein, 1982, 1987). These misperceptions are highly problematic, as unrealistic optimism is often associated with the performance of risk behaviors (Dillard et al., 2006, 2009) and resistance to prevention campaigns (Radcliffe & Klein, 2002). Accordingly, health and risk communication scholars have investigated strategies to mitigate the effects of unrealistic optimism on message processing and subsequent behavior (Kim & Niederdeppe, 2016; Klein et al., 2010). From this body of research emerges two promising mechanisms for persuasion: (a) reducing psychological distance from health-related issues and (b) reducing resistance to risk information via narrative message design (So & Nabi, 2013).

Construal level theory (CLT) posits that one mechanism for increasing issue relevance (e.g., personal risk perceptions) is the reduction of psychological distance (Lee et al., 2018, 2020). Depending on four sub-dimensions of psychological distance—temporal distance, spatial distance, social distance, and hypotheticality—a person becomes closer or further removed from an issue (Trope & Liberman, 2010). When psychologically proximal to an object, people's decisions are readily influenced by situational factors, such as social influences or specific information, rather than their existing attitudes, ideologies, and values (Trope & Liberman, 2010). Thus, health

interventions should seek to decrease psychological distance from health issues to increase people's risk perceptions and promote behavior change.

A separate body of research argues that narratives can modify health-related attitudes and behaviors by promoting engagement with characters and plotlines, and, subsequently, reducing counterarguing (Green et al., 2004; Moyer-Gusé, 2008; Slater & Rouner, 2002). When viewing narratives, viewers become absorbed into alternate realities (Green & Brock, 2000) and adopt characters' identities (Cohen, 2001), exchanging their existing views for those promoted in the narrative. These processes of engagement diminish viewers' inclination tcounterargue against persuasive messages embedded in narratives, leading to both attitude and behavior change (Braddock & Dillard, 2016; de Graaf et al., 2016).

Merging the propositions of CLT and narrative persuasion, the risk convergence model (RCM) argues that narratives, by increasing identification, transportation, parasocial interaction, personal relevance, and perceived realism, reduce audiences' perceived social distance from a mediated personality experiencing a health risk, in turn heightening their personal risk perceptions (So & Nabi, 2013). So and Nabi (2013) found that identification was the strongest predictor of personal risk perceptions related to sexually transmitted infections (STIs), followed by parasocial interaction, personal relevance, and transportation. Contrary to expectations, perceived realism was not significantly related to personal risk perceptions. Given the relative impact of the variables, the authors conclude that audience variables focusing on a mediated person

(identification and parasocial interaction), rather than the overall narrative, have a greater impact on audience's perceived social distance from media characters.

In both the seminal RCM text and the follow-up test of the model, transportation is shown to be a weak or insignificant predictor of perceived social distance from a media character (So & Nabi, 2013; So & Shen, 2016). Importantly, the RCM encompasses both character-oriented (identification and parasocial interaction) and more general plot-oriented processes (transportation and perceived realism). While the RCM's central argument is that the increase of each of these variables should result in decreased social distance from characters, and subsequently, a convergence between character and audience risk, recent theoretical discussion suggests character-oriented and narrative-oriented variables operate in distinct ways to produce distinct persuasive outcomes (Tal-Or & Cohen, 2016). For instance, while a character's lack of moral virtue may decrease audience identification (i.e., due to motivations to avoid the internalization of stigma), that character's involvement in suspenseful or exciting events may invite transportation. Additionally, the body of research on narrative persuasion demonstrates the general trend that identification promotes attitudes that are consistent with the identified character's viewpoint, whereas transportation promotes attitudes that are consistent with the overall narrative reality (Tal Ohr & Cohen, 2016).

Considering health contexts where a character may resist audience identification, health practitioners should utilize the character-independent, plot-driven qualities of narratives to convey issue relevance. Specifically, narratives concerning stigmatized health issues may not need to promote identification to depict the societal impact of a

health problem, which involves a higher level of construal than individual-level behavior change. While identification and parasocial interaction heighten personal risk perceptions through the reduction of social distance, transportation and perceived realism are likely related to more general risks that are burdening society. Thus, while heightened perceptions of societal risk do not invite individual behavior changes, they more likely promote support for policies intervening with health issues on a societal level. Expanding on So and Nabi's (2013) RCM, this research distinguishes between character-driven (identification and PSI) and plot-driven (transportation and perceived realism) processes of narrative persuasion, arguing that while character-driven processes reduce social distance from individual characters (and subsequently heighten personal risk perceptions that elicit behavior change), plot-driven processes reduce the perceived spatial distance from the impacts of health issues, resulting heightened perceived societal risk related to the issue, and heightened support for health policies intervening on a societal level.

CHAPTER TWO

LITERATURE REVIEW

STIs in College Students

Sexually transmitted infections (STIs) are highly prevalent conditions in the United States, resulting in serious health consequences and billions of dollars in healthcare costs annually (Centers for Disease Control and Prevention [CDC], 2021). Adolescents and young adults are particularly vulnerable to STIs, as nearly half of all STI incidents are reported among people between the ages of 15 and 24, an age range shown to engage in risky sexual behaviors (CDC, 2021). In a survey study among American college students, 84.3% reported being sexually active in some form (McCave et al., 2013). While most respondents reported using at least one form of birth control, the most commonly used form was the oral contraceptive pill, which does not prevent STIs (McCave et al., 2013). Additionally, while over half of the sample reported engaging in oral sex, 92.7% reported never having used a condom during oral sex. Despite the prevalence of risk behaviors among college students, only 44.2% report ever having been screened for STIs (Renfro et al., 2022).

Given the pervasiveness of STIs among college students, public health scholars have investigated predictors of STI outcomes and sexual risk behaviors (Renfo et al., 2022). Some predictors of sexual risk behaviors among college students include low intentions to communicate with partners about STIs and pregnancy prevention and endorsement of traditional gender role norms (Scull et al., 2020). Another key factor impacting students' risk behaviors is the perceived social norms of peers (Scholly et al.,

2010). Previous survey data reveals that college students generally perceive their same-sex peers' sexual behaviors to be more frequent than their own self-reported behaviors, a misperception associated with elevated sexual risk behaviors (Lewis et al., 2014). Problematically, college students generally perceive themselves to be at low risk for contracting STIs, even when engaging in risky behavior (Clifton et al., 2018; Hickey & Cleland, 2012). Thus, strategic health messages should aim to increase perceptions of personal susceptibility to decrease unsafe sex behaviors.

Given the prevalence of STIs among college students, it is important to consider the availability and utilization of sexual health services for college students. A recent survey among U.S. higher education institutions revealed a host of barriers to accessing sexual health care (Habel et al., 2018). Most frequently, the cost of testing and treatment for STIs was imposed on individual students or their insurance companies; only 10.2% of institutions reported offering free STI-related visits and testing. Other policy-related factors contributing to sexual risk behaviors and outcomes include sexual education, which can be particularly important for vulnerable or high-risk populations (Finigan-Carr et al., 2021). Importantly, however, even when sexual health care resources are available to students, a range of barriers reduce students' utilization of these services. Utilizing focus groups among college students, Cassidy et al. (2018) revealed several barriers, including lack of knowledge about sexual health services, lack of visibility of these services, and perceived stigma related to use of these services. Accordingly, a minority of students (about 28%) utilize their campus-based services (Bersamin et al., 2017). Thus, in

addition to promoting prevention behaviors, messages should also seek to promote

support for policies addressing STIs.

Narrative Persuasion

The Extended-Elaboration Likelihood Model (E-ELM) posits that narrative

messages are processed distinctively from overtly persuasive texts (Slater & Rouner,

2002). Namely, while traditional persuasive messages are effective insofar as they

directly influence a reader's self-interest (Petty & Cacioppo, 1986), narratives are more

likely to be impactful when processes of audience engagement supersede a story's

persuasive goals (Green & Brock, 2000; Moyer-Guse, 2008; Slater & Rouner, 2002).

Unlike overtly persuasive messages, narratives invite involvement with characters and

absorption into new realities, which are alternative mechanisms to attitude change from

traditional cognitive processing of an argument (Slater & Rouner, 2002).

Accordingly, a body of literature on narrative persuasion argues that narratives,

compared to purely informational texts, are uniquely positioned to modify people's

health-related behaviors and attitudes (Braddock & Dillard, 2016; Graaf et al., 2016;

Green, 2006; Moyer-Gusé, 2008; Niederdeppe et al., 2011). While narratives have been

characterized with a range of definitions, scholars generally agree that they must depict a

character who experiences at least one event, bounded in time and space (Kreuter et al.,

2007; McDonald, 2014). Additional elements of narratives include temporality (events

occurring over time), and causality (holding a cause-and-effect relationship) (Dahlstrom,

2014). Thus, where a traditional health campaign message may convey the consequences

of unprotected sex using statistics (i.e., "50% of sexually active people contract an STI by

age 25"), a narrative may depict a young person (character) who engages in unprotected sex (causality) and later tests positive for an STI (temporality).

Research on narrative persuasion yields several theoretical frameworks that have been empirically examined. Theories of narrative persuasion posit that narratives drive processes of audience involvement, decreasing viewers' inclinations toward psychological reactance, counterarguing, or other forms or resistance (Moyer-Gusé, 2008; Slater & Rouner, 2002). Other research adopts the lens of Bandura's (2006) social cognitive theory (SCT), arguing that characters in entertainment narratives offer vicarious learning experiences for audiences, guiding perceived social norms and behavioral intentions (Krcmar, 2019; Singhal et al., 2003). Throughout the theoretical frameworks employed in narrative effects, several mechanisms have emerged as central to persuasion processes: transportation, perceived realism, identification, and parasocial interaction.

Transportation

A large portion of experimental research on narrative persuasion focuses on how qualities of narrative texts drive audience involvement (Green et al., 2020). Perhaps the most studied process of narrative involvement is transportation, which invites a loss of self-awareness, where the "real-world" becomes temporarily inaccessible (Green et al., 2004; Green & Brock, 2000). As individuals become increasingly transported into narrative reality, they become detached from their pre-existing attitudes and values, and more inclined to accept ideas presented in a narrative without counterarguing (Green & Brock, 2000; Moyer-Guse, 2008). Accordingly, a body of research supports the idea that higher levels of transportation drive story-consistent risk perceptions, attitudes, and

behavioral intentions (Dillard et al., 2018; van Laer et al., 2014). Theorizing on narrative persuasion attributes these effects to the reduction of counterarguing as people become absorbed into a narrative world and forget their own reality (Moyer-Guse, 2008; Slater & Rouner, 2002). However, other studies have failed to identify a significant relationship between transportation and counterarguing (Moyer Guse & Nabi, 2010), raising questions about the extent to which audiences lose awareness when undergoing transportation.

Importantly, several studies indicate that transportation does not necessarily entail a complete detachment from the real world. Contrary to a monolithic experience where an audience member is wholly absorbed or disconnected from a text, recent research reveals that audience engagement fluctuates between the real world and narrative world (Lin et al., 2019; McDonald et al., 2015). For instance, several studies demonstrate that self-referencing (i.e., thinking of personal experiences) and real world- referencing (thinking of people, events, or places in the real world) are associated with transportation and increased subsequent attention to an entertainment narrative (Green et al., 2004; Tchernev et al., 2023). Supporting these findings, other research confirms that a person's intermittent awareness of the real world does not impede processes of narrative engagement, but rather strengthens engagement and persuasive outcomes, such as attitude change (Moyer-Gusé et al., 2022). One potential mechanism for this relationship is that transportation heightens perceptions of personal relevance of narrative events (Quintero Johnson & Sangalang, 2017). In sum, while transportation is an immersive experience, people's real-world experiences and identities remain important in guiding processes of narrative persuasion and subsequent attitudinal and behavioral outcomes.

Perceived Realism

  Scholars of narrative effects argue that perceptions of narrative realism are central to audience's processing of entertainment media, affecting engagement and subsequent beliefs and attitudes (Cho et al., 2014; Shen et al., 2017). Perceived realism is often defined as the degree to which a viewer perceives media content as representative of reality (Bahk, 2001). Shapiro et al. (2010) found that viewers' perceived realism of narratives reflected a narrative's consistency with their own attributions related to characters. However, beyond merely matching the real world, scholars conceptualize perceived realism as complex, multi-dimensional construct encompassing dimensions of both external and narrative realism (Busselle & Bilandzic, 2008; Cho et al., 2014; Hall, 2003). External realism reflects a narrative's consistency with the real world and includes dimensions such as plausibility, typicality, and factuality (Hall, 2003). Conversely, narrative realism refers to characteristics such as coherence, logic, and consistency within a text (Busselle & Bilandzic, 2008). While fantasy and science fiction media may lack plausibility or typicality relative to the real world, audiences recognize criteria such as internal consistency or perceptual persuasiveness which are shown to influence their evaluation of narrative messages (Cho et al., 2014; Hall, 2003).

  In addition to driving audience engagement with narratives, perceptions of realism influence audience's attitudes and behaviors related to a narrative's themes (Cho et al., 2014; Krakow et al., 2018). For instance, Bahk (2010) identified perceived realism of an entertainment narrative about deforestation as a powerful predictor of subsequent environmental preservation attitudes. Other studies demonstrate the role of perceived

realism in determining health-related persuasive outcomes, such as risk perceptions (Pinkleton et al., 2010). Cho et al. (2013) found that perceived realism of anti-drug narratives influenced viewers' personal risk estimation, by diminishing audience's message minimization and promoting identification with characters.

Identification

Beyond research focusing on overall qualities of texts, other research focuses specifically on audience involvement with characters. Identification is the character-driven variable that has earned the most scholarly attention. Cohen (2001) defined identification as a "mechanism through which audience members experience reception and interpretation of the text from the inside, as if the events were happening to them" (p. 245). Similar to transportation, identification results in a loss of self-awareness by an observer, in exchange for the goals and perspectives of a character. Accordingly, a body of experimental research demonstrates that identification is a powerful driver of change in attitudes, risk perceptions, and behaviors (de Graaf et al., 2012; de Graaf et al., 2016; Hoeken & Fikkers, 2014; Moyer-Gusé & Nabi, 2010). Through identification, observers and characters become increasingly similar resulting in an overlap in vulnerability to health consequences (Moyer-Guse, 2008).

Qualities of both audiences and characters may influence the process of identification. Identification is often conceptualized alongside perceived similarity or homophily to characters. Similarities between audiences and characters such as demographic factors (Murphy et al., 2013), attitudinal similarities (de Graaf et al., 2012), and career interests (Hoeken et al., 2016) influence identification and subsequent

persuasive effects. Considering the role of identification in promoting health-related persuasion, Chen et al. (2016) found that audiences more readily identified with a protagonist who was similar in age and the same gender, compared to a dissimilar protagonist. In turn, highly identified audience members experienced greater perceptions of severity of health risk, supporting the idea that character-audience similarity strengthens identification (Chen et al., 2016).

Another factor shown to influence identification with characters is the valence of characters' attributes. Several studies demonstrate that audiences are often reluctant to identify with immoral, incompetent, or stigmatized characters (Tal-Or & Cohen, 2010; Zhou & Shapiro, 2022). In the context of health behaviors, audiences are more likely to view themselves as similar to characters who engage in healthy behaviors (Niederdeppe et al., 2014). For instance, Chen et al. (2017) found that audiences more readily identified with those who successfully prevented type-II diabetes compared to those with the stigmatized health condition. Scholars argue that these patterns represent defense mechanisms triggered by audience members experiencing a threat to their positive self-concept through a character's negative attributes (So & Shen, 2016). Given that identification involves a close connection between character and observer, people are likely to avoid internalization of negative characteristics.

Parasocial Interaction

Another key process of audience involvement is parasocial interaction (PSI), where an audience member interacts with a media persona in a fashion like that in interpersonal relationships (Giles, 2002). PSI is distinct from identification in that

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audience members maintain their distinct identities while becoming attached to characters, leading some scholars to argue that it is a weaker form of audience involvement (Brown, 2015). However, research on PSI with media personae (i.e., celebrities) reveal that PSI can be a powerful driver of health-related risk perceptions and behavior change—similar to the effects of identification (Brown & Basil, 2010; Kresovich & Noar, 2020). While identification with characters creates an overlap in vulnerability between reader and character, PSI with characters guides perceived social norms surrounding health behaviors (Moyer-Guse, 2008). As peers offer guidance for behavioral expectations, media characters can function similarly to peers (Rubin et al., 1985), providing health-related recommendations without the formality of a traditional PSA.

Much of the scholarship on PSI focuses on people's parasocial relationships (PSRs) with celebrities, revealing that celebrity health events can be powerful drivers of behavioral change (Brown & de Matviuk, 2010; Myrick et al., 2022; Walter et al., 2022). Additionally, PSI can reduce psychological reactance to health-related messages, reflecting the general proposition of narrative persuasion that narrative involvement reduces counter-arguing (Moyer-Guse & Nabi, 2010). Other promising effects of PSI include stigma reduction (Wong et al., 2017), although scholars argue that stigma attitude change via PSI occurs under more stringent conditions than single-exposure processes of narrative persuasion (Schiappa et al., 2005).

Construal Level Theory

Trope and Liberman's (2010) construal level theory (CLT) posits that people's level of psychological distance from mental objects influences their mental construals related to the object, with implications for attitudes and behavior. Rather than being bound to the direct experience of reality, people can "recollect themselves in the past, plan the future, take others' perspective, cognize spatially remote places, and contemplate counterfactual alternatives to reality" (Trope & Liberman, 2012, p. 119). When a person construes a psychologically near object, they construct low-level construals of that object, focusing on contextualized, detailed, incidental qualities (Trope et al., 2007). For example, when considering a meeting scheduled for tomorrow, one may construct a mental list of each attendee, the agenda for the meeting, and a docket of tasks to be completed in preparation for the meeting. Conversely, if one were to mentally construe next year's national conference, they would likely produce a high-level mental construal, involving general features of conferences, imagining a large gathering of people with goals of exchanging information and expanding their professional networks. A body of experimental research reveals characteristics of high-level versus low-level construals; whereas high-level construals involve desirability concerns, broad categories, primary features, dispositional information, and overarching goals, values, and ideologies, low-level construals involve feasibility concerns, exemplars, specific behaviors, individualized information, and situation-specific demands (Soderberg et al., 2015).

An important distinction between high and low-level construal is its influence of people's enduring values on attitudes and behaviors in a situation. Values (i.e.,

benevolence) are abstract concepts and are thus more readily applied when a situation is psychologically distant (Trope & Liberman, 2010). For example, Eyal et al. (2009) argued/found that those who endorsed values (i.e., respect for tradition) were more likely to engage in value-consistent behaviors (i.e., attending an annual family reunion) when anticipating a psychologically distant event.

Conversely, when an object is psychologically near, people are less likely to be influenced by abstract values and more readily guided by incidental social influences, attitudes, and secondary values (Trope & Liberman, 2010). Ledgerwood et al. (2010) found that study participants were influenced by a discussion partner's attitudes, rather than their own ideological perspectives, when considering an immigration policy change to be implemented at a psychologically near time (next week). The opposite was true when participants considered the policy change in the distant future (next year); their attitudes were guided by their existing ideologies, independent of a discussion partner's attitudes. Thus, in the context of persuasive health messaging, communicators should create low psychological distance to increase the likelihood that people will be influenced by situational, message-specific characteristics to combat existing health-related attitudes and values.

One key implication of construal level is people's risk estimations. Specifically, high-level construal of a hypothetical risk outcome (i.e., likelihood of death due to heart attack) leads to lower perceptions of risk, compared to low-level construal of the same outcome (Lermer et al., 2016). Lermer et al. (2016) demonstrate that manipulating construal level by inviting either concrete or abstract mindsets can guide the accuracy of

people's risk estimates for events with both small and large probabilities. Given the tendency of people to overestimate the likelihood of events with extremely unlikely probabilities, adopting an abstract mindset can improve the accuracy of risk estimations by decreasing risk perceptions. Similarly, given the tendency of people to underestimate the likelihood of common risks, a concrete mindset can improve the accuracy of risk estimations by increasing probability estimations (Lermer et al., 2016).

CLT posits four sub-dimensions of psychological distance, including temporal distance, spatial distance, social distance, and hypotheticality (Trope & Liberman, 2010). A body of research examines the relationships between different dimensions of psychological distance (i.e., Fiedler et al., 2012; Kim et al., 2008; Maglio et al., 2013). For example, Stephan et al. (2011) considered how temporal distance message cues (i.e., "this weekend," "six months from now") directly influenced social distance perceptions, where temporally distant social entities were viewed as less familiar and less similar to the self. In contrast, other scholars find that experiencing any dimension of psychological distance reduced people's sensitivity to other dimensions (Kim et al., 2008; Maglio et al., 2013). Namely, when evaluating socially distant individuals, participants viewed the same high temporal distance of two years as shorter than those evaluating socially proximal individuals (Maglio et al., 2013). Despite these findings, scholars consistently demonstrate that the variables are positively correlated (Fiedler et al., 2012). Although the dimensions are closely connected, the dimensions are unique and warrant distinct consideration (Trope & Liberman, 2012).

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Temporal Distance

The first dimension of psychological distance to be thoroughly examined was

temporal distance (Trope & Liberman, 2003). Research in social psychology reveals that

people make decisions about the near future in fundamentally different ways than they do

about more distant future events. One consequence of this tendency is the "planning

fallacy," where people develop unrealistically optimistic forecasts about what can be

achieved in the distant future (Buehler & Griffin, 2015; Buehler et al., 2010).

Additionally, people attach greater value to temporally near events, compared to more

distant ones (Lowenstein et al., 2001; Trope & Liberman, 2012). These tendencies reflect

the general predictions of CLT, such that people allocate much more detailed concerns to

events in the near future, often only considering distant future events in general or

abstract terms (Förster et al., 2004; Trope & Liberman, 2003).

Additionally, people construe temporally distant actions in terms of high-level,

superordinate features, whereas they construe proximal actions in terms of low-level,

subordinate features (Trope & Liberman, 2012). Feasibility concerns are superordinate

event features (i.e., the "how" component of an action), whereas desirability concerns are

subordinate features (i.e., the "why" component of an action). According to CLT,

desirability concerns for an action become more salient as psychological distance

increases, while feasibility concerns guide decisions for psychologically close actions

(Trope & Liberman, 2012). Affirming these predictions, Lutchyn and Yzer (2011) found

that manipulating temporal distance from a prospective behavior (i.e., eating five servings

of fruits and vegetables daily or using condoms with a partner) influenced the proportion

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of desirability and feasibility concerns produced by participants. While participants considering health behaviors within a proximal time frame (i.e., "tomorrow") focused on feasibility concerns such as self-efficacy or barriers to performing the behaviors, participants considering health behaviors within more distance time frames (i.e., "six months from now") focused on desirability concerns, such as positive outcomes of the behaviors.

Spatial Distance

The second dimension of psychological distance is spatial distance, which represents the location-driven component of psychological distance (Trope & Liberman, 2010). As with high temporal distance, people construe spatially distant objects in high-level, abstract terms with implications for predictions, social judgements, and behaviors (Henderson et al., 2011). A body of research supports the idea that spatial distance influences people's threat perceptions for issues such as climate change, causing geographical closeness to be associated with greater recognition of issue proximity and support for mitigation policies (Chu, 2022; Kysela et al., 2019; Spence et al., 2012). For example, Sparkman et al. (2021) found that people were more supportive of government spending on improving air quality in their country of residence compared to more spatially distant locations (i.e., around the world or in disadvantaged countries).

Accordingly, scholars recommend that policymakers frame climate change as a local risk to promote societal engagement and policy support (van der Linden, 2015), though less scholarly attention has been granted to the implications of spatial distance framing for health policy support. In the same study, Sparkman et al. (2021) found that

participants were more supportive of government spending on healthcare for geographically proximal locations than geographically distal ones. Thus, there is need for further examination of how perceived spatial distance influences health policy attitudes.

Social Distance

A third dimension of psychological distance is social distance, which represents perceptual distinctions between the self and others (Trope et al., 2010). As proposed by CLT, as the distance between the self and another person increases, people construe objects, issues, and events in higher-level terms. As with other dimensions of psychological distance, social distance influences the impact of different message frames on persuasive outcomes. Previous experiments have examined the effects of social distance as both a message target and a message source.

For instance, Nan (2007) manipulated social distance by asking participants to consider health consequences for either a close friend or for the average college student. Across multiple experiments, the author found that gain-framed messages were more effective in guiding health-related attitudes when considering consequences for the average collect student, affirming that benefits are more salient with greater social distance. In another study, Young (2015) manipulated social distance through message sourcing, where participants were exposed to a health-related social media message from a demographically and attitudinally similar or dissimilar peer source. As predicted by CLT, Young found that socially proximal sources invited feasibility concerns (i.e., "Set a time every day to spend on exercise"), whereas socially distant sources invited desirability concerns (i.e., "Good exercise habits will pay off later in life").

However, while increasing social distance promoted recognition of smoking cessation benefits for others, the goal of many health interventions is to drive personal risk perceptions and behavior change. Importantly, Nan (2007) found that participants' recognition of individual (self) and negative consequences of smoking was not impacted by social distance, raising concerns about the ability of social distance in guiding personal risk perceptions. Other research has found that decreasing social distance (i.e., from the average college student to a best friend) can improve attitudes toward others' quitting smoking tobacco (Ma & Nan, 2018). However, again, the effects of social distance on attitudes merely influenced attitudes about others' health-related behaviors. Given CLT's proposition that lower social distance predicts low-level construals (i.e., concerns with feasibility of behavior change), persuasive message design should work to depict a social distance approaching zero, or a total overlap with the self.

Hypotheticality

The fourth dimension of psychological distance included in CLT research is hypotheticality, or perceptions of event probability. When people perceive low likelihood of an outcome, people construct high-level mental construals, whereas when they perceive an event to be likely, their subsequent construal level tends to be low. Research on hypotheticality reveals that when outcomes are framed as less likely, people construe the outcomes in high-level terms, often paying less attention to detail (Trope et al., 2007; Wakslak et al., 2006). For example, when told that they were unlikely to get a graduate assistantship, student participants were able recall only general descriptive information about the job description for acting as a confederate (e.g., conducting behavior research)

compared to those told that they had a high likelihood of getting the position (e.g., dropping a book in front of participants) (Wakslak et al., 2006). However, a recent replication study failed to identify effects of event likelihood on construal level, raising some questions about the viability of hypotheticality as a reliable dimension of psychological distance (Calderon et al., 2020). That said, hypotheticality remains an important, yet understudied dimension of psychological distance, inviting further empirical examination.

Narratives and Psychological Distance

Research on both narrative persuasion and CLT provides guidance for health-related message design by considering people's unrealistic optimism about their own health risks — a major barrier facing health communication practitioners (Dillard, 2009; Radcliffe & Klein, 2002; Weinstein, 1987). While theorizing on narrative persuasion argues that narrative-driven processes of audience involvement (i.e., transportation and identification) can increase health-related risk perceptions (Moyer-Guse, 2008; Slater & Rouner, 2002), research on CLT suggests that risk perceptions can be increased through the reduction of psychological distance (Lermer et al., 2015). A recent theoretical development by So and Nabi (2013) merges the two theoretical perspectives. The authors propose that various forms of audience engagement with entertainment media (e.g., identification, transportation) reduce audiences' perceived social distance from mediated characters, in turn promoting a convergence of perceived risk between character and audience member.

Risk Convergence Model

So and Nabi's (2013) RCM considers five variables associated with narrative involvement that have been shown to increase perceptions of risk: identification, parasocial interaction, personal relevance, transportation, and perceived realism. The model views social distance—a dimension of CLT's broader construct of psychological distance—as the mechanism through which entertainment characters can increase audience members' personal risk perceptions. The RCM posits that each of the five processes of audience involvement with narratives diminishes the perceived social distance between audience members and characters, resulting in a convergence between the two parties. Subsequently, when media characters experience risk events, audience members perceive heightened risk for themselves.

In their initial empirical examination of the RCM, So and Nabi (2013) employed a between-subjects experimental design in which risk portrayal was manipulated: participants in the experienced risk conditions viewed an entertainment media clip where a character experienced a negative health outcome (i.e., a positive STI result), whereas those in the threatened risk conditions viewed a clip where a character felt threatened but did not experience a negative health outcome (i.e., an STI scare). The authors found that, with the exception of perceived realism, all narrative driven variables (transportation, identification, PSI, and personal relevance) decreased participants' perceived social distance from characters. In turn, this reduced social distance led to increased personal risk perceptions, thus affirming the predictions of the RCM. The variables demonstrated varying levels of influence on perceived social distance, where identification reduced

social distance to the greatest degree, followed by PSI, personal relevance, and transportation.

These varying effects of each variable on social distance reflect the distinction between character-driven and overall narrative-driven processes of narrative persuasion. Namely, identification and PSI are closely related to social distance, a construct representing the overlap between the self and another. Additionally, while not generally viewed as a form of narrative engagement, personal relevance should also be expected to relate to social distance, as socially proximal characters share characteristics and interests with one another (i.e., common interest in a health topic). Accordingly, the three variables were stronger predicters of reduced social distance than transportation and perceived realism, which reflect broader processes of engagement with a story.

[Insert Figure 1 (So & Nabi's RCM)]

Character-driven versus Plot-driven Forms of Narrative Engagement

While the RCM posits that the reduction of social distance accounts for the effects of narrative persuasion variables on personal risk perceptions, the model does distinguish between character-driven and plot-driven variables. In a recent review of empirical research on transportation and identification—the two variables that have received the most attention within the narrative persuasion literature—Tal-Or and Cohen (2016) propose that the variables represent distinct processes of engaging with a narrative, are enhanced by different factors, and hold different consequences for persuasion. Both variables are ways in which audience members experience psychological convergence with a text, developing feelings of closeness with characters and plots.

In contrast, there are contexts where the variables may be unrelated, or at-odds with each other. For example, character virtue is shown to be an important driver of identification (Tal-Or & Cohen, 2016), and previous studies demonstrate that audience members are less inclined to identify with immoral characters (Zhou & Shapiro, 2022) or characters with stigmatized health conditions (Chen et al., 2017). However, while low character virtue may diminish audience's involvement with a character (i.e., through identification or PSI), audiences can maintain their engagement with a narrative overall.

Empirically examining this proposition, Tal-Or and Cohen (2010) manipulate transportation and identification via story tense (past versus future details about a character's deeds) and character qualities (positive versus negative moral valence of a character's deeds). The authors found that the valence of a character's deeds significantly influenced identification but not transportation, while the time of a character's deeds influenced transportation but not identification. Namely, participants experienced higher levels of identification when reading a story about a moral, rather than an immoral character, and more transportation when reading a story including details about the future, rather than the past. This research suggests that character-driven and story-driven processes of audience involvement are distinct, inviting further exploration of the processes and their consequences (Tal-Or & Cohen, 2010). The current study will experimentally examine the effects of character-driven and plot-driven forms of engagement, operationalizing character-driven engagement as identification and plot-driven engagement as identification.

Study Predictions

The goal of the RCM is to account for the effects of different narrative processes on people's risk perceptions. So and Nabi (2013) posit that these effects are due to the reduction of perceived social distance from characters experiencing risk events. According to the theory, narrative-driven variables, including transportation, perceived realism, identification, PSI, and personal relevance diminish a viewer's perceived social distance from a character, leading to a convergence of risk between character and audience member. Identification, PSI, and personal relevance are clearly intertwined with social distance. Whereas PSI involves one-sided interaction with a character like that of a friendship (Giles, 2002), identification involves the adoption of a character's identity by an audience member (Cohen, 2001). Whether through promoting a parasocial friendship with a socially proximal other, or through the merging of identities with a character, these forms of engagement reduce audience members' perceived social distance from story characters. The current study maintains So and Nabi's (2013) predictions regarding character-driven forms of engagement, hypothesizing:

H1:   Character-driven engagement (identification) will be associated with decreased levels of social distance.

As an audience member's perceived social distance from a character approaches a zero value, risks threatening characters result in personal risk perceptions by audience members, leading to the adoption of prevention behaviors. Recognizing the theoretical basis for this series of predictions, along with previous empirical support (So & Nabi, 2013; So & Shen, 2017), the current study hypothesizes that:

H2:   Diminished social distance from media characters will be associated with increased personal risk perceptions.

H3:   Personal risk perceptions will be associated with increased preventative behavioral intentions.

Whereas the character-driven processes are explicitly tied to social distance, personal risk perceptions, and personal behavior changes, the connection is less obvious with the plot-driven processes of transportation and perceived realism. Empirical examinations of the RCM found that transportation and perceived realism were weak or insignificant predictors of reduced social distance, thus raising conceptual questions about the connection between plot-driven processes and social distance (So & Nabi, 2013; So & Shen, 2017). Conceivably, when a reader becomes transported into a narrative reality, they are inclined to become socially close to the characters involved in the story. Similarly, when an observer feels that a story is highly realistic, they may feel closer to the characters, imagining the characters as representatives of the real world.

However, just as easily, a highly transported audience member could develop an increased social distance from a character, particularly if that character holds socially undesirable traits such as a stigmatized health condition (Chen et al., 2017). Additionally, health behaviors are closely intertwined with notions of personal responsibility and morality, meaning that those with adverse health outcomes nay be viewed as immoral and socially undesirable (Smith, 2007; 2019). Similarly, audience members may perceive a story to be realistic while maintaining a large social distance from characters, if those characters represent a stigmatized group.

Thus, when an otherwise engaging, realistic narrative depicts characters with negative attributes, the RCM's five narrative-driven variables operate distinctly. This possibility is notable, as the RCM seeks to examine the effects of entertainment media on personal risk health risk perceptions, which often include stigmatized conditions such as sexually transmitted infections (STIs) (So & Nabi, 2013; So & Shen, 2016). Additionally, health behaviors are closely intertwined with notions of personal responsibility and morality, meaning that those with adverse health outcomes nay be viewed as immoral and socially undesirable (Smith, 2007; 2019). While many people may socially distance themselves from these stigmatized issues, it remains important to understand mechanisms through which risk perceptions can be promoted.

CLT's psychological distance encompasses not only social distance, but also other dimensions, including spatial distance, temporal distance, and hypotheticality. While stigma may be a barrier to promoting personal risk perceptions via reduced social distance through character-driven processes, transportation and perceived realism offer a promising mechanism for increasing spatial distance — the dimension of psychological distance concerning physical immediacy. Notably, when reflecting on the fact that transportation was a weak predictor of social distance, So and Nabi (2013) proposed that future research should investigate whether transportation related to another dimension of psychological distance, highlighting spatial distance as a promising candidate. By increasing perceptions of spatial closeness vie transportation and perceived realism, entertainment media can increase viewers' risk perceptions, even as they remain detached from characters with undesirable traits. As audience members become immersed in

narrative realities, they increasingly feel present in the story world (Green & Brock, 2000; Slater & Rouner, 2002). As viewers are transported into an alternative reality, their physical location becomes increasingly distant, where the world of the story becomes more immediate. Thus, the following hypothesis is forwarded:

H4:   Plot-driven engagement (transportation) will be associated with decreased spatial distance.

Although viewers may reject that they are personally susceptible to risk events due to perceptions of social distance from stigmatized characters, they may still recognize risks burdening society more broadly when viewing entertainment narratives depicting health issues. Personal risk perceptions are accepted as a reliable predictor of preventative behavioral intentions (Aiken et al., 2001). However, when risk perceptions are broadened beyond the individual to society, it is unlikely that behavior change will follow. For instance, if someone recognizes that STIs are a health threat to their college campus, but does not feel personally susceptible (e.g., due to perceived differences between themself and those who contract STIs), that individual is unlikely to change their own behavior. However, beyond behavior change, a separate body of health communication scholarship focuses on the promotion of policy support through media messages (i.e., Niederdeppe et al., 2014, 2021; Oliver et al., 2012). This body of scholarship posits that health policy perspectives are closely intertwined with perceptions of societal causes of health issues (Iyengar, 1990; Joslyn & Haider-Markel, 2019; Coleman et al., 2011). When messages emphasize societal, rather than individual factors

as causes for public health problems, audiences endorse the perspective that government actors are responsible for presenting solutions (Pearl & Lebowitz, 2014; Sun et al., 2016).

While spatial distance is distinct from social distance in that it not explicitly tied to personal risk perceptions, it should be expected that perceptions of geographical proximity would translate to broader perceptions of societal risk (i.e., risk posed to one's community). Accordingly, research demonstrates that people are more supportive of environmental and health policies when they are spatially proximal (Chu, 2022; Sparkman et al., 2021; Spence et al., 2012). Thus, insofar as transportation promotes the spatial immediacy of a health threat, support for prevention policies addressing the threat is likely to follow. Thus, the following hypotheses are forwarded regarding plot-driven forms of audience engagement:

H5: Diminished spatial of a narrative will be associated with increased social risk perceptions.

H6: Social risk perceptions will be associated with increased support for preventative policies.

[Insert Figure 2 (proposed model)]

CHAPTER THREE

METHODS

Sample

Participants were 107 students from a departmental participant pool at a large southeastern university. While this is a convenience sample, college students are an ideal sample for the current study because they represent the most at-risk group for STIs (CDC, 2021), are shown to engage in high-risk sexual behaviors (Brown et al., 2016), and are generally hesitant to screen for infections (Renfro et al., 2022). Specifically, human papillomavirus (HPV) was chosen as the health condition discussed in the entertainment narrative because it is the most common STI and is most frequent among people in their late teens and early twenties (CDC, 2022b). While the condition frequently goes away on its own without health problems, HPV can cause genital warts and several types of cancer, including cervical, anal, and oropharyngeal cancer (Brianti et al., 2016; CDC, 2022). About 19,400 women and 12,100 men experience HPV-related cancers annually, which if untreated, can be fatal (CDC, 2022b). Every year, roughly 4,000 women die of cervical cancer. Given these consequences, the CDC (2022) recommends that young people under 26 get vaccinated against HPV, making college students the ideal target audience for this entertainment-education experiment.

Following approval of study procedures by the university's Institutional Review Board, participants were invited to participate in exchange for course credit. Four participants were excluded from the initial sample of ($N = 111$) due to the failure of one or more attention checks, leaving a final sample of 107 participants ($n = 6$ male, 33.6%, n

= 68 female, 63.6% and $n = 3$, 2.8% preferred not to say). Participants were racially homogenous ($n = 86$ White, 80.4%, $n = 11$ Black or African American, 10.3%, $n = 5$ Asian, 4.7%, $n = 4$ Hispanic/ Latino, 3.7%, $n = 2$ Native Hawaiian or Other Pacific Islander, 1.9%, $n = 1$ American Indian or Alaska Native, 0.9%, $n = 1$ preferred not to say, 0.9%).

Experimental Design

This research employed a 2 (high versus low identification) X 2 (high versus low transportation) between-subjects factorial design.

Procedure and Stimuli

Following their acceptance of a standard consent form, participants were randomly assigned to one of four experimental conditions: Low Identification/Low Transportation, High Identification/Low Transportation, High Identification/Low Transportation, and High Identification/High Transportation. Participants read one of four versions of an introduction to the plot. Following exposure to the introduction, which contained the experimental manipulations, participants were shown a scene from a television show, *Girls*. *Girls* is a comedy-drama series that aired on HBO in 2012 and depicts the experiences of four young women living in New York City. The series focuses on protagonist Hannah Horvath's struggles with financial distress, her ambition to become a writer, and mistakes characteristic of people in their early twenties.

Across conditions, participants watched a short scene from the show (1:22 minutes), which features a discussion between Hannah and her partner Adam about HPV, a highly common sexually transmitted infection. In the scene, Hannah receives a phone

call from her OB-GYN, who reveals that she has tested positive for the virus. Hannah tells Adam about her test results. After Adam briefly consoles Hannah, the pair get into an argument about who is responsible for transmitting the virus to the other. While Adam says that he tested negative for the HPV the previous week, it remains unclear who is "responsible" for getting the virus by the end of the scene.

Manipulation

The introductory explanation, which will appear to provide context for participants' understanding of the scene, contained the experimental manipulations. All participants were told that the scene features a young couple discussing a positive STI result.

To manipulate the first independent variable, transportation, participants will either be given information about the protagonist's past or her future. One of the few experiments that has successfully manipulated transportation (Tal-Or & Cohen, 2010), employed the same strategy. In their experiment, the authors first exposed participants to a written explanation regarding a plotline from the 1995 film, *The Brothers McMullen,* which tells the romantic stories of three brothers. This introductory explanation contained the experimental manipulations. All participants were told that the scene they would be watching concerned the relationship of the main character with a friend of his wife. Transportation was manipulated by revealing information about the character's past or his future. In the low-transportation (past) conditions, participants were either told that this character was a loyal partner or a serial cheater. In the high-transportation (future conditions), participants were told that the character would face a dilemma between his

desires and his conscience, and he would either follow his conscience and avoid hurting his wife or submit to his desire and commit an act of infidelity. Results of a pretest and the main experiment demonstrated that providing information about the future appeared to build suspense, and in turn, promote transportation.

Given the success of this previous study, the current experiment adopted the same methods of manipulation. Across conditions, participants were told that the scene they would be watching involves a discussion between a young woman, Hannah, and her partner Adam. In the two low transportation conditions, the description revealed information about Hannah's past (e.g., "Since the beginning of her relationship, Hannah has been cheating on Adam"; "Since the beginning of their relationship, Hannah has been loyal to Adam"). In the two high transportation conditions, the description revealed information about Hannah's future meant to elicit suspense (e.g., "However, she is about to receive a phone call that may change everything"). See Table 1 for more detailed examples of the manipulation.

Next, to manipulate identification, the moral valence of the protagonist was varied. In the same study, Tal-Or and Cohen (2010) manipulated identification by either revealing that the protagonist was a serial cheater or an unfailingly loyal partner. While participants identified with the moral version of the protagonist, the information about infidelity suppressed identification. In addition to Tal-Or and Cohen's (2010) manipulation, previous studies have found that varying moral valence influences audience members' identification with characters. For example, Zhou and Shapiro (2022) manipulated characters' moral valence in narratives taking place in academic settings.

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The high-morality conditions featured characters demonstrating selfless acts (e.g., voluntarily tutoring to help other students), while the low-morality conditions feature characters explicitly violating standards of academic integrity (e.g., selling test answers for personal profits). As expected, character morality directly affected audience identification (Zhou & Shapiro, 2022). In another case, Hoeken and Sinkeldam (2014) manipulated character morality, producing similar findings. In the high-morality conditions, the character is kind to customer service personnel, offers pay to her friend for helping her with her health spending budget, and returns the unspent money from her healthcare budget to the government so that other people can use it. In the low-morality conditions, the character is rude to customer service works, does not compensate her friend for the help she provided, and keeps her leftover healthcare money for herself. Again, as expected, this manipulated directly influenced audience identification.

Thus, in the current experiment, identification was operationalized and manipulated through the moral valence of a character. Within the two past conditions, participants will either be told that Hannah is a serial cheater who has had sex with multiple partners during her relationship, or an extremely loyal partner. The moral valence of Hannah will also be manipulated in the two future conditions. In the high moral future condition, participants will be told that Hannah, an extremely devoted partner who feels confident in her Adam's loyalty, is about to receive a phone call that may call her entire relationship into question. In the low moral future condition, participants will be told that Hannah, a regular cheater who feels confident that her

infidelity will never be revealed to her partner, is about to receive a phone call that may uncover her secret.

After reading the introduction containing the manipulation and viewing the scene, participants completed a questionnaire, which included scales for each outcome variable, along with attention checks, a manipulation check, and standard demographic questions. The scales included in the questionnaire measured identification, PSI, personal relevance, perceived realism, transportation, perceived spatial distance, perceived social distance from the protagonist, perceived personal risk of getting STIs, perceived societal risk of STI transmission, behavioral intentions to engage in safe-sex behaviors, and support for policies means to provide college students with resources encouraging safe-sex behaviors.

Pretest

To ensure the effectiveness of the manipulations of the independent variables, identification and transportation, the stimulus materials were pre-tested in a sample similar to the target population. Participants for the pre-test ($N = 48$) were recruited from undergraduate courses in exchange for course credit. The pre-test stimuli and measures were administered through Qualtrics, an online survey platform which allows participants to participate in studies at their leisure (e.g., outside of a lab). For the pre-test, participants were randomly assigned to one of the four conditions, reading the introductory paragraph containing the manipulation, and viewing the short scene. After viewing the scene, participants reported responses to measures for the independent variables, identification and transportation.

Identification was measured using an 8-item version of Cohen's (2001) identification scale. Participants reported their identification levels toward Hannah, the female protagonist, on a 7-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree. Example items include "While viewing the show I could feel the emotions Hannah portrayed," and "At key moments in the show, I felt I knew exactly what Hannah was going through." Two items from Cohen's original scale were removed due to their conceptual overlap with transportation (e.g., "While viewing the show, I forgot myself and was fully absorbed,"; "While viewing program X, I felt as if I was part of the action"). The items were presented to participants in a randomized order. The items formed an index with a good fit ($\alpha = .88$, $M = 4.25$, $SD = 1.24$).

Transportation was measured using a version of Green & Brock's (2000) 11-item transportation scale. Due to its limited relevance to written narratives only, one item was excluded (e.g., "While I was reading the narrative, activity going on in the room around me was on my mind"). Participants reported their responses on 7-point Likert-type items ranging from (1) strongly disagree to (7) strongly agree, such as "I wanted to learn how the narrative ended," and "I was mentally involved in the narrative while reading it."

To assess the effectiveness of the identification manipulation, an independent samples t-test was performed using participants' measured levels of identification as the dependent variable. The average reported level of identification for participants in the low identification conditions ($M = 3.27$, $SD = 1.12$) was lower than that in the high transportation conditions ($M = 4.68$, $SD = 1.15$). This difference was statistically

significant $t(46) = -4.33$, $p <.000$. Thus, the manipulation of identification through moral valence was successful.

Next, to assess the effectiveness of the transportation manipulation, an independent samples t-test was performed using participant's measured levels of transportation as the dependent variable. The average reported level of transportation for participants in the low transportation conditions ($M = 4.50$, $SD = .83$) did not differ significantly from those in the high transportation conditions ($M = 4.79$, $SD = .91$), $t(46)$ $= -1.18$, $p = .24$. Thus, the transportation manipulation was not successful.

Given the failure to manipulate transportation, a second round of pre-testing was conducted. In this case, transportation was operationalized as the presence or absence of spoilers in the pre-scene introduction, given research by Johnson and Rosenbaum (2015) that found spoilers negatively impact transportation. In their study, prior to reading an entertaining short story (i.e., a narrative with a character in mortal danger and a surprise ending), participants were either exposed to a summary introduction that either spoiled the story's ending or left the ending uncertain. Although the authors failed to find conclusive evidence that spoilers influenced transportation, the authors identified a marginal effect of spoilers on the cognitive dimension of transportation, where spoiled stories were marginally less transportive than unspoiled stories. Moreover, the presence of spoilers diminished suspense and enjoyment, constructs that are empirically associated with transportation (Bezdek & Gerrig, 2016; Tal-Or & Cohen, 2010).

Given the promise of these findings, the second pretest manipulated transportation using spoilers about the outcome of the scene in the introduction. Participants for the pre-

test ($N = 54$) were recruited from a departmental participant pool in exchange for course credit. As in the original design, identification was manipulated through the moral valence of the protagonist. In the low transportation conditions, participants learned of Hannah's relationship morals (i.e., Hannah is a serial cheater or a loyal partner) along with a description of the events in the scene.

> In the scene, Hannah receives a phone call from her doctor, who tells her that she
>
> has tested positive for HPV, a highly common sexually transmitted infection.
>
> Hannah is shocked to hear this news. She asks Adam if he transmitted the virus to
>
> her, which he denies. He tells her he was tested for HPV the previous week.
>
> Hannah apologizes for making the accusation, and the conversation ends.

Thus, the participants in the two low transportation conditions are given context about the characters' relationship to manipulate their levels of identification and information revealing the scene's action and conclusion, leaving little room for suspense or transportation. See Table 1 for additional manipulation details.

In the high transportation conditions, participants also learned of Hannah's relationship morals before reading information that promotes uncertainty about the outcome of the scene. In the high identification condition, the introduction reveals that, despite her commitment to the relationship, Hannah is becoming suspicious of Adam's behavior. The introduction concludes with a suggestion that an important revelation is contained in the scene (i.e., "You can only turn a blind eye for so long, and she is about to receive a phone call that might change everything"). In the low identification condition, the introduction reveals that, despite her past year of successful infidelity,

Adam is becoming suspicious about Hannah's behavior. As in the high identification/ low transportation condition, the introduction concludes with a suggestion that an important revelation is contained in the scene. See Table 1 for additional manipulation details.

Independent samples t-test were used to ensure that the manipulation of identification remained successful across iterations of transportation manipulations, and differences in reported identification remained significant in the intended direction. To assess the effectiveness of the identification manipulation, an independent samples t-test was performed using participants' measured levels of identification as the dependent variable. The average reported level of identification for participants in the low identification conditions ($M = 3.17$, $SD = 1.14$) was lower than that in the high identification conditions ($M = 4.96$, $SD = .92$), and this difference was statistically significant $t(52) = -6.38$, $p < .000$. Thus, the manipulation of identification was successful.

To investigate the effectiveness of the transportation manipulation, an independent samples t-test was performed, with reported transportation considered as the dependent variable. Analysis indicated that the average level of transportation reported in the high transportation conditions ($M = 4.02$, $SD = .70$) did not differ significantly from that reported in the low transportation conditions ($M = 3.85$, $SD = .74$), $t(52) = -.85$, $p = .40$. Thus, again, the transportation manipulation was unsuccessful.

Next, other methods of manipulating transportation were considered. In their seminal publications on transportation theory, Green and Brock (2000) operationalized the manipulation of transportation by providing tasks designed to either promote or

suppress absorption into the story world. Prior to reading an entertainment narrative ("Murder at the Mall"), participants were instructed to a) immerse themselves in the text as an actor playing a role might do, or b) identify words that would not be understandable to someone reading at a fourth-grade level. While the authors only identified marginal effects on identification, their experimental design has been employed in other narrative persuasion studies (i.e., Cohen et al., 2015; Green, 2004) and is commonly cited as a method of manipulating transportation (Green & Fitzgerald, 2017; Tal-Or & Cohen, 2010).

These methods of manipulation were adapted to fit a video, rather than textual narrative. Participants were told that they were evaluating the quality of videos for a media production class. In the high transportation conditions, participants were instructed to absorb themselves into the scene: "Immerse yourself in the action of the story. Imagine the setting, how the characters are feeling, and how you might feel in the situation." In the low transportation conditions, participants were instructed to focus on the technical aspects of film production: "Evaluate the aspects of the scene related to production. Concentrate on the technical components of the scene, such as the lighting choices, camera angles, and costumes."

Participants for the third pre-test ($N = 65$) were recruited from were recruited from a departmental participant pool in exchange for course credit. Both the identification and transportation manipulations were assessed. To assess the effectiveness of the identification manipulation, an independent samples t-test was performed using participants' measured levels of identification as the dependent variable. The average

reported level of identification for participants in the low identification conditions ($M =$ 4.21, $SD = 1.34$) was lower than that in the high identification conditions ($M = 4.95$, $SD =$ .92), and this difference was statistically significant $t(63) = -2.50$, $p = .01$. Thus, the manipulation of identification through moral valence was successful.

Next, an independent samples t-test was used to determine the effectiveness of the transportation manipulation. The analysis revealed no significant differences in reported transportation between participants in the high transportation conditions ($M = 4.02$, $SD =$ .83) and the low transportation conditions ($M = 4.06$, $SD = 1.19$), $t(63) = .15$, $p = .88$. Thus, a third attempt at manipulation of transportation was unsuccessful.

Considering the success of Tal-Or and Cohen's (2010) manipulation of both identification and transportation, the authors' experimental design was re-examined. While the first pre-test operationalized the transportation manipulation through the promotion or suppression of suspense (i.e., providing information about the protagonist's past or future), all four manipulations provided context that may have driven suspense. For example, in the low transportation conditions, the introduction explained, "After finding out from her OBGYN that she has tested positive for an STI, [Hannah] is worried that Adam will find out about her infidelity/ she is worried that Adam may have cheated on her." While this information was intended to give context about the couple's relationship, it may have unintentionally sparked participants' interest and driven transportation.

In their experiment, Tal-Or and Cohen's (2010) low transportation only revealed the moral status of the protagonist. Thus, in the second iteration of employing Tal-Or and

Cohen's (2010) method for manipulating transportation, information about Hannah's morality was only revealed in the low transportation conditions (i.e., "Since the beginning of their relationship, Hannah has been loyal to Adam and has had no other sexual partner/ has been cheating on Adam with multiple partners"), giving no information about the couple's future that would build suspense.

In their experiment, Tal-Or and Cohen's high transportation conditions work to build suspense by suggesting the protagonist will face a dilemma where he will "eventually submit to his desires and hurt his wife, or that he will eventually follow his conscience and not hurt his wife," indicating the moral valence along with building suspense about the scene. Thus, in the revised high transportation conditions, the introductory text indicates a pivotal moment in the couple's relationship, aimed at promoting suspense (i.e., "In this scene, Hannah will be forced to face the truth about her relationship when she can no longer ignore her suspicion that Adam has been cheating on her/ when she can no longer hide the fact that she has been cheating on Adam").

Participants for the fourth pre-test ($N = 72$) were recruited from a departmental participant pool in exchange for course credit. To examine the effectiveness of the fourth transportation manipulation on reported transportation, an independent samples t-test was performed. Participants in the high transportation conditions ($M = 4.05$, $SD = .85$) reported lower levels of transportation than those in the low transportation conditions ($M = 4.58$, $SD = .98$), and this difference was statistically significant, $t(70) = 2.43$, $p = .02$. Thus, the manipulation of transportation was successful, albeit not in the intended direction. Given the lack of success in former iterations of the manipulation, these stimuli

were used for data collection in the final experiment. Thus, low transportation was operationalized as the two suspense-building versions of the introduction, and high transportation was operationalized as the two versions of the introduction that solely indicated Hannah's moral status.

Measures

Identification

Identification was measured using the same scale employed in the pre-test. The items were presented to participants in a randomized order. The items formed an index with a good fit ($\alpha = .88$, $M = 4.25$, $SD = 1.24$).

Transportation

Transportation was measured using the same scale employed in the pre-tests. The mean of the items was computed with an initial Cronbach's alpha of .70. After removing an item (i.e., "While viewing, I thought about the events occurring in the room I was in"), the index had acceptable reliability ($\alpha = .76$, $M = 4.27$, $SD = 1.10$).

Social Distance

Social distance was measured using So and Nabi's (2013) eight-item measure. Participants' responses will be reported on 7-point Likert-type items ranging from (1) strongly disagree to (7) strongly agree. Example items include "I would behave similarly to Hannah if I were in her situation,"; "I can easily think of people around me who are like Hannah in many ways,"; "I feel very close to Hannah." The eight items were averaged into a scale, which had good reliability ($\alpha = .86$, $M = 3.41$, $SD = 1.22$).

Spatial Distance

Spatial distance was measured using four items adapted from Jones et al. (2016). Example items include "The worst effects of STIs are felt more by places far away from Clemson," and "I think about faraway places rather than nearby places when thinking of negative effects of STIs." Participants' responses were reported on 7-point Likert-type items ranging from (1) strongly disagree to (7) strongly agree. The items were computed into a single index, which had acceptable reliability ($\alpha = .68$, $M = 3.88$, $SD = .98$).

Personal Risk Perceptions

Participants' personal risk perceptions were measured using two items employed by So and Nabi (2013). The two items assessed participants' perception of risk on 7-point Likert scales ranging from (1) strongly disagree to (7) strongly agree: "I believe that my chances of getting an STI are high," and "I believe that my lifestyle makes me vulnerable to getting an STI." The two items were averaged into a single item to represent personal risk ($r = .61$, $p < .001$) ($M = 1.96$, $SD = 1.19$)

Societal Risk Perceptions

Participants' societal risk perceptions were measured using two items adopted from So and Nabi (2013). This measure asked participants about perceptions of risk within the population they represent: students at their university: "I believe that the average student at my university's chances of getting an STI are high," and "I believe the lifestyle of the average student at my university makes them vulnerable to getting an STI." Participants responded on a 7-point Likert scale ranging from (1) strongly disagree to (7) strongly agree. Analysis revealed the two items were not significantly correlated, *r*

= .10, *p* = .15. Further consideration of the chosen items shows the second item includes an attribution of responsibility, rather than risk generally. Therefore, the first item was selected for use in analysis (*M* = 3.84, *SD* = 1.46).

Behavioral Intentions

As was the case for So and Nabi's seminal work on the RCM, the key persuasive outcome considered was behavioral intentions to get tested for STIs. Participants' intentions were measured using a two-item scale with seven-point Likert-type items, "How likely is it for you to test for STIs in the near future?" and "How likely is it that you get vaccinated against HPV in the near future?" ranging from (1) not likely at all to (7) very likely. The mean of the items was computed to create a behavioral intentions measure (*r* = .45, *p* < .001) (*M* = 3.59, *SD* = 1.60).

Policy Support

The second persuasive outcome of interest is participants' support for policies meant to aid college students in preventing and treating STIs. Policy support was measured using a 6-item scale measuring attitudes toward various policies that could be implemented at the university level. Responses were reported on a 7-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree. The items included, "All students at my university should have access to free STI testing," "Individual students are responsible for paying for STI testing" (reverse coded), "All students at my university should be guaranteed free treatment for STIs," "All students at my university should be guaranteed free treatment for STIs, regardless of insurance coverage," "In order to pass CU1000, the orientation course required for all students at the university, students should

have to pass an STI education module," "Students at my university should be required to be vaccinated for HPV," and "Students at my university should have access to free HPV vaccination." The items were computed into a scale with acceptable reliability ($\alpha = .77$, $M = 5.35$, $SD = 1.07$).

Topic Relevant Information

Participants will be asked to report behavioral information relevant to the health context. Using the same items as So and Nabi (2013), participants responded to the following: "Have you ever had sexual intercourse?" (55% yes), "Are you currently sexually active?" (33% yes), "Have you ever been diagnosed with an STI?" (3% yes), and "Do you know anyone who has been diagnosed with an STI?" (38% yes). Additionally, on 7-point Likert-type items, participants reported the likelihood that they would engage in sexual intercourse anyway when no protection against STIs is available ($M = 2.36$, $SD = 1.68$), and would use protection against STIs every time you have sexual intercourse over the next year ($M = 5.35$, $SD = 1.95$). Due to the low sample size, these variables were not used as co-variates but will be considered in future analyses with a larger sample.

CHAPTER FOUR

RESULTS

Manipulation Check

To ensure the manipulation of both identification and transportation was successful in final data collection, two independent-samples t-tests were performed. The items for transportation ($\alpha = .76$, $M = 4.27$, $SD = 1.10$) and identification ($\alpha = .88$, $M = 4.25$, $SD = 1.24$) were averaged into scales with acceptable or good fit. The first independent samples t-test was performed with measured identification used as the dependent variable. Participants in the high identification conditions ($M = 4.92$, $SD = .85$) reported significantly higher identification than those in the low identification conditions ($M = 3.59$, $SD = 1.21$), $t(105) = -6.59$, $p < .001$, indicating that the manipulation was successful.

A second independent samples t-test was performed with measured transportation used as the dependent variable. Participants in the high transportation conditions ($M = 4.26$, $SD = 1.01$) did not report significantly more transportation than participants in the low transportation conditions ($M = 4.28$, $SD = 1.20$), $t(105) = .07$, $p = .95$. Thus, the manipulation of transportation was unsuccessful. Given these results, measured levels of transportation were used for analysis. Although this limits the ability to test the causal claims in the model, it provides an understanding of the relationship between the variables of interest and is not uncommon in the literature.

Analysis

To test the first set of hypotheses (H1-3), a serial mediation model (Model 6) was computer with the PROCESS 3.4 macro on SPSS (Hayes, 2013). The model used 5,000 bootstrapped samples and bias corrected confidence intervals at 95% to examine the indirect effects, where confidence intervals excluding zero denoted significance. The regression coefficients and indirect effects associated with the model are reported in Table 2. The first hypothesis (H1) predicted that identification would be associated with decreased social distance. Results of the model indicated support for this prediction, B = -1.05, $p < .001$. Thus, H1 was supported. The second hypothesis (H2) predicted that reduced social distance would be associated with increased personal risk perceptions. Again, the model affirmed this prediction, B = -.29, $p = .006$, revealing support for H2. The third hypothesis (H3) predicted that personal risk perceptions would be associated with increased intentions to engage in prevention behaviors, and the model revealed support for this prediction, B = .45, $p < .001$. Thus, H1-3 were supported.

Next, the model tested the indirect effects predicted in H1-3: the effect of manipulated identification (X) on intentions to screen for STIs (Y) via two sequential mediators: social distance from the protagonist (M_1) personal risk perceptions (M_2). Evidence of serial mediation was revealed (a_1db_2 X = 0.14(0.08, CI 95% [.03, 0.32]) (X$\rightarrow M_1 \rightarrow M_2 \rightarrow$ Y), supporting H1-3. Specifically, identification was associated with lower social distance from the protagonist, which predicted increased risk perceptions, and, subsequently, behavioral intentions.

To test the second set of hypotheses (H4-6) a second serial mediation model was used. H4 predicted that transportation would be associated with decreased perceptions of social distance, and the model revealed support for this prediction, B = -.19, p = .03. Thus, H4 was supported. Next, H5 predicted that decreased social distance would be associated with increased societal risk perceptions. The model provided evidence for this prediction, B = -.49, $p < .001$, supporting H5. Finally, H6 predicted that societal risk perceptions would be associated with increased support for prevention policies. However, the model did not reveal support for this prediction, B = .11, p = .11. Thus, H6 was rejected.

The model was then used to examine the indirect effects hypothesized in H4-6: the influence of reported transportation (X) on policy support (Y) through two sequential mediators: spatial distance from the protagonist (M_1) and societal risk perceptions (M_2). The model did not reveal evidence of serial mediation (a_1db_2 X = 0.01(0.01), CI 95% [-0.00, 0.03]) (X→ M_1→ M_2 → Y). However, direct effects of transportation on policy support were observed (a_1db_2 X = 0.37 (0.09), CI 95% [0.19, 0.55]) (X → Y). In particular, higher reported transportation was associated with increased support for policies increasing student access to STI testing. Thus, while the serial mediation model was not supported, the prediction that transportation would lead to higher support for prevention policies was supported.

CHAPTER FIVE

DISCUSSION

An expansion on So and Nabi's (2013) RCM, this investigation examined the distinct effects of character-driven engagement (e.g., identification) and plot-driven engagement (e.g., transportation) on health-related risk perceptions, considering multiple dimensions of psychological distance as explanatory mechanisms. In line with previous examinations of the model (So & Nabi, 2013; So and Shen, 2016) and recent theorizing on narrative engagement (Tal-Or & Cohen, 2010; 2016), the current study demonstrated that character-driven engagement and plot-driven engagement influenced health-related risk perceptions in distinct ways. Namely, character-driven engagement (operationalized as identification) reduced perceptions of social distance from an at-risk character, which drove increases in personal risk perceptions and, subsequently, intentions to engage in prevention behaviors. Through a separate process, plot-driven engagement (operationalized as transportation) promoted increases in societal risk perceptions via the reduction of spatial distance. Additionally, transportation directly influenced support for policies intervening with a health threat on a societal, rather than individual level.

Character-Driven Engagement

This study replicates the findings of previous applications of the RCM, which have found that engaging with an at-risk character in an entertainment narrative reduced social distance between the character and viewer, and in turn, elicited perceptions of personal risk and motivations to engage in protective behaviors (So & Nabi, 2013; So & Shen, 2016). One of the most studied forms of narrative engagement, identification

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causes viewers to temporarily adopt a character's identity, causing them to experience narrative events as though they were happening to them (Cohen, 2001). In turn, when a character experiences a health risk, viewers internalize that risk and take actions to protect themselves. Though theorizing on narrative persuasion has focused on how identification with characters reduces viewers' inclination to counterargue against characters' perspectives (e.g., Igartua & Rodríguez-Contreras, 2020; Moyer-Guse, 2008; Slater & Rouner, 2002), the current study offers additional evidence to support So and Nabi's (2013) proposition that an alternative mechanism, social distance, accounts for these effects.

Although young people generally perceive themselves to have little vulnerability to STIs (Clifton et al., 2018; Hickey & Cleland, 2012), identification was able to overcome this barrier to persuasion by promoting social proximity (i.e., shared characteristics and susceptibilities). This diminished social distance increased perceptions of personal risk; insofar as a socially proximal character was susceptible to STIs, participants felt that they were at risk. In turn, heightened risk perceptions related to STIs drove increases in intentions to vaccinate against HPV (i.e., the exemplified health threat) and to test for STIs in the near future. These findings demonstrate the utility of risk messages that invite engagement with characters experiencing adverse health outcomes. While previous research demonstrates that people underestimate their susceptibility to adverse health outcomes compared to similar others in a phenomenon referred to as unrealistic optimism (Weinstein, 1982, 1987), the current study demonstrates that entertainment media present a potential solution. Namely, such messages overcome

viewers' misperceptions about their vulnerability to health risk by promoting social closeness to characters experiencing risk.

Further, this study demonstrates that character-driven engagement does not promote the reduction of psychological distance as a broad concept, but rather specifically promotes the reduction of social distance—the dimension of psychological distance concerned with relationships to others. The results of ad-hoc analysis showed that participants undergoing identification did not experience reductions in spatial distance (i.e., perceptions of physical presence), $t = -.11$, $df = 105$, $p = .91$. Thus, while confirming So and Nabi's predictions that character-driven engagement promotes risk perceptions by reducing social distance, the current research clarifies that this process does not extend to other dimensions of psychological distance. In other words, character-driven engagement is effective because it creates a perceptual overlap between viewers and their identified characters, not because it promotes psychological immediacy of an overall narrative world.

Notably, identification alone did not promote personal risk perceptions and behavior change. Only through the reduction of social distance from an at-risk character did identification promote persuasion. These findings are consistent with those of So and Nabi (2013), who also found that the effects of identification on personal risk perceptions was mediated by the reduction of spatial distance, but that direct effects of identification were not present. Despite previous research arguing that identification is a powerful driver of behavior change (de Graaf et al., 2016; Shen et al., 2015), identification appears to drive persuasion insofar as it initiates other processes, such as social distance reduction

(So & Nabi, 2013; So & Shen, 2016). As conceptualized by Cohen (2001), identification is the temporary adoption of a character's identity. However, results of the current study indicate that this temporary overlap alone is insufficient to impact personal risk perceptions or prevention behaviors. Instead, this temporary overlap drives perceptions of social closeness to a character experiencing risk, which in turn promotes personal risk perceptions and intentions to change behavior. So and Nabi (2013) argue that this pattern of results suggests that risk communication efforts should be aimed at not only increasing identification, but increasing identification with characters to whom viewers feel socially proximal.

For example, while some research suggests that character-viewer demographic similarity drives identification (Murphy et al., 2013), other research demonstrates that identification with characters is independent of viewer similarity to them (Cohen et al., 2018). One meta-analysis found no effects of manipulated demographic similarity on identification with characters (Tukachinsky, 2014). Although these studies demonstrate that narratives can elicit identification despite dissimilarity between viewers and identified characters, the current findings, combined with other research on RCM (So & Nabi, 2013; So & Shen, 2016) indicate that these narratives may be less effective at increasing risk perceptions and behavior change. Namely, viewers identifying with a character who lacks shared social characteristics (e.g., age, gender) may not experience the reduced social distance necessary to produce the intended persuasive outcomes. Thus, particularly when a health risk is specific to a sub-group (e.g., HPV screening for women or HPV vaccination for young women), risk narratives should promote identification with

socially proximal characters whose risk is readily internalized by viewers. While the current study operationalized identification as moral virtue, the protagonist was a young woman, who is demographically similar to the study's sample (e.g., young college men and women). Thus, future research should investigate whether character-viewer similarity influences the effects of identification on social distance and subsequent persuasive outcomes.

Plot-Driven Engagement

The current research also contributes to the understanding of plot-driven engagement as a driver of narrative persuasion. This study revealed that plot-driven engagement, rather than character-driven engagement, produces support for policies addressing the health issues represented in media narratives. Namely, transportation into an entertainment narrative about STI transmission increased participants' endorsement of policies improving access to testing and treatment of STIs. Given that character-driven engagement exerted influence on personal risk perceptions by reducing social distance, this study examined whether plot-driven engagement influenced societal risk perceptions through an alternative dimension of psychological distance: spatial distance. As identification is conceptually similar to social proximity (i.e., both involve a social distance approaching zero), transportation is akin to spatial proximity (i.e., both involve perceptions of physical immediacy). Indeed, the current study demonstrated that transportation into an entertainment narrative reduced participants' perceived spatial distance from the health threat exemplified in the narrative world. However, this reduction in spatial distance did not mediate the effects of plot-driven engagement on

persuasive outcomes (societal risk perceptions and policy support). Thus, while this study provides evidence that plot-driven engagement is distinct from character-driven engagement in that it promotes support for health policy, rather than behavior change, more investigation is needed to determine the mechanisms through which plot-driven engagement produces these effects.

While transportation did not influence policy support through the proposed mechanism, this study affirms the propositions of recent theoretical discussions surrounding narrative engagement (Tal-Or and Cohen, 2016). Specifically, while identification and transportation are frequently shown to drive narrative persuasion, they do so through distinct mechanisms with distinct effects. Research on narrative persuasion overwhelmingly focuses on the ability of narratives to guide health behaviors (de Graaf et al., 2016; Shen et al., 2015). However, the current study demonstrates that plot-driven engagement with narratives has unique implications for health policy attitudes, independent of the narrative's influence on behavior change.

Although previous research suggests that both character-driven (e.g., identification) and plot-driven (e.g., transportation) engagement with narratives promotes behavior change, the current study suggests that engagement with a specific character influences individual-level intervention with health threats. Notably, identification and transportation are not incompatible with each other. In fact, they are frequently correlated with one another in empirical research (Tal-Or & Cohen, 2016). That said, when identification with a character is absent, narrative effects on behavior change are likely to

diminish. Instead, the narrative is more likely to drive support for policy intervention with a health threat.

Policy-Driven Engagement and Policy Support

The findings of this research show that character-driven engagement drives personal, but not societal-level risk perceptions. Thus, while media messages encouraging identification with at-risk characters increase perceptions of personal susceptibility to adverse health outcomes, these concerns may not extend to society more broadly. Distinguishing between personal and societal-level risk perceptions is essential, because while personal risk perceptions guide healthy behaviors (Aiken et al., 2001), societal risk perceptions have implications for public attitudes toward health-related policies. Namely, when health threats are perceived to be caused by factors at the societal, rather than individual level, people endorse government intervention and policy change as solutions (Joslyn & Haider-Markel, 2019; Pearl & Lebowitz, 2014; Sun et al., 2016). Thus, examining mechanisms through which media messages promote societal risk perceptions, in addition to personal risk perceptions, is important for the advancement of public health policies and structural change.

Despite the value of health communication efforts aimed at promoting behavior change, an alternative line of research works to examine how strategic messages can increase support for controversial health policies (Niederdeppe et al., 2014, 2021). Scholarly discussions in public health and policy suggest the importance of developing strategies to improve public support for policy interventions to address health disparities (Golden et al., 2015; Robert & Booske, 2011; Williams & Cooper, 2019). Health

behaviors are guided and constrained by people's structural environments (Braveman & Gottlieb, 2014), meaning that working to increase behavior change alone is insufficient to address major health issues. The current findings address this concern by providing preliminary evidence that plot-driven processes of narrative engagement (e.g., transportation) can be leveraged to improve public support for health policy.

Interestingly, while previous research suggests that spatial distance influences policy attitudes (i.e., where environmental and health policies affecting spatially proximal locations are viewed more favorably) (Chu, 2022; Sparkman et al., 2021; Spence et al., 2012), spatial distance was not significantly associated with policy support in the current study. These findings indicate that transportation drove policy support through an alternative mechanism. Previous research on narrative persuasion and policy support demonstrates that causal attributions influence policy perspectives (Niederdeppe et al., 2014, 2015), though these studies did not measure transportation. Rather, these studies considered how engagement with characters (i.e., through empathy and perceived similarity) was associated with increased perceptions that society, rather personal failures, were to blame for the character's plight.

While character-driven engagement diminishes attributions of personal responsibility, plot-driven engagement is likely to promote acceptance of narrative events in the causal sequence they are depicted in. Narratives demonstrate causes and effects as a chain, increasing the likelihood that an audience member will recall the story as a whole, rather than standalone parts (Green, 2006). Thus, insofar as viewers are transported into a narrative, they are more likely to accept causal explanations in their

entirety. For example, Murphy et al. (2013) found that women who viewed an entertainment narrative where a young woman reveals to her sister that tested positive for HPV reported more knowledge about HPV (i.e., HPV causes cancer) than those who viewed an informative PSA containing the same information about the causes and effects of HPV. Narrative effects on participants' knowledge were driven by transportation, but not identification with the character who had HPV, suggesting that transportation holds unique implications for viewers' causal understanding. Notably, transportation did not predict intentions to screen for HPV, affirming the idea that transportation influences broad understanding of health issues rather than personal risk perceptions (Murphy et al., 2013).

Additionally, the work of Niederdeppe and colleagues (2011, 2014, 2015) demonstrates that narratives depicting an individuals' struggle to overcome obesity in the face of structural barriers drives societal causal attributions (i.e., understanding that factors outside of an individual's control) about obesity, and subsequently, support for policies addressing obesity. While the authors did not measure plot-driven engagement, their research suggests that narratives hold a unique ability to influence causal attributions and policy support (Niederdeppe et al., 2011), inviting future inquiry about the processes through which this occurs.

To these ends, the current study demonstrates that transportation into a narrative world featuring STI transmission increased perceptions of societal-level risk and support for societal-level policy intervention. While causal attributions were not measured, these findings considered alongside the work of Niederdeppe et al. (2011, 2014, 2015) indicate

that transportation may drive perceptions that a health threat is external to the individual

(e.g., by social factors). Although the entertainment narrative used in the stimuli did not

provide clear causal explanations for the transmission of HPV, transportation into a

narrative world in the absence of identification with a character might diminished the

perceived causal controllability of adverse health outcomes through individual behavior.

Identification with the at-risk character drove intentions to act against STI transmission

by diminishing perceptual distance from the character and increasing personal risk

perceptions. Again, while causal attributions were not measured, the intentions to modify

behavior suggest that identification with a character can drive perceptions of behavioral

control over health outcomes. In other words, identification with characters experiencing

health risks may drive the perception that health outcomes are internally caused.

Conversely, transportation into a narrative world without identification with a character

may drive the perception that health risks exist independent of individual behavior. Thus,

research examining narratives that invite plot-driven engagement, but not character-

driven engagement should consider effects on causal attributions, in addition to societal

risk perceptions and policy support.

Within this line of work, Skurka et al. (2020) considered persuasive processes

driving the effects of individual and collective narratives. The authors found that

individual narratives about health disparities (i.e., narratives about a single character)

outperformed collective narratives (i.e., narratives about a community) in terms of

promoting identification. Namely, participants identified more with the specific character

references in the individual narrative than the group referenced in the collective narrative.

However, the authors found no difference in transportation across the narrative types and that the collective narrative effectively increased support for community-level policy action (Skurka et al., 2020). Previous research argues that narrative persuasion operates by promoting engagement with characters by exemplifying their encounters with health threats (i.e., through identification or parasocial interaction) (Kresovich & Noar, 2020; Moyer-Gusé, 2008; Moyer-Gusé & Nabi, 2010). Given the current study's findings, future research should investigate how narratives depicting broader causes and consequences of health issues can work to promote support for policies. While the current study demonstrates that plot-driven engagement, and not character-driven engagement can drive health policy support, the mechanisms through which this occurs remain unclear. Thus, future research should examine the role of mediators, such as causal attributions, in explaining the impact of plot-driven engagement.

Limitations and Future Directions

The findings of this study should be interpreted alongside several limitations. First, the final sample size was 107 participants, which provided limited statistical power for the examination of study predictions. However, despite the statistical analyses being underpowered, the full serial mediation model regarding character-driven engagement, and multiple relationships predicted about plot-driven engagement were significant. These results indicate that the theoretical assumptions underlying study predictions are robust and would likely be affirmed with the addition of more participants.

Second, the manipulation of transportation was unsuccessful. Despite theory-driven attempts to manipulate transportation (i.e., through suspense, spoilers, and

engagement instructions), only the final pre-test revealed effects of the experimental manipulation on transportation. Contrary to the findings of Tal-Or and Cohen (2010), whose study design guided the development of the experimental stimuli, the promotion of suspense significantly reduced transportation. While Tal-Or and Cohen (2010) reasoned that providing information about the character's future would build suspense, our results demonstrate that the opposite may be true. Pre-tests of the stimuli indicated that providing less information about characters produced suspense toward the scene, and subsequently, transportation. Still, given the inconsistencies between the current findings and those of other experimental manipulations of transportation (Green & Brock, 2000; Johnson & Rosenbaum, 2015; Tal-Or & Cohen, 2010), additional research should work to determine effective ways of manipulating transportation.

Additionally, due to the failure to manipulate transportation in the full experiment, measured transportation, rather than manipulated transportation, was used to examine hypotheses related to plot-driven engagement. Accordingly, limited conclusions about the causal relationship between transportation and each outcome variable can be drawn. That said, analyzing the effects of reported transportation still allowed for the comparison of plot-driven and character-driven engagement and revealed novel insights about their distinct consequences on variables. Additionally, given the challenges of manipulating transportation, most of the previous research in this area has taken this approach to testing the outcomes of transportation.

Third, participants were undergraduate students enrolled in an introductory communication course. Sampling from a single university allows for limited

interpretation of the generalizability of results, as the participants are not representative

of (a) the broader population of college students in the U.S. or (b) the entire population of

the U.S. Additionally, these students came from an institution in the southern U.S., where

norms surrounding sexual behavior and religiosity may have influenced responses.

Notably, only one-third of the sample reported being sexually active. Given that the

content of the entertainment narrative related to risky sexual behaviors, participants who

are currently sexually active would have been preferred.

However, while this is a convenience sample, these participants were selected

because college students represent the most at-risk group for STIs (CDC, 2021).

Additionally, they engage in risky sexual behaviors and demonstrate hesitancy against

prevention behaviors, such as screening (Brown et al., 2016, Renfro et al., 2022).

Moreover, the STI exemplified in the entertainment narrative was HPV, which is not only

the most common STI, but also the most impactful for people in their late teens and early

twenties (CDC, 2022b). As HPV is linked to several types of cancer but can be prevented

through vaccination, public health authorities recommend that people under age 26 get

vaccinated against the virus (CDC, 2022). Thus, the sample of college students aged 18-

28 years (M=19.28, SD=1.40) was a suitable target audience for the promotion of risk

perceptions and policy attitudes related to the health topic.

Additionally, findings should be interpreted in light of limitations related to

measurement. The items used to measure transportation (α = .76), spatial distance (α =

.68), and policy support (α = .77) comprised scales of only acceptable reliability.

Additionally, because the two items used to measure societal risk perceptions were not

significantly correlated ($r = .10$, $p = .15$), a single item was used to represent the construct. The findings related to these variables should thus be interpreted with these limitations in mind.

Despite these limitations, this research advances theoretical knowledge about narrative engagement and presents avenues for future investigations. The study's findings reflect previous assumptions about character-driven engagement, suggesting that theorizing in this area presents a reliable conception of how entertainment narratives about health are processed. Namely, identification with an at-risk character increased participants' personal risk perceptions and behaviors (de Graaf et al., 2016; Shen et al., 2015) through the reduction of perceived social distance from the character (So & Nabi, 2013; So & Shen, 2016). Given these findings, additional research should expand on the relationship between identification and social distance (i.e., whether it is impacted by character-viewer similarity).

Additionally, a unique contribution of this research is that plot-driven engagement operates distinctly from character-driven engagement, promoting risk perceptions at the societal, rather than individual level. Additionally, this form of engagement directly impacted participants' support for sexual health-related policies. Although the hypothesized mechanism of these effects (i.e., spatial distance reduction) was not supported, the study suggests that narratives aimed at promoting support for health policies should work to elicit engagement with an overall plot, rather than specific characters.

Additionally, given the failure to manipulate transportation through the experimental design of previous research (Cohen et al., 2015; Green & Brock, 2000; Green et al., 2004; Johnson & Rosenbaum, 2015; Tal-Or & Cohen, 2010), future research should replicate and re-examine the antecedents of narrative transportation. Tal-Or and Cohen's (2010) suspense manipulation is the only published experiment that successfully and independently manipulated both identification and transportation However, other research has manipulated transportation, by spoiling plotlines or providing engagement tasks (Green & Brock, 2000; Johnson & Rosenbaum, 2015). While these methods are viewed as means of influencing transportation (Johnson & Rosenbaum, 2015; Tal-Or & Cohen, 2016; van Laer et al., 2014), one meta-analysis found that only half of the studies manipulating transportation reported significant differences in the expected direction (Tukachinsky, 2014). Thus, replication studies are needed to understand the conditions under which transportation can be manipulated.

CHAPTER SIX

CONCLUSION

The current study experimentally investigated the effects of two dominant forms

of narrative engagement, including engagement with individual characters and

engagement with overall plotlines. Although narrative persuasion research often

conceptualizes the two variables together, this study demonstrates that the processes

operate through distinct mechanisms, with distinct implications for health risk

perceptions and actions. Namely, character-driven exerts impact by closing the perceived

social distance between a viewer and an at-risk character. In turn, viewers perceive

themselves to share the same health risk as the character and become motivated to act

against the threat. In contrast, plot-driven engagement closes the perceived spatial

distance between a viewer and a narrative world. In turn, this leads to heightened risk

perceptions at the societal level. While these processes did not mediate the effects of plot-

driven engagement on policy support, plot-driven engagement, and not character-driven

engagement, drove support for health-related policies. This research advances theoretical

understanding of the different types of narrative engagement and creates paths for future

inquiry about how narratives can be leveraged to garner support for policy action against

health issues.

APPENDICES

Before viewing a short scene from the television show *Girls*, participants will read a brief introduction containing the experimental manipulations.

Condition 1: Low Identification (immoral)/ Low Transportation (info about past):

The following is a scene from a TV show called Girls. The scene involves a discussion between Hannah and her boyfriend, Adam. Since the beginning of their relationship, Hannah has been cheating on Adam with multiple partners. After finding out from her OBGYN that she has tested positive for an STI, she is worried that Adam will find out about her infidelity. She decided to lie to him and accuse him of transmitting the virus to her rather than admit that it may have been from someone else.

Condition 2: High Identification (moral)/ Low Transportation (info about past)

The following is a scene from a TV show called Girls. The scene involves a discussion between Hannah and her boyfriend, Adam. Since the beginning of their relationship, Hannah has been loyal to Adam and has had no other sexual partners. After finding out from her OBGYN that she has tested positive for an STI, she is worried that Adam may have cheated on her. After all, since she received her STI screening last year, Adam is the only partner she has had sex with.

Condition 3: Low Identification (immoral)/ High Transportation (info about future)

The following is a scene from a TV show called Girls. The scene involves a discussion between Hannah and her boyfriend, Adam. Since the beginning of their relationship, Hannah has been cheating on Adam with multiple partners. So far, he has not suspected a thing. Conveniently, his busy work Adam's busy work schedule allows her plenty of free time to see other men without him asking questions. This has been going on for a year now, but she is about to receive a phone call that might change everything.

Condition 4: High Identification (moral)/ High Transportation (info about future)

The following is a scene from a TV show called Girls. The scene involves a discussion between Hannah and her boyfriend, Adam. Since the beginning of their relationship, Hannah has been loyal to Adam and has had no other sexual partners. She met Adam a year ago and has never doubted that he is just as committed. This year, she approached her annual STI screening stress-free, knowing that her only partner is just as committed

to her as she is to him. However, she is about to receive a phone call that might change everything.

Next, across all conditions, participants will view the same short scene from *Girls*.

Low ID/ Low Trans

The following is a scene from a TV show called Girls, a show that aired on HBO for five seasons and ended in 2017. The scene involves a discussion between Hannah and her boyfriend, Adam.

Since the beginning of their relationship, Hannah has been cheating on Adam with multiple partners. Adam is committed to Hannah and believes she feels the same way about him. They discuss having a future together on a regular basis. He would be devastated to find out that Hannah has not been loyal. In the scene, Hannah received a phone call from her doctor, who tells her that she has tested positive for HPV, a highly common sexually transmitted infection.

Hannah is shocked to hear this news. She asks Adam if he transmitted the virus to her, which he denies. He tells her he was tested for HPV the previous week. Hannah apologizes for making the accusation, and the conversation ends.

High ID/ Low Trans

The following is a scene from a TV show called Girls, a show that aired on HBO for five seasons and ended in 2017. The scene involves a discussion between Hannah and her boyfriend, Adam.

Since the beginning of their relationship, Hannah has been loyal to Adam and has had no other sexual partners. She has always had a feeling that he was the one.

In the scene, Hannah received a phone call from her doctor, who tells her that she has tested positive for HPV, a highly common sexually transmitted infection.

Hannah is shocked to hear this news. She asks Adam if he transmitted the virus to her, which he denies. He tells her he was tested for HPV the previous week. Hannah apologizes for making the accusation, and the conversation ends.

Low ID/ High Trans

The following is a scene from a TV show called *Girls*, a show that aired on HBO for five seasons and ended in 2017. The scene involves a discussion between Hannah and her boyfriend, Adam. Since the beginning of their relationship, Hannah has been cheating on Adam with multiple partners. Adam is committed to Hannah and believes she feels the same way about him. They discuss having a future together on a regular basis. He would be devastated to find out that Hannah has not been loyal. He has had suspicions in the past, but Hannah has always been able to come up with an excuse or have friends cover for her. The last time he confronted her, she turned the accusations around on him. However, you can only keep the lies up for so long, and Hannah is about to receive a phone call that might change everything.

High ID/ High Trans

The following is a scene from a TV show called *Girls*, a show that aired on HBO for five seasons and ended in 2017. The scene involves a discussion between Hannah and her boyfriend, Adam. Since the beginning of their relationship, Hannah has been loyal to Adam and has had no other sexual partners. She has never experienced love this strong and has never doubted that Adam is just as committed to the relationship.

She has always had a feeling that he was the one and thinks Adam might be about to make his commitment official with a proposal. However, Hannah has recently become suspicious of his behavior. He has been coming home late more often and is sometimes unable to provide a clear answer about where he has been. However, you can only turn a blind eye for so long, and she is about to receive a phone call that might change everything.

Low ID/ Low Trans

The scene you will view is from the television show, *Girls*, which aired on HBO. The scene involves a discussion between two of the main characters in the show: Hannah and her boyfriend, Adam. To give you some background, Hannah has been cheating on Adam with multiple partners since the beginning of their relationship.

This scene will be used to teach students in a media production class how to create high-quality content.

While watching, **evaluate the aspects of the scene related to production**. Concentrate on the technical components of the scene, such as the lighting choices, camera angles, and costumes.

High ID/ Low Trans

The scene you will view is from the television show, *Girls*, which aired on HBO. The scene involves a discussion between two of the main characters in the show: Hannah and her boyfriend, Adam. To give you some background, Hannah has been loyal to Adam and has had no other sexual partners since the beginning of their relationship.

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This scene will be used to teach students in a media production class how to create high-quality content.

While watching this scene, **immerse yourself in the action of the story**. Imagine the setting, how the characters are feeling, and how you might feel in the situation.

High ID/ High Trans

The scene you will view is from the television show, *Girls*, which aired on HBO. The scene involves a discussion between two of the main characters in the show: Hannah and

her boyfriend, Adam. To give you some background, Hannah has been loyal to Adam and has had no other sexual partners since the beginning of their relationship.

This scene will be used to teach students in a media production class how to create high-quality content.

While watching this scene, **immerse yourself in the action of the story**. Imagine the setting, how the characters are feeling, and how you might feel in the situation.

All Conditions: The scene you will view is from the television show, Girls, which aired on HBO. The scene involves a discussion between two of the main characters in the show: Hannah and her boyfriend, Adam.

Low ID/ Low Trans

Since the beginning of their relationship, Hannah has been cheating on Adam with multiple partners.

Low ID/ High Trans

In this scene, Hannah will be forced to face the truth about her relationship when it becomes impossible to hide the fact that she's been cheating on Adam.

High ID/ Low Trans

Since the beginning of their relationship, Hannah has been loyal to Adam and has had no other sexual partners.

High ID/ High Trans

In this scene, Hannah will be forced to face the truth about her relationship when she can no longer ignore her suspicion that Adam has been cheating on her.

Appendix B

Measures

Identification (Cohen, 2001)

1. I was able to understand the events in the show in a manner similar to that in which Hannah understood them.

2. I think I have a good understanding of Hannah.

3. I tend to understand the reasons why Hannah does what she does.

4. While viewing the show I could feel the emotions Hannah portrayed.

5. During viewing, I felt I could really get inside Hannah's head.

6. At key moments in the story, I felt I knew exactly what Hannah was going through.

7. While viewing the program, I wanted Hannah to succeed in achieving her goals.

8. When Hannah succeeded I felt joy, but when she failed, I was sad.

Parasocial Interaction (Rubin et al., 1985)

1. The character made me feel comfortable, as if I was with a friend.

2. I see the character as a natural, down-to-earth person.

3. I look forward to watching the character in a video clip.

4. If the character appeared in a video clip, I would watch that clip.

5. If there were a story about the character in a newspaper or magazine, I would read it.

6. I would miss the character when he was on vacation.

7. I would like to meet the character in person.

8. I find the character to be attractive.

Personal Relevance (So & Nabi, 2013)

1. Preventing STIs is relevant to me.

2. Preventing STIs is important to me.

3. Preventing STIs would impact me personally.

4. Preventing STIs would impact my life.

Transportation (Green & Brock, 2000)

1. While I was reading the narrative, activity going on in the room around me was on my mind. (R)

2. I was mentally involved in the narrative while reading it.

3. After finishing the narrative, I found it easy to put it out of my mind. (R)

4. I wanted to learn how the narrative ended.

5. The narrative affected me emotionally.

6. I found myself thinking of ways the narrative could have turned out differently.

7. I found my mind wandering while reading the narrative. (R)

8. The events in the narrative are relevant to my everyday life.

9. The events in the narrative have changed my life.

Perceived Realism (Busselle, 2001)

1. Television shows, like *Girls*, inform me about what the world is really like.

2. You cannot learn much about the real world by watching television shows, like *Girls*.*

3. I feel I can learn a lot about people from watching television shows like *Girls*.

4. By watching television shows like *Girls*, I can learn how to avoid some dangerous situations.

5. Characters in television shows, like *Girls*, are very similar to people in the real world.

6. The romantic relationships portrayed in television shows, such as *Girls* are not at all like romantic relationships in the real world. *

7. The personal problems characters have in drama programs, like *Girls*, are very similar to problems real people have.

8. The issues that come up in drama programs, like *Girls*, are very similar to issues in the real world.

9. You cannot learn anything about real life by watching prime-time drama programs.*

Social Distance (So & Nabi, 2013).

1. I feel very close to Hannah.

2. I feel very similar to Hannah.

3. Hannah and I think very similarly.

4. I would behave similarly to Hannah if I were in her situation.

5. I am very familiar with people like Hannah.

6. I can easily think of people around me who are like Hannah in many ways.

7. I do NOT have much direct experience interacting with someone like Hannah.

8. I think I would be uncomfortable around someone like Hannah.

Spatial Distance

1. The worst effects of STIs are felt more by places far away from Clemson.

2. I think about far away places rather than nearby places when thinking of negative effects of STIs.

3. Many negative effects of STIs are geographically near Clemson.

4. Clemson is being negatively affected by STIs.

Personal Risk Perceptions (So & Nabi, 2013)

1. I believe that my chances of getting an STI are high.

2. I believe that my lifestyle makes me vulnerable to getting an STI.

3. Rate your likelihood of catching an STI in a percentage form from 0 (*not at all likely*) to 100 (*extremely likely*).

4. I believe that my chances of getting HPV are high.

2. I believe that my lifestyle makes me vulnerable to getting HPV.

3. Rate your likelihood of catching HPV in a percentage form from 0 (*not at all likely*) to 100 (*extremely likely*).

Behavioral Intentions (So & Nabi, 2013)

1. How likely is it for you to test for STIs in the near future?

2. How likely is it for you to get vaccinated against HPV in the near future?

Societal Risk Perceptions (So & Nabi, 2013)

1. I believe that the average student at my university has high chances of getting an STI.

Policy Support

1. All students at my university should have access to free STI testing.

2. Individual students should be responsible for paying for their own STI testing.

3. All students at my university should be guaranteed free treatment for STIs, regardless of insurance coverage.

4. In order to pass CU1000, the orientation course required for all students at the university, students must pass an STI education module.

5. Students at my university should be required to be vaccinated for HPV.

Demographic Information

Sex

1. What is your sex?

Ethnicity

2. With what ethnicity do you most closely identify?

Age

3. What is your age in years?

Topic-Relevant Information

1. Have you ever had sexual intercourse?

2. Are you currently sexually active?

3. How frequently do you have unprotected sex?

4. Have you ever been diagnosed with an STI?

5. With which of the following conditions have you been diagnosed?

6. Do you know anyone who has been diagnosed with an STI?

7. With which of the following conditions has someone you know been diagnosed?

8. Estimate how likely it is that you would engage in sexual intercourse anyway, when no protection against STIs is available.

9. How likely do you think it is that you will use protection against STIs every time you have sexual intercourse over the next year?

10. How likely is it that you will contact every one of your previous sexual partners if you were to be diagnosed with an STI?

11. How likely is it that you will engage in unprotected sex (if you are a woman) if you or (if you are a man) the woman you are sexually involved with is taking birth control pills?

FIGURES

Figure 1

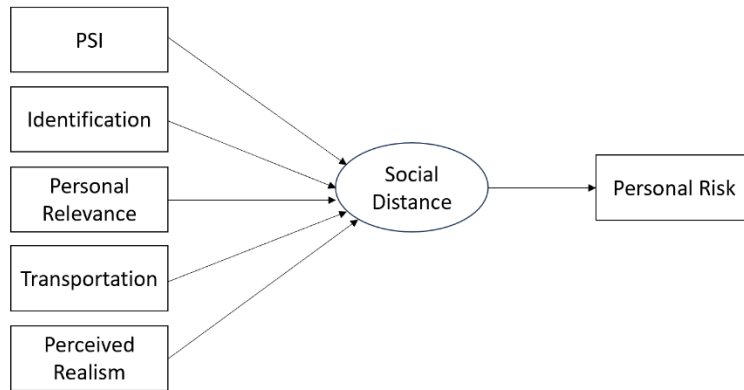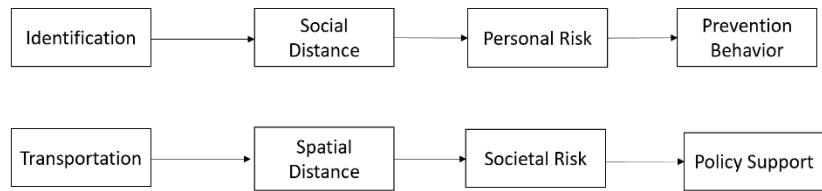So and Nabi's (2013) Risk Convergence Model

Figure 2

Conceptual Model

TABLES

Table 1

Transportation Manipulations by Pretest

Version	Manipulations
Suspense (Tal-Or & Cohen, 2010)	**High Transportation** Since the beginning of their relationship, Hannah has been cheating on Adam with multiple partners. So far, he has not suspected a thing. *This has been going on for a year now, but she is about to receive a phone call that might change everything.* (Low ID) Since the beginning of their relationship, Hannah has been loyal to Adam and has had no other sexual partners. She met Adam a year ago and has never doubted that he is just as committed. *However, she is about to receive a phone call that might change everything.* (High ID) **Low Transportation** Since the beginning of their relationship, Hannah has been cheating on Adam with multiple partners. After finding out from her OBGYN that she has tested positive for an STI, she is worried that Adam will find out about her infidelity. *She decides to lie to him and accuse him of transmitting the virus to her rather than admit that it may have been from someone else.* (Low ID) Since the beginning of their relationship, Hannah has been loyal to Adam and has had no other sexual partners. After finding out from her OBGYN that she has tested positive for an STI, she is worried that Adam may have cheated on her. *After all, since she received her STI screening last year, Adam is the only partner she has had sex with.* (High ID)
Spoilers (Johnson & Rosenbaum, 2015)	**High Transportation** Since the beginning of their relationship, Hannah has been cheating on Adam with multiple partners. Adam is committed to Hannah and believes she feels the same way about him. They discuss having a future together on a regular basis. He would be devastated to find out that Hannah has not been loyal. He has had suspicions in the past, but Hannah has always been able to come up with an excuse or have friends cover for her. The last time he confronted her, she turned the accusations around on him. *However, you can only keep the lies up for so long, and Hannah is about to receive a phone call that might change everything.* (Low ID)

Since the beginning of their relationship, Hannah has been loyal to Adam and has had no other sexual partners. She has never experienced love this strong and has never doubted that Adam is just as committed to the relationship. She has always had a feeling that he was the one and thinks Adam might be about to make his commitment official with a proposal.

However, Hannah has recently become suspicious of his behavior. He has been coming home late more often and is sometimes unable to provide a clear answer about where he has been. *However, you can only turn a blind eye for so long, and she is about to receive a phone call that might change everything.* (High ID)

Low Transportation
Since the beginning of their relationship, Hannah has been cheating on Adam with multiple partners. Adam is committed to Hannah and believes she feels the same way about him. They discuss having a future together on a regular basis. He would be devastated to find out that Hannah has not been loyal. *In the scene, Hannah received a phone call from her doctor, who tells her that she has tested positive for HPV, a highly common sexually transmitted infection. Hannah is shocked to hear this news. She asks Adam if he transmitted the virus to her, which he denies. He tells her he was tested for HPV the previous week. Hannah apologizes for making the accusation, and the conversation ends.*

Since the beginning of their relationship, Hannah has been loyal to Adam and has had no other sexual partners. She has always had a feeling that he was the one. *In the scene, Hannah receives a phone call from her doctor, who tells her that she has tested positive for HPV, a highly common sexually transmitted infection. Hannah is shocked to hear this news. She asks Adam if he transmitted the virus to her, which he denies. He tells her he was tested for HPV the previous week. Hannah apologizes for making the accusation, and the conversation ends.*

Viewing Instructions (Green & Brock, 2000)	**High Transportation** The scene you will view is from the television show, Girls, which aired on HBO. The scene involves a discussion between two of the main characters in the show: Hannah and her boyfriend, Adam. To give you some background, Hannah has been cheating on Adam with multiple partners since the beginning of their relationship (Low ID)/To give you some background, Hannah has been loyal to Adam and has had no other sexual partners since the beginning of their relationship (High ID). *This scene will be used to teach students in a*

media production class how to create high-quality content. While watching this scene, immerse yourself in the action of the story. Imagine the setting, how the characters are feeling, and how you might feel in the situation

Low Transportation

The scene you will view is from the television show, Girls, which aired on HBO. The scene involves a discussion between two of the main characters in the show: Hannah and her boyfriend, Adam. To give you some background, Hannah has been cheating on Adam with multiple partners since the beginning of their relationship (Low ID)/To give you some background, Hannah has been loyal to Adam and has had no other sexual partners since the beginning of their relationship (High ID). *This scene will be used to teach students in a media production class how to create high-quality content. While watching, evaluate the aspects of the scene related to production. Concentrate on the technical components of the scene, such as the lighting choices, camera angles, and costumes.*

Suspense 2 (Tal-Or & Cohen, 2010)	**High Transportation** In this scene, Hannah will be forced to face the truth about her relationship when it becomes impossible to hide the fact that she's been cheating on Adam. (Low ID) In this scene, Hannah will be forced to face the truth about her relationship when she can no longer ignore her suspicion that Adam has been cheating on her. (High ID) **Low Transportation** Since the beginning of their relationship, Hannah has been cheating on Adam with multiple partners. Since the beginning of their relationship, Hannah has been loyal to Adam and has had no other sexual partners.

Table 2

Participant Demographics

	Variable	N	%
1	Age	*M* = 19.28	*SD=1.40*
2	Sex		
	Female	68	*63.6%*
	Male	36	*33.6%*
3	Race/Ethnicity		
	Caucasian	86	*80.4%*
	African American	11	*10.3%*
	Asian	5	*4.7%*
	Hispanic/Latino	4	*3.7%*
	Asian	5	*4.7%*
	Native Hawaiian or Pacific Islander	2	*1.9%*
	American Indian or Alaska Native	1	*0.9%*
	Other	1	*.09%*

Table 3

Correlations for Outcome Variables

Correlations for outcome variables

	1	2	3	4	5	6	7
1. Transportation							
2. Identification	.37**						
3. Social Distance	.38**	.80**					
4. Spatial Distance	-.21*	-.09	-.23**				
5. Personal Risk	.12	.13	-.25**	-.10			
6. Societal Risk	.19	-.07	.07	.35**	.21*		
7. Intentions	.34**	.09	.20*	-.14	.37**	.21*	
8. Policy Support	.39**	.20*	.15	-.03	.06	.19	.35**

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

Table 4

OLS Regression Coefficients and Indirect Effects: Character-driven Engagement

Regression Model	B	SE	t	p	LLCI	ULCI
Outcome: Social Distance						
$F(1, 105) = 23.97$, $p = .00$, $R^2 = .186$						
Constant	2.900	.151	19.228	.000	2.600	3.195
Identification (a_1)	1.048	.214	4.900	.000	.623	1.4719
Outcome: Personal Risk						
$F(2, 104) = 4.035$, $p = .000$, $R^2 = .268$						
Constant	1.095	.336	3.258	.0015	.429	1.762
Identification (d)	-.248	.249	-.998	.321	-.742	.245
Social Distance (a_2)	.290	.103	2.830	.006	.087	.493
Outcome: Intentions						
$F(3, 103) = 6.72$, $p < .000$, $R^2 = .164$						
Constant	2.150	.451	4.77	<.000	1.255	3.04
Identification(b_1)	-.400	.320	-1.240	.218	-1.030	.238
Social Distance (b_2)	.223	.136	1.638	.105	-.047	.492
Personal Risk (c')	.446	.125	3.563	<.001	.198	.695

		Bootstrapped		
Indirect and Serial Indirect Effects		SE	LLCI	ULCI
a_1db_2 ($X \rightarrow M_1 \rightarrow M_2 \rightarrow Y$) =	.136	.076	.028	.316
a_1b_1 ($X \rightarrow M_1 \rightarrow Y$) =	.233	.154	-.066	.545
a_2b_2 ($X \rightarrow M_2 \rightarrow Y$) =	-.111	.118	-.389	.071

Note: Coefficients are unstandardized (B). Statistics generated using PROCESS in SPSS with 5,000 bootstrapped samples and 95% bias-corrected confidence intervals (CIs). [*]Lower and upper-level confidence intervals (LLCI; ULCI) do not include zero and thus indicate significant mediation. Coefficients and indirect effects shown represent unique variance accounted for by individual variables and indirect paths (i.e., while simultaneously controlling for other effects in the model). SE = standard error; M_1 = Social Distance; M_2 = Personal Risk.

Table 4

OLS Regression Coefficients and Indirect Effects: Plot-driven Engagement

Regression Model	B	SE	t	p	LLCI	ULCI
Outcome: Spatial Distance						
$F(1, 105) = 4.779$, $p = .031$, $R^2 = .044$						
Constant	4.673	.375	12.479	<.000	3.931	5.417
Transportation (a_1)	-.186	.085	-2.186	.031	-.354	-.017
Outcome: Societal Risk						
$F(2, 104) = 8.277$, $p <.000$, $R^2 = .137$						
Constant	5.074	.836	6.069	<.000	3.416	6.732
Transportation (d)	.154	.123	1.252	.2133	-.090	.382
Spatial Distance (a_2)	-.487	.138	-3.525	<.001	-.761	-.213
Outcome: Policy Support						
$F(3, 103) = 7.410$, $p < .000$, $R^2 = .176$						
Constant	2.870	.701	4.092	<.000	1.479	4.260
Transportation (b_1)	.374	.089	4.190	<.000	.197	.552
Spatial Distance (b_2)	.114	.105	1.078	.284	-.096	.323
Societal Risk (c')	.114	.071	1.609	.111	-.0265	.254

		Bootstrapped		
Indirect and Serial Indirect Effects		SE	LLCI	ULCI
$a_1 d b_2$ (X→ M_1→ M_2 → Y) =	.010	.009	-.002	.033
$a_1 b_1$ (X→ M_1→ Y) =	.018	.018	-.011	.062
$a_2 b_2$ (X→ M_2 → Y) =	-.021	.024	-.084	.013

Note: Coefficients are unstandardized (B). Statistics generated using PROCESS in SPSS with 5,000 bootstrapped samples and 95% bias-corrected confidence intervals (CIs). [*]Lower and upper-level confidence intervals (LLCI; ULCI) do not include zero and thus indicate significant mediation. Coefficients and indirect effects shown represent unique variance accounted for by individual variables and indirect paths (i.e., while simultaneously controlling for other effects in the model). SE = standard error; M_1 = Spatial Distance; M_2 = Societal Risk.

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