THE DEATH MESSAGE PROCESSING MODEL: A MIXED METHODS EVALUATION OF AN INTERVENTION TO MOTIVATE ADVANCE CARE PLANNING

by

Christian Reed Seiter
A Dissertation
Submitted to the
Graduate Faculty
of
George Mason University
in Partial Fulfillment of
The Requirements for the Degree
of
Doctor of Philosophy
Communication

The Death Message Processing Model: A Mixed Methods Evaluation of an Intervention to Motivate Advance Care Planning

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at George Mason University

By

Christian R. Seiter
Master of Science
University of Rochester School of Medicine and Dentistry, 2016
Bachelor of Fine Arts
University of Utah, 2014

Director: Xiaoquan Zhao, Professor Department of Communication

> Summer Semester 2021 George Mason University Fairfax, VA

DEDICATION

This manuscript is dedicated to my wife and my parents. Without you three (and Goose), completing this dissertation and retaining a modicum of sanity during the COVID-19 pandemic would have been impossible.

ACKNOWLEDGMENTS

I wish to thank Gary Kreps, Kevin Wright, and especially Xiaoquan Zhao for their guidance on this project. I am also thankful to Nate Brophy for his friendship, support, and brilliance. Funding for data collection via Amazon Mechanical Turk was provided by the Department of Communication at George Mason University via a Supplemental Research Support Award.

TABLE OF CONTENTS

		Page
	List of Tables	V
	List of Figures	vii
	Abstract	ix
1.	Introduction	1
2.	Review of Scientific Literature.	7
3.	Phase One – Qualitative Interviews with the Death Positive Movement	28
4.	Phase Two– Message Testing Experiment	60
5.	Phase Three – Qualitative Interviews with Experiment Participants	143
6.	Discussion and Evolution of the Death Message Processing Model	164

LIST OF TABLES

Name	Page
Table 1. Demographic Information of Death Positive Movement Participants	34
Table 2. Descriptive Statistics for Podcast Condition on Perceived Humor	74
Table 3. Experiment Participant Demographics	76
Table 4. Reliability of ACP DVs	84
Table 5. Correlations of All DVs.	85
Table 6. Main Effects for Podcast Condition on Message Response DVs	88
Table. 7. Interaction Effects of Podcast Condition and Religion on Message Response DVs	89
Table. 8. Interaction Effects of Podcast Condition and Generation on Message Response DVs.	90
Table 9. Descriptive Statistics for Podcast Condition on Message Response DVs	91
Table 10. Descriptive Statistics for Podcast Condition with Religion	97
Table 11. Descriptive Statistics for Podcast Condition with Generation	104
Table 12. Descriptive Statistics for Condition with Profanity Use for All Message Response DVs.	110
Table 13. Main Effects for Podcast Condition on EOL Communication DVs	114
Table 14. Descriptive Statistics for Podcast Condition on EOL Communication DVs	115

Table 15. Interaction Effects for Podcast Condition and Religion on EOL Communication DVs	116
Table 16. Descriptive Statistics for Podcast Condition with Religion for EOL Communication DVS	117
Table 17. Interaction Effects for Podcast Condition and Generation on EOL Communication DVs	119
Table 18. Descriptive Statistics for Podcast Condition with Generation for EOL Communication DVS.	120
Table 19. Interaction Effects for Podcast Condition and Profanity Use on EOL Communication DVs	122
Table 20. Descriptive Statistics for Podcast Condition with Profanity Use for EOL Communication DVS.	123
Table 21. Phase Three Demographic Information	147
Table 22 Phase Three Themes	156

LIST OF FIGURES

Name	Page
Figure 1. Theoretical Model Depicting the Role of Humor in ACP Motivation, Derived from TPB, TMT, Integrative Affective-Cognitive Model of Humor, and EVT.	26
Figure 2. Model of DPM Lay Theories about Humor in Death Messages	55
Figure 3. Integrated Theoretical Framework	62
Figure 4. Interaction Between Condition and Religion for Positive Expectancy Violation.	93
Figure 5. Interaction Between Condition and Religion for Perceived Speaker Effectiveness.	95
Figure 6. Interaction Between Condition and Religion for Perceived Message Effectiveness.	96
Figure 7. Interaction Between Condition and Generation for Positive Expectancy Violation	100
Figure 8. Interaction Between Condition and Generation for Perceived Speaker Effectiveness.	101
Figure 9. Interaction Between Condition and Generation for Perceived Message Effectiveness	103
Figure 10. Interaction Between Condition and Profanity Use for Positive Expectancy Violation	106
Figure 11. Interaction Between Condition and Profanity Use for Perceived Speaker Effectiveness	108

Figure 12. Interaction Between Condition and Profanity Use for Perceived Message Effectiveness	109
Figure 13. Theoretical Model Depicting the Role of Humor in ACP Motivation, Derived from TPB, TMT, Integrative Affective-Cognitive Model of Humor, and EVT	170
Figure 14. Model of DPM Lay Theories Regarding Humor and Death Communication	174
Figure 15. Integrated Theoretical Framework.	176
Figure 16. The Death Message Processing Model.	184

ABSTRACT

THE DEATH MESSAGE PROCESSING MODEL: A MIXED METHODS EVALUATION OF AN INTERVENTION TO MOTIVATE ADVANCE CARE

PLANNING

Christian R. Seiter, Ph.D

George Mason University, 2021

Dissertation Director: Dr. Xiaoquan Zhao

This study examined the use of humor (including profanity-laced humor) in

persuasive communication promoting end-of-life (EOL) advance care planning (ACP).

Based on lay theories from media experts in the "death positive movement" (DPM) and

relevant social scientific theories (i.e., theory of planned behavior, terror management

theory, humor theories, and expectancy violations theory), a Death Message Processing

Model (DMPM) was proposed. The model was developed and tested through three

phases of empirical research.

Phase 1 consisted of in-depth interviews with DPM experts (N = 13) regarding

how/why death humor works. Some themes from this phase included *positive expectancy*

violation, tension release, younger generations prefer death humor, irreverent people

prefer death humor, and religious people will not enjoy death humor.

Phase 2 was an experiment with Amazon MTurk workers (N=695) to assess responses to three podcast clips (i.e., non-humorous, clean humorous, profane humorous) about ACP. Results indicated that humorous (versus non-humorous) messages yielded lower positive expectancy violation and perceptions of speaker/message effectiveness. Humorous messages generated more positive emotional responses, however. In comparison to Christians, atheists preferred profane humor but rated clean humor less favorably. Moreover, people from younger (versus older) generations preferred humor to non-humor. Likewise, people who use less (versus more) profanity preferred humor over non-humor. Although significant differences were found for message response variables, experimental manipulations failed to elicit differences in death anxiety, communication apprehension about death, attitudes towards ACP, norms about ACP, perceived behavioral control towards ACP, or intention to engage in ACP. Overall, results indicated that humor about ACP, especially profane humor, is a risky communication approach.

In Phase 3, follow-up interviews with Phase 2 experiment participants (N = 9) were conducted. Thematic analysis findings both supported and contradicted experiment results. Themes included *clean humor has broad appeal* and *explicit mortality reminders* (i.e., memento mori) *catch attention*. Interestingly, re-exposure to the humorous podcast clips apparently increased ACP intentions for several (N = 3) participants, suggesting that humorous death messages, when combined with a more powerful interpersonal intervention, may yield increased ACP intention.

Based on findings from Phases 2 and 3, the initial DMPM was revised and areas in need of further investigation are highlighted in the discussion. Theoretical contributions and practical implications of the current findings are also discussed.

CHAPTER 1: INTRODUCTION

On February 25, 1990, a young woman named Terri Schiavo unexpectedly fell unconscious in her apartment (Hook & Mueller, 2005). Although she was resuscitated, she would never regain consciousness. Schiavo died in 2005, after living in a persistent vegetative state for fifteen years and inadvertently becoming the focus of a landmark case for medical ethics (Hook & Mueller, 2005). During that fifteen-year period, grueling legal battles ensued between Shiavo's family regarding her murky prognosis (i.e., whether she could recover neurologically), the proper course of action, and especially, the ethics of allowing her to die by removing life support. The prolonged and controversial case was exacerbated by the fact that Schiavo, like most Americans, did not possess any form of advance directive, which are legal forms that allow patients to specify care preferences and select surrogate decision-makers (Rao et al., 2014). In Schiavo's case, the lack of clarity about care preferences and who had the right to make medical decisions turned what was an already painful process for her family into an unimaginable, prolonged nightmare of legal bureaucracy and heartache (Hook & Mueller, 2005). Schiavo's case demonstrates the importance of communicating care preferences and designating surrogate decision makers, regardless of age, health, or any other factor.

This dissertation project seeks to elucidate promising message strategies that can help motivate families to engage in important conversations about end-of-life (EOL) care preferences. Specifically, this program of research and the present study focus on advance care planning (ACP). ACP is the process of communicating EOL wishes to loved ones, spiritual advisors, healthcare providers, and others who may be involved in medical decision making (Butler et al., 2014). Expressing EOL wishes to others is vitally important for all patients, not just those with serious illnesses, because one can never anticipate future incapacity. Yet, like Schiavo, fewer than one-third of American adults have formally engaged in ACP (Rao et al., 2014; Yadav et al., 2017).

Previous research has examined using negative emotions as an approach to motivate information seeking about ACP. Using a message-testing approach, for example, Seiter and Brophy (2020) found that inducing worry in participants led to increased information seeking intention and behavior in the context of ACP. To date, however, no message testing studies have examined more positive approaches for motivating ACP. That said, previous non-academic literature and practice suggests that one promising positive approach might leverage the use of humor. Indeed, although using humor when discussing such a potentially disquieting, indeed even sacred, topic like death may seem paradoxical or even inappropriate, many prominent media figures specialize in communicating about death using humor. By way of example, Caitlin Doughty-the owner of a non-profit funeral home, author, and popular YouTube content creator-frequently utilizes humor when communicating about death-related topics, including ACP. Upon examination, Doughty and her colleagues appear to have discovered a unique, ostensibly appealing, communication approach to motivating these important conversations, as evidenced by the fact that her YouTube channel has nearly

150 million views, and all three of her books are New York Times Bestsellers. By her own admission humor is an integral component of their approach. In fact, Doughty writes, "I love using humor to engage death" (The Order of the Good Death, 2021).

The seemingly paradoxical idea that death *should not* be joked about, considered alongside Doughty's and others' tremendous success in doing just that, was the spark that ignited this research project. The following manuscript is the result of a mixed-methods academic journey intended to investigate humor as a mechanism for motivating ACP. Specifically, the investigation consisted of three phases. The first phase involved qualitative interviews with leaders of the "death positive movement" (DPM), who are experts about using media to motivate EOL communication. The purpose of the first phase was to augment existing literature about ACP motivation and theories of health behavior change with lay theories from subject matter experts. Based on findings from this phase, an integrated theoretical framework was created based on a synthesis of existing social scientific theories and lay theories from the DPM about humor, and other communication-based mechanisms, which will be discussed in detail in chapter three. The second phase of this study consisted of a quantitative, message-testing experiment of that integrated theoretical framework. The third and final phase consisted of follow-up qualitative interviews with participants from the experiment in phase two; this third phase was conducted to further elucidate findings, both expected and unexpected, from the quantitative experiment.

Preview of Additional Chapters

This section previews the contents of each chapter to explain the underlying rationale for why this study was conducted in three distinct phases. Chapter two provides a review of relevant academic literature. Specifically, the chapter summarizes, explains, conceptualizes, and illustrates the application of key social scientific theories (i.e., not lay theories). In particular, the review focuses on the theory of planned behavior (TPB), terror management theory (TMT), the integrative affective-cognitive model of humor, and expectancy violations theory (EVT). In chapter two, I will present a visual model based on existing social scientific literature. Importantly, based on findings from each consecutive phase, this model will be refined and intermittently presented again throughout the manuscript.

Next, chapter three presents the first qualitative study. The chapter begins with additional background about the DPM and methods used in this phase of the investigation. Specifically, through a series of qualitative interviews with members of the DPM, the purpose of this phase was to elucidate lay theories about how humor can be used to motivate healthy EOL communication (e.g., how they define their communication approach, why they use humor, what they think humor does to receivers, what qualities in receivers are likely to facilitate/impede positive reception of humorous messages about death, and so forth). Based on these interviews rooted in the critical incident technique (Flanagan, 1954; Kreps, 2017), I present themes based on participant responses. These themes will then be discussed in light of the previous theoretical model based on social scientific literature. Of note from this phase is the introduction of several other important variables, which add considerable nuance to existing social scientific models, notably,

profanity use, religion, and age. Additionally, this phase of the study offered insights about how to design humorous stimuli for the experiment in phase three. Finally, at the end of chapter three, an integrated theoretical model using predictions from both the social scientific literature and DPM lay theories will be presented.

This integrated model served as the framework to guide phase two of this project. Specifically, chapter four presents a quantitative message-testing experiment using members of the American public as participants. This chapter details the experiment's design and provides an explanation about how different short podcast clips about ACP (non-humorous, clean humorous, and profane humorous) were created for the experiment. Further, chapter four discusses how measures were selected to operationalize key concepts in the integrated theoretical model presented at the end of chapter three, research methods, findings from a pilot study, and findings from the main study. Chapter four concludes with discussion about where social scientific theories, lay theories, and data gathered for this study converge and diverge. This phase served two primary purposes: testing the integrated theoretical framework and providing insights for designing the interview protocol for the final phase of the study.

Chapter five presents the third and final phase of the study: interviews with individuals who participated in the experiment. The purpose of this phase was to gather rich data based on participants' perspectives detailing what specifically they liked or disliked about the podcast and their experiences/intention to engage in ACP, among other topics. By following the quantitative phase with this qualitative study, I was able to investigate paradoxical and interesting findings from the experiment.

Chapter six, the final chapter, presents a synthesis of all three phases of this project. In addition to reviewing each phase, the chapter includes a discussion focusing on where the phases converged and diverged. Finally, an integrated model based on findings from each phase is presented. This model is called the Death Message Processing Model (DMPM), and implications for its use in future research and praxis are discussed at the end of chapter six.

This first chapter has introduced the concept of ACP, the importance of examining humor as a message strategy, and a three-phase, mixed-methods study intended to examine use of humor in this context. In the next chapter, you will read about how important theories and models from social scientific literature informed the three-phase study, and ultimately, the creation of the Death Message Processing Model presented in chapter six.

CHAPTER 2: REVIEW OF SCIENTIFIC LITERATURE

In this chapter I discuss bodies of academic literature relevant to the present study. First, I discuss literature on advance care planning. Next, I discuss the guiding theoretical frameworks for this study, including the theory of planned behavior (TPB), terror management theory (TMT), models of humor as a persuasive mechanism, and expectancy violations theory (EVT). Finally, based on these bodies of social scientific literature, I present a preliminary, integrated, and original model, which will be modified and refined throughout this manuscript. Each aspect of the literature review will be discussed in the context of motivating ACP. Thus, I begin with information about ACP as a communication behavior.

Advance Care Planning

Recall that advance care planning (ACP) is the process of communicating end-of-life (EOL) wishes to relevant stakeholders, such as loved ones, healthcare providers, legal professionals, and spiritual counselors (e.g., healthcare chaplains) (Butler et al., 2014). As such, ACP is best conceptualized as a collaborative, family communication behavior (Wallace, 2015).

Much like cancer screening, applying sunscreen, and flossing, ACP is a preventative health communication behavior intended to mitigate future negative outcomes; instead of contracting harmful skin conditions or tooth decay, ACP helps

prevent undesirable situations such as patients being subjected to unwanted treatments and/or families being forced to make difficult decisions without guidance from the patient. Benefits of ACP are numerous, and include decreased decision-making burden on families, fewer ICU admissions, fewer in-hospital deaths, increased satisfaction with care, increased clarity about a patient's wishes, and more (Houben et al., 2014; Tierney et al., 2001; Wright et al., 2008; Zhang et al., 2009). In short, by communicating one's EOL wishes to those likely to serve as surrogate decision makers, patients can have greater peace of mind, knowing that their wishes are clear and will be followed in the event they cannot directly communicate. Unfortunately, as discussed in chapter one, only one-third of American patients engage in ACP (Rao et al., 2014; Yadav et al., 2017). Thus, it is vitally important for communication scholars to examine ways to motivate ACP.

The literature about ACP identifies several possible reasons for low uptake of this vital behavior. First, ACP is a communication process that requires forethought, preparation, intention, and self-efficacy (Scherrens et al., 2018). Second, in addition to the effortful nature of ACP, the inherent morbidity of the topic can be demotivating (Brown et al., 2014; Brophy, Seiter, & Zhao, 2021). Third, many people, especially those who are young and healthy, perceive the need for EOL planning as irrelevant, and therefore lack motivation to engage in such efforts (Rao et al., 2014). These are challenging barriers to overcome, but negative consequences associated with failing to make decisions in the context of EOL care (see above) necessitates research examining ways to help patients overcome these barriers.

Like preventative cancer screening or organ donor registration, ACP is best conceptualized as a protective health behavior intended to yield positive future outcomes. Moreover, engaging in ACP requires individuals to carefully consider their values, imagine complex hypothetical situations (e.g., who to designate as a surrogate decision maker if in a coma), and often complete legal paperwork. In short, ACP is an effortful communication process, requiring future planning. As such, it is not surprising that a review of health behavior theories used in the context of EOL care points to the theory of planned behavior (TPB) as a predominant guiding theoretical framework for ACP research (Scherrens et al., 2018).

Theory of Planned Behavior

The theory of planned behavior (TPB) posits behavioral intention (i.e., the extent to which a person intends to engage in a specific behavior) predicts behavior (Ajzen, 1991). Important determinants of behavioral intention according to TPB include attitudes toward the behavior, normative beliefs about the behavior, and perceived behavioral control regarding the behavior. Attitudes are evaluations of a behavior typically ranging from favorable to unfavorable, descriptive norms are perceptions about the prevalence of the behavior among a reference group, injunctive norms are perceptions about whether important others would endorse the behavior, and perceived behavioral control is the extent to which a person believes he or she could successfully enact the behavior (Ajzen, 1991).

TPB is widely used as a guiding framework in health communication research.

Several meta-analyses and systematic reviews conclude the theory is robust, performing

well in its explanation of behavioral intentions in health contexts (e.g., McEachan et al., 2011). Specifically, one meta-analysis identified intention as the most important predictor of health behavior with an average R² of .34 (Godin & Kok, 1996). The same analysis identified attitudes towards the behavior and PBC towards the behavior as significant predictors of intention (Godin & Kok, 1996). A second systematic review of TPB-based health interventions (Hardeman et al., 2002) included thirty studies targeting behaviors such as nutrition, condom use, breast self-examination, and more. The review concluded that half of interventions rooted in TPB were effective in changing intention, and twothirds of the TPB interventions were effective in changing the target behavior (Hardeman et al., 2002). A third and more recent analysis of twenty-seven studies using TPB in the context of treatment adherence found that the theory explained 33% of variance in intention to adhere to treatment and 9% of variance in adherence behavior (Rich et al., 2015). Furthermore, between attitudes, norms, and perceived behavioral control, perceived behavioral control was the greatest predictor of intention, but effect sizes were small across TPB intervention studies for the intention-behavior relationship (Rich et al., 2015). Thus, though not TPB still has room to be refined in terms of predictive value (Ajzen, 1991), TPB has robust empirical support in predicting health intention and behavior.

Theory of Planned Behavior in the End-of-Life Context

Previous literature indicates that TPB is a valuable framework for research focusing on EOL communication. For example, a study by Seiter and Brophy (2020) using TPB found that worrying stimuli increased participants' intentions and behavior in

the context of EOL information seeking. Moreover, a study by Brophy, Seiter & Zhao (2021) found that death anxiety negatively mediated the relationship between COVID-19 risk perceptions and behavioral intention to engage in ACP with family. Beck et al. (2017) found nursing home managers held negative attitudes towards ACP. Although there has not been a study examining descriptive or injunctive norms about ACP broadly, one study examined the effects of norms on intention to enroll in hospice care (Enguinados et al., 2011) and another considered the role of norms in facilitating ACP in nursing homes (Beck et al., 2017). Stelter et al., (1992) found that a lack of perceived behavioral control towards completing living wills was a major barrier for American adults. While TPB enjoys a great deal of exposure in other health contexts, it is clear more communication research needs to be conducted using TPB for ACP interventions. While several scholars have used TPB and its sister theory, the theory of reasoned action, in the context of ACP (for a review of communication theories in the context of EOL care, see Scherrens et al., 2018), significantly more research needs to be conducted using TPB to explain and motivate ACP. Because ACP is a cognitively taxing health behavior that involves consideration of the future, TPB is, conceptually, an excellent fit for communication research in this context.

Death Anxiety and Death Communication Apprehension

As noted above, ACP is an effortful process both cognitively and emotionally. Indeed, when attempting to change behaviors that require cognitive effort, TPB is an appropriate framework. However, the role of strong emotions must also be considered in the context of ACP. Because ACP involves discussion about EOL matters, a particularly

germane emotion to consider is death anxiety. In addition, this section examines terror management theory (TMT), which predicts that humans engage in specific cognitive defenses to shield themselves from existential terror when mortality is salient. Of relevance to health communication scholarship is the extent to which death anxiety manifests in communication apprehension about death.

Death Anxiety and Terror Management Theory

Death anxiety is conceptualized as debilitating discomfort a person feels as a consequence of recognizing the inevitability of death (Solomon et al., 1991). Relatedly, cultural anthropologist Ernest Becker's seminal work, *The Denial of Death*, posits nearly everything about the human experience is intended to create symbolic meaning (e.g., religion, culture, relationships), which serves as a defense mechanism to buffer us from ever-present mortal terror (Becker, 1973). Death denial, according to Becker, takes the form of "immortality projects," which are acts intended to transcend corporeal death by achieving symbolic immortality; these acts further perpetuate beliefs that one's own way of doing things is the "right" way (Becker, 1973). The effects of death anxiety on human behavior have been examined over four decades by scholars; these experiments yielded the empirically robust terror-management theory.

Terror management theory (TMT), which has largely been studied in the psychology discipline, is based on Becker's notions about death denial. Indeed, Becker (1973) argued that humans are cursed by awareness of their mortality, and by extension, TMT scholars have posited death awareness is the "worm at the core" of all actions intended to make meaning in a chaotic world in which extinction is inevitable (Solomon

et al., 1991). Although intriguing, such postulations required empirical verification. Thus, TMT, using Becker's observations as a framework, was developed. Through decades of experimentation, scholars testing effects of death reminders have found that evoking mortality salience predicts specific behaviors. In fact, the experiments have shown when people are made aware of their mortality (typically by priming them to envision their own deaths or showing them something that reminds them of their creatureliness/mortality), they experience cognitive discomfort, which they try to manage by reaffirming values and traditions they believe hold meaning.

More specifically, the theory argues that people confront the terror of their own, inevitable deaths by engaging in two forms of defense (Burke et al., 2010). First, proximal death defenses occur soon after exposure to stimuli that arouse mortality salience (MS), and manifest in conscious cognitions that shield the participant from existential terror – examples include cognitions such as reassuring oneself of being healthy, young, extraordinary, and/or rich. Second, the theory predicts when there is a delay between the MS prime and the measurement of effects (typically with a non-death related distraction task), people will defend against death with distal defenses because their mortal terror becomes subconscious. Examples of distal death defensees include subconsciously defending against existential terror by reinforcing one's worldviews and cultural sources of meaning. In fact, most TMT research has tested what is known as the mortality salience (MS) hypothesis, which posits that if individuals defend against death with distal defenses, increasing their mortality salience will, in turn, increase their motivation to deny death by defending strongly held worldviews. One meta-analysis, for

example, noted that distal death defenses result in increased racism, nationalism, risky behavior, harsher judgments of persons different from themselves, violence against others, and more (Burke et al., 2010).

TMT research has demonstrated that reminding people of their mortality is an especially powerful prime. In fact, many MS experiments have found that the same defenses do not occur when people are reminded of other unpleasant topics (e.g., pain, uncertainty, public speaking anxiety). Thus, examining persuasive effects of death primes on attitudes and drives for self-preservation is valuable for extending our understanding of this aspect of social life. Additionally, because reinforcement of worldviews (i.e., distal defenses) are key elements of TMT, understanding how worldviews and deeply held values influence persuasion processes is of great value. Researchers can benefit from examining the role of death in forming worldviews, which, in turn, often influence how receivers respond to specific messages. Practically, TMT research can help explain why diplomacy is so challenging for warring countries. Specifically, because people fear for their lives, the prospect of acquiescing to a worldview different from their own will be challenging. Consequently, being persuaded by people who are perceived as "different" becomes less likely (Hirschberger et al., 2009). But how does arousal of death anxiety influence health behaviors? The terror management health model (TMHM), an integrated theoretical framework based upon TMT and models of health behavior change, attempts to explain why TMT is relevant in health contexts.

Terror Management Health Model

The TMHM explains that mortality salience and death-related cognitions predict threat avoidance rather than problem management, and as a result, often result in undesirable health outcomes (Goldenberg & Arndt, 2008). Specifically, the model offers three propositions. The first proposition posits that when thoughts of mortality are conscious, distal defenses engage to move existential terror in the subconscious, which results in unproductive threat-avoidance. Thus, the role of death thought activation must be carefully considered in health messaging. The second proposition states that people seek to maintain meaning and values when death thought activation is nonconscious. In the context of health behavior change, this means that changing behaviors from which an individual draws meaning (e.g., convincing someone who smokes to maintain a "rebellious" image to quit tobacco) when they have entered a state of distal death defenses may be especially challenging. The third proposition states that health messages reminding people of their creatureliness (e.g., excretions, sex drive) also lead to unconscious thoughts of mortality (Cox et al., 2007). The implications of this proposition are massive in the context of health because reminders of the body are often integral to success but may also yield threat avoidance according to TMHM. While findings from TMT and TMHM are interesting insofar as they elucidate the important role of death anxiety on human behavior, ACP is necessarily a communication behavior. Thus, it is imperative to also examine the literature on a similar, yet separate, communication phenomenon: communication apprehension about death (CAD).

Communication Apprehension about Death

Communication apprehension, in general, is conceptualized as an individual's fear about future anticipated communication events and is one of the most heavily researched communication constructs (for one meta-analysis, see Allen & Bourhis, 2009). A related, yet more specific construct, communication apprehension about death (CAD), is conceptualized as an individual's fear of communication about topics related to death, dying, and end-of-life (Carmack & DeGroot, 2016). A study seeking to validate a scale operationalizing CAD found concurrent validity between the scale, established measures of death anxiety, and established measures of communication apprehension (Carmack & DeGroot, 2016).

Using the validated Communication Apprehension about Death Scale (CADS; Carmack & DeGroot, 2016), one study found that communication apprehension about death negatively impacted organ donation decisions (Carmack & DeGroot, 2020). Interestingly, this same study found that affiliation with a specific religion also negatively impacted decisions to engage in organ donation (Carmack & DeGroot, 2020). Such findings are especially relevant to the present investigation because both organ donation and ACP are future-oriented health behaviors directly relevant to death and dying. In other words, such findings hint at the potentially important role of CAD in the context of EOL communication with loved ones.

It is clear based on literature examining the effects of mortality salience, death anxiety, and communication apprehension about death, that ACP presents barriers beyond mere logistical challenges (e.g., planning for complex medical scenarios). As such, it is imperative for communication researchers to find specific message strategies

that can help people approach threatening health topics related to mortality. As will be illustrated in the next section, humor is one such approach that has shown promise in motivating people to engage in threatening health behaviors.

Humor

In this section, I discuss conceptualizations of humor as an interactive process dependent on both sources and receivers, relevant humor research from psychology and advertising, persuasive advantages and disadvantages of humor, and how expectancy violations theory is relevant to humor research in EOL contexts. First, I begin with a discussion of important conceptualizations and assumptions of humor as an empirical phenomenon.

Conceptualization of Humor as an Interactive Communication Process

Lynch (2002) argues that humor is an interactive, fundamentally communicative activity, and in social contexts, humans create humor for the amusement of others as a form of play (Martin, 2010). Humor has been conceptualized by communication scholars as intentional verbal and nonverbal messages that elicit responses indicating pleasure, delight, and surprise in the receiver (e.g., laughter) (Booth-Butterfield & Booth-Butterfield, 1991). Notably, this conceptualization implies that messages which fail to elicit positive responses in receivers, despite intention to do so, are best considered "attempted humor" rather than humor (Markiewicz, 1974). Thus, it is important to consider humor as a communication process in which sources intentionally convey humorous messages that, in turn, receivers must accurately interpret as humorous. This theme is echoed across several academic disciplines, although traditionally, scholarly

literature has focused more on how humor is received than on how it is produced. The fields of psychology and advertising have contributed several interesting findings about humor from the perspective of receiver effects.

Psychology Scholarship and Humor

Lynch (2002) traces the origins and trajectory of humor scholarship, noting that prominent conceptualizations from the field of psychology posited that tension relief was a primary function of humor. Freud (1960), for example, believed that humor allows forbidden ideas from the unconscious to surface, thereby permitting therapeutic release of tension and energy. Similarly, the incongruity theory of humor posits that humor has a fundamental structure in which arousal or tension is generated from an unexpected element amidst a playful cue, which is followed by a psychological mechanism that allows the receiver to reduce the tension and enjoy the arousal (Plessner, 1970; Speck, 1991). Indeed, jokes often rely on receivers recognizing that something stated is inconsistent within the expected rational order of an environment (Lynch, 2002).

Humor in Advertising Research

A considerable amount of humor research has been conducted in the field of advertising, and it, too, tends to focus on the ways in which receivers process and respond to humorous message. One ongoing scholarly debate concerns the extent to which humor works by affecting cognitions or emotions. Specifically, a review by Eisend (2011) noted that scholars have explained the effects of humor on consumers based on two theoretical models. First, the cognitive model posits that humor affects cognitive responses in receivers by enhancing attention and reducing negative cognitions via distraction (Eisend,

2011; Evans, 1988; Krishnan & Chakravarti, 2003; McGuire, 1978). Conversely, the affective model posits that humor works because positive emotional responses to messages "transfer" to the ad (Eisend, 2011; Evans, 1988; Krishnan & Chakravarti, 2003; McGuire, 1978). Based on a meta-analysis, Eisend (2011) showed how affective and cognitive models could be integrated to explain how humor works in advertising. Specifically, the integrative affective-cognitive model provides a synthesis of previous models, stating that humor increases positive affect, which in turn leads to enhanced positive cognitions (Eisend, 2011).

In addition to investigating the processes through which humor works, previous literature has examined the persuasive effects of humorous messages. Specifically, humor has several empirically demonstrated persuasive advantages, including an ability to influence attitudes, emotions, intention, attention, source liking, memorability of a message, and making potentially threatening topics more approachable for receivers. On the other hand, empirical findings suggests that there are disadvantages to using humor as well. The following sections examine such advantages and disadvantages.

Persuasive Advantages of Humor

Attitudes. Based on results of a robust meta-analysis, Eisend (2009) concludes that humorous messages increase positive attitudes towards an ad and positive attitudes towards the brand associated with the ad. Further, Nabi et al. (2007) found that humor predicts the extent to which receivers like sources. In the context of health communication research, Lee et al. (2015) found that humorous messages positively influenced attitudes towards abstaining from binge drinking. Based on these findings, in

the context of health communication research, it is worthwhile to consider how humor's effect on attitudes towards a campaign message may transfer to a behavior advocated in the message (e.g., ACP).

Affective Reactions. Eisend (2009) concludes that humor both increases positive affective responses to messages and decreases negative affective responses. Further, Yoon and Tinkham (2013) conclude that humor has the potential to reduce reactance during processing by reducing perceived negative judgments about the behavior. The importance of influencing affective responses to messages cannot be overlooked when examining behaviors that evoke motivation-dampening emotions like death anxiety (Goldenberg & Arndt, 2008).

Intention and Behavior. Recall that intention strongly predicts behavior, according to TPB (Ajzen, 1991). Thus, the extent to which humorous message influence intention and behavior of receivers is highly consequential for persuasion researchers. Eisend (2009) concludes that humorous messages significantly increase purchase intention in the realm of advertising. Further, Lee et al. (2015) found that humorous messages were effective in influencing binge-drinking abstinence intentions in college students. While intention is indeed an important consideration for researchers, even more promising are findings that humorous messages were more persuasive in motivating organ donor registration behavior in comparison to sad messages (Weber et al., 2006). This finding is particularly germane to the present study because organ donation, like ACP, is a health behavior that evokes thoughts of death, regards future consequences, and lacks buy-in from the public (Organ Donation Statistics, 2021).

Attention and Memorability. Previous research indicates that humor plays an important role in the degree to which receivers attend to and remember messages. Specifically, in his meta-analysis, Eisend (2009) found that humorous messages are useful for grabbing attention of receivers. Importantly, the ability to capture receiver's attention is an integral part of the persuasion process (McGuire, 1968; McGuire, 1976; Kleinhesselink & Edwards, 1975). In addition, although traditional research suggests that the effect of persuasive messages may weaken over time (e.g., see Stiff, 1994), Nabi et al. (2007) found that humor may work via "sleeper effects." Specifically, because receivers attend to humorous messages to a larger degree than non-humorous messages, humorous messages are more memorable as time passes (Nabi et al., 2007).

Approachability of Threatening Topics. An additional advantage of humor that is particularly relevant to the present study has to do with the relationship between humorous appeals and responses to threatening health topics, including organ donation and working with cadavers. Specifically, building on the finding that humorous messages were more persuasive than non-humorous messages in the context of anti-drinking and anti-drug campaigns (Conway & Dube, 2002), Weber et al. (2006) found that humorous messages were more persuasive in motivating people to engage in organ donation, which as discussed above, is conceptually like ACP. Additionally, one study found that using humor successfully relieved tension among medical students prior to working with cadavers (Weller & Zorn, 1997). Taken together, such studies underline a rationale for using humor to make topics that remind us of our mortality more approachable. Thorson (1985) found that humor, indeed, shields against death anxiety.

Persuasive Disadvantages of Humor

As discussed above, humor has several advantages in persuasive contexts.

However, scholars have also found convincing evidence of humor's shortcomings in advertising and health contexts. These shortcomings will briefly be discussed below.

Disadvantages of Humor in Advertising Contexts. In the context of advertising, humor has been found to decrease perceptions of source credibility (Eisend, 2009). Further, humorous messages apparently have little impact on receiver comprehension of the message and little ability to influence purchase behavior (Eisend, 2009). Furthermore, another (notably older) review of humor research in advertising concludes that humorous messages do not offer significant advantages over non-humorous messages in persuasive value (Weinberger & Gulas, 1992).

In addition, certain individual differences may predispose some people to respond negatively to humorous message. Consider, for example, issue involvement, which is conceptualized as the importance individuals place on behaviors, topics, and issues (Cacioppo & Petty, 1984). When individuals perceive the issue at hand as having little relevance to them (i.e., they have low issue involvement), they are less likely to pay close attention to the message. Instead, they tend to rely on irrelevant peripheral cues (i.e., heuristics) when processing messages (Cacioppo & Petty, 1984). As such, for individuals with low issue-involvement, humor works as a peripheral cue (Petty & Cacioppo, 1979). Conversely, for individuals with high issue-involvement, peripheral cues such as humor can undermine perceived seriousness of the issue, and, as a result, decrease the persuasiveness of a message (Petty & Cacioppo, 1979). Thus, understanding the extent to

which participants are issue-involved with a given behavior is important when predicting success of humor-based interventions to avoid potential boomerang effects.

Disadvantages of Humor in Health Persuasion Contexts. Despite prevalence of humorous messages in campaigns (Paek et al., 2013), communication scholars have pointed to the relative sparseness and inadequacy of communication-focused humor research in the context of changing health behavior (Lee, 2010). Such criticisms are well founded considering the potential benefits of humor as a persuasive mechanism in health contexts (see above). At the same time, it is important to critically examine potential downsides of humor in health persuasion as well. Previous research, for example, indicates that humor can result in boomerang effects. One study, for instance, found that humorous messages decreased perceptions of severity regarding unprotected sex, which, in turn, predicted reduced behavioral intention to practice safe sex (Moyer-Guse et al., 2011). Another found that humorous sarcastic anti-drug messages were less persuasive than non-humorous sarcastic anti-drug messages (Alabastro et al., 2012).

Given that humor can be a double-edged sword as a persuasive strategy, a question that naturally follows asks: what underlying mechanisms explain whether humor will be advantageous or disadvantageous in persuasive contexts? One potential answer to this question is provided by expectancy violations theory.

Expectancy Violations Theory

Origins

Expectancy violations theory (EVT) was initially developed to explain contradictory findings regarding norm violations of nonverbal behavior on perceived

interpersonal effectiveness. The theory posits that expectancy violations of nonverbal behavior lead to arousal, and then appraisal, the result of which depends upon whether the receiver views the violation as positive or negative, based upon their attitudes towards the source of the message (Burgoon & Hale, 1988).

Implications of Expectancy Violation for Persuasion

In the context of persuasion, positive and negative expectancy violations yield different outcomes. Indeed, if a positively perceived expectancy violation occurs, the receiver is more likely to move in the direction of the advocated behavior; however, if a negatively perceived expectancy violation occurs, the receiver is either unlikely to change their position, or worse, move even further away from the advocated position (Burgoon et al., 1989). In the context of health messages, Siegal and Burgoon (2002) posit that violating a receiver's expectations about health behaviors will subsequently create a new orientation towards that topic; this response, in turn, will force receivers to evaluate the message. Recall that humor often relies upon perceived incongruity in a social environment (i.e., expectancy violation). Because of conceptual similarities between EVT and the role of humor in interpreting incongruencies, several scholars have studied humor using EVT as a guiding framework.

Humor as Expectancy Violation

Guided by principles of EVT, previous research indicates that humor has potential to violate expectancies in positive and negative ways. One study examining political humor and source perceptions, for example, found that positive expectancy violations influenced perceived humor in the message, which, in turn, led to favorable receiver

evaluations of the source (Walther-Martin, 2015). Similarly, in educational contexts, students reported more communication satisfaction when instructors used humor that violated expectancies in a positive way (Sidelinger, 2014). Additionally, a pilot study using a college student sample found preliminary evidence that a humorous message generated expectancy violation, which, in turn, predicted perceived humor (Esralew, 2012). On the other hand, in political contexts, one study found that candidates' use of a humorous pun on social media (perceived as a negative expectancy violation), led to reduced perceptions of candidate credibility and lower voter support (Bullock & Hubner, 2020). Yet, to the author's knowledge, no studies to date have used expectancy violations theory to examine humor in EOL contexts.

Because health contexts seem to necessitate propriety, sensitivity, and respect, it is logical that humor about death would be particularly risky. Indeed, the potential for negative expectancy violation seems especially high in EOL contexts. Yet, as discussed in chapter one, several successful public figures (e.g., Caitlin Doughty) use humor as a primary communication strategy when discussing death. The present study addresses these gaps in the humor, health, and expectancy violations literature.

Conclusion and Model Explanation

This chapter reviewed scholarly literature, which is crucial to the present three-phase study. The theoretical model presented in Figure 1 combines predictions from TPB, TMT, theories about persuasive mechanisms of humor, and EVT to predict likely outcomes of using humor to motivate receivers to engage in ACP. Importantly, this preliminary model will be re-evaluated and presented again throughout this manuscript,

after each phase of the study. Notably, the next chapter presents a qualitative study, which elicits lay theories from subject matter experts in death communication.

The model below posits that humor results in positive expectancy violation, which increases positive affect and decreases death anxiety/communication apprehension about death. Further, this process increases determinants of behavioral intention (i.e., attitudes, norms, and PBC), behavioral intention to engage in ACP, and eventually behavioral engagement in ACP.

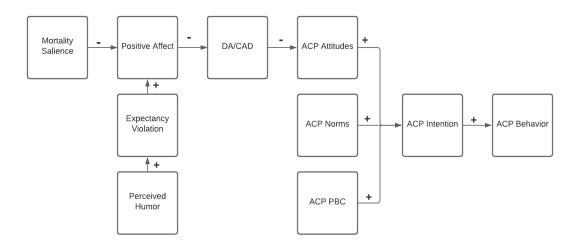


Figure 1. Theoretical Model Depicting the Role of Humor in ACP Motivation, Derived from TPB, TMT, Integrative Affective-Cognitive Model of Humor, and EVT

Note: TPB is an abbreviation of theory of planned behavior; TMT is an abbreviation of terror management theory; EVT is an abbreviation of expectancy violations theory; ACP is an abbreviation of advance care planning; DA/CAD is an abbreviation for death anxiety and communication apprehension about death, respectively; and PBC is an abbreviation for perceived behavioral control.

Brief Methodological Overview

Exploratory sequential designs in mixed-methods research involve starting with qualitative methods before employing quantitative methods (Ivankova et al., 2006). This approach allows rich data rooted in the lived experiences of participants to inform surveys or experiments (Ivankova et al., 2006). The present study goes a step further, employing a qualitative, then quantitative, then qualitative, three-phase design. Thus, the initial qualitative phase in the next chapter informed stimuli and survey design for the experiment in chapter four, and the quantitative findings in chapter four informed the interview protocol and analysis of findings in the final qualitative phase presented in chapter five.

CHAPTER 3: PHASE ONE– QUALITATIVE INTERVIEWS WITH THE DEATH POSITIVE MOVEMENT

Background: The Death Positive Movement

The death positive movement (DPM) is a social movement that intends to change how society perceives, and communicates about, death and dying. Specifically, as the "sex positive movement" does for topics related to sex, the DPM seeks to remove societal taboos surrounding death; moreover, the DPM works to advocate for consumer autonomy in death and educate consumers about predatory aspects of the funeral industry (The Order of the Good Death, 2021). Scholars and advocates for death industry reform believe rampant death anxiety in the United States is largely attributable to cultural factors. The Order of the Good Death, a prominent group within the larger death positive movement, is an advocacy group rooted in a humanistic perspective towards death.

Recall from chapter one that Caitlin Doughty, a mortician, author, public speaker, activist, and media producer, is the founder of the death positive movement (DPM) as well as The Order of the Good Death, a central organization of the DPM. Established in 2011, The Order of the Good Death is an interdisciplinary collective of death-industry workers, academics, artists, and others whose mission is to change the way people communicate about death (The Order of the Good Death, 2021). The Order of the Good Death's website states the central tenets of death positivity: 1) Death denial is harmful to

society; 2) Death denial is best addressed via discussion, artistic expression, scholarship, and curiosity; 3) Engaging with one's death should be encouraged and done with curiosity rather than fear; 4) Dead bodies must be respected, not feared, and it is a human right to care for one's own dead; 5) Laws and policies surrounding end-of-life matters must prioritize autonomy and respect for cultural differences; 6) Death practices should be environmentally conscious; 7) Formalizing and communicating with loved ones about end-of-life preferences (e.g., advance care planning) are worthwhile activities; 8)

Advocating for good death can change harmful cultural and social mores (The Order of the Good Death, 2021). Additionally, the Order of the Good Death's website states that society must accept that death is natural but anxiety about discussing end-of-life matters is not (The Order of the Good Death, 2021).

Communication in the Death Positive Movement

It is evident from DPM's stated goals that communication is of paramount importance to the organization. Few researchers have studied communication behaviors of DPM members. As one exception, Baldwin (2017) examined communication goals of Death Café facilitators. Death Cafés and Death Salons are organized by volunteers who believe in the DPM's goal of bringing conversation about death into the light. As such, Death Cafés and Death Salons offer a place for anyone to come to discuss death and dying with others over beverages and cake. Baldwin (2017) found that Death Café facilitators advocate for changing norms about death communication as well as validation of individual stories, desires, and fears about death.

Notable to the present study, humorous messages are prevalent within influential media produced by the DPM. The irreverent wit that permeates DPM media is apparent from Doughty's books (e.g., "Will my Cat Eat my Eyeballs? And Other Questions About Dead Bodies;" Doughty, 2019) and YouTube channel, which includes topics such as what happens to breast implants during cremation, corpse poop, the history of using human skulls as beverage vessels, and people who hired strippers for a funeral.

Importantly, as is also apparent in DPM media, Doughty approaches serious topics too, such as racial disparity in the funeral industry, COVID-19 funerals, grief in the wake of terrible tragedies, and advance care planning. In her media, Doughty often writes with humor, wit, and/or profanity (e.g., a podcast episode titled, "Get Your Sh*t Together;" Doughty, 2019).

The DPM's success is impossible to ignore. As noted above, Doughty runs a YouTube channel with nearly 150 million views and has authored three New York Times Best Selling books. Considering the size of her following and success of the movement she founded, an examination of the DPM seems an especially promising avenue for understanding death communication. Consistent with this notion, Mortensen & Cialdini (2010) recommended that researchers begin studies with observation of phenomena in the world; thus, examining novel communication approaches used by figureheads and fans of the DPM is a worthwhile activity for scholars interested in motivating ACP. Yet, humor and irreverence have proven to be, at best, risky message strategies. Indeed, as noted in chapter two, several strong studies have shown that humor can decrease perceptions of source credibility (Eisend, 2009; Nabi et al. 2007). Moreover, profanity can be perceived

as antisocial and inappropriate (Stone et al., 2015). Thus, effectiveness of the humor and profanity-laden message strategies employed by prominent members of the DPM is an empirical question.

This first phase of the present three-phase project consisted of qualitative interviews with leaders and dedicated members of the DPM. The primary goal at the outset of this stage was to gather lay theories, which are conceptualized as fundamental beliefs and assumptions about human attributes by individuals not trained in the sciences (Dweck, 1986; Dweck, 1999; Dweck, 2006; Rattan et al., 2018). Specifically, the purpose of this phase was to gather lay theories from experts within the DPM about why they believe the movement uses humor in media, what effects humorous messages about death have on audiences, and what audience factors might influence the positive or negative reception of humorous messages about death. An additional purpose of gathering lay theories was to add nuance to the theoretical model based on social scientific literature, which was presented at the end of chapter two. Moreover, these insights would be used to design humorous and parallel stimuli for the experiment presented in chapter four. To achieve these goals, I developed the following research questions.

RQ1: What do DPM members believe are the mechanisms by which humor facilitates communication about death?

RQ2: What receiver factors do DPM members believe may *enhance* and/or *impede* someone's ability to enjoy humor about death?

RQ3: What source and/or message factors facilitate humorous communication of topics related to death and dying?

Methods

The first phase of this three-phase study consisted of in-depth, semi-structured, qualitative interviews with leaders and members of the DPM and related communities. The purpose of these interviews was to ascertain lay theories (Dweck, 1986; Dweck, 1999; Dweck, 2006; Rattan et al., 2018) from subject matter experts regarding use of humor in the context of EOL communication. The following procedures were approved by the institutional review board at George Mason University.

Sample and Recruitment

The researcher began by posting a call for people who identify as creators or fans of the death positive movement on various social media sites, including subreddits dedicated to death positivity and Facebook groups associated with death positive activities (e.g., Death Cafes). The researcher also used personal contacts to reach out to participants. In total, thirteen members of the death positive community agreed to participate in the study after contacting the researcher via email. Prior to the interviews, participants explained their specific roles as creators and fans of the movement. The researcher specifically chose individuals who had significant followings, possessed unique knowledge regarding ACP, or specialized in comedy in the context of EOL communication. Notably, several participants stated that they do not specifically identify with the death positive movement by name (e.g., not identifying as a member of the Order of the Good Death), but that they agreed with the movement's message and worked in their own way to further the philosophies of the death positive movement. All participants agreed that they were, at minimum, "death positive movement adjacent."

Participant roles in the community included thought leaders of the death positive movement, death industry workers, activists, artists, death café facilitators, grief counselors, hospice volunteers, online content creators, satirists/comedians, writers, storytellers, academics, death hobbyists (e.g., taxidermy), charity organizers, and fans of death positive media. For demographic information, see Table 1. Importantly, the "thought leader" designation was reserved for individuals who serve as leaders in death-positive organizations and/or organizations with missions congruent with the death positive movement, and founders/prominent public figures within the movement (e.g., content creators with substantial public impact via social media, podcasts, books, etc.) To be considered a "thought leader," the person must have been referred to, by name, by another participant (e.g., "I'm a big fan of Kate's work. You should try and get a meeting with her if you can.")

33

 Table 1. Demographic Information of Death Positive Movement Participants

Pseudonym	Gender	Race/Ethnicity	Age	Role(s)
Kathleen	Woman	White	42	Artist, activist
Daniela	Woman	Hispanic	36	Activist, death-industry worker
Erin	Woman	White	18	Death-industry worker, artist, writer, online creator
Marianne	Woman	White	45	Death café facilitator, grief counselor, hospice volunteer
Jason	Man	White	31	Academic, online creator
Charlie	Man	Asian/Biracial	32	Artist, satirist, online creator
Annie	Woman	White	22	Satirist, online creator, death-industry worker
Julia	Woman	White	45	Writer, storyteller, content creator
Jasmine	Woman	Black/Biracial	43	Academic, DPM thought leader
Gina	Woman	White	20	Hobbyist, fan
Jenny	Woman	White	32	Charity organizer, fan
Patricia	Woman	White	65	Academic
Kate	Woman	Black	41	Academic, DPM thought leader, activist

Procedure

Participants gave verbal consent for the interview to be recorded and transcribed for later use. Participants were assured confidentiality for themselves and for any individuals mentioned in their responses. Interviews lasted between thirty and sixty minutes, and participants were paid between five and ten dollars for their time, depending on the length of the interview. Notably, all but four participants declined payment, and all participants enthusiastically thanked the interviewer for a fun conversation and for his interest in the topic.

The interview protocol was developed using the critical incident technique (Flanagan, 1954; Kreps, 2017), and participants were asked to discuss their relationships to the death positive movement, what death positive content they enjoy/consume, how they define their approach to discussing death with others, their beliefs about humor in the context of death, potential upsides and downsides of using humor in the context of death communication, whether certain types of humor are more likely to be successful than others in the context of death communication, personality traits of people who are likely to respond well or poorly to humor in the context of death, stories about times during which they were especially successful communicating about death, stories about times during which they were not successful communicating about death, their experiences with advance care planning, and demographic information. Importantly, because the primary goal of this phase of the study was to develop a model and elucidate conceptual relationships to be tested, participants were asked probing questions about

why they thought humor worked or did not work in the context of death communication and *for whom* humor may or may not work in the context of death communication.

During interviews the facilitator repeated back interpretations of what was said, noting whether the participant agreed with that interpretation, and altering his interpretation if the participant disagreed. By engaging in this process during interviews, the researcher was better able to determine whether his interpretations accurately represented participant perspectives. This technique of verifying interpretations and findings with research participants is noted as an important method of achieving internal validity in qualitative interview studies (Lincoln & Guba, 1985).

Analysis

For the first step of analysis, the researcher manually transcribed each of the interviews. Next, the researcher read the transcripts to gain general familiarity with the text. After transcribing and reading the text, the researcher began the process of open coding (Corbin & Strauss, 2015, p. 216) which consisted of reading "chunks" of text and then summarizing the general idea of each text. This process yielded 505 codes, which were winnowed down, based on similarities, to 80 codes. Those 80 codes were then grouped with one another until themes emerged from common patterns in the coded data. Thematic analysis yielded several themes and subthemes regarding lay theories that death positive movement members held about humor and death communication. This process was continued until thematic saturation, the point at which no new ideas emerge in further analysis, was reached (Guest et al., 2006).

Results

RQ1: What do DPM members believe are the mechanisms by which humor facilitates communication about death?

The core four themes that emerged during analysis are as follows: *humor must be perceived, humor must be enjoyed, positive expectancy violation,* and *tension release.*

The first theme is *humor must be perceived*. Participants discussed factors that might affect a receiver's ability or capacity to detect humorous intent in a message. In short, participants discussed that a listener must easily perceive humorous intent in a message, especially in the context of death communication, when a miscommunication could be seen as especially inappropriate or insensitive. Exemplifying this theme, one participant said, "If your audience doesn't understand that it is humor, you've failed at your job. The audience needs to be able to perceive this as humor. If it's not perceived as humor, you didn't do it right."

The second theme is *humor must be enjoyed*. This theme speaks to the fact that participants believe that many people are likely to be offended by humor about death and think humor in the context of death and serious illness is disrespectful. In short, though some people might acknowledge that humor is being attempted, the next step to humor facilitating perceived accessibility of topics related to death is enjoying the attempted humor. Regarding this, one participant said, "Generally, I wouldn't even attempt humor unless I was reading cues from that person that they might be open to it."

The third theme, *positive expectancy violation*, concerns the phenomenon whereby a person is surprised by the presentation of a message about death (e.g., humorously,

irreverently) and responds in a positive way to the novelty of that approach. Participants discussed that people who actively engage with morbid curiosities (e.g., taxidermy, watching videos about dead bodies, etc.) are less likely to experience positive expectancy violation because humor about death is less novel to them. In contrast, DPM participants stated that people who believe death is a taboo subject, and yet, enjoy the humorous message are more likely to experience positive expectancy violation when exposed to a humorous message about death. Indeed, the following exemplar quotes speaks to DPM perspectives about how humor in the context of death violates a social norm in a way that helps people approach the topic.

I think anytime there's something that's a little bit taboo, we feel like it is off limits.

And, you know, accessing it by way of humor makes it more tangible. It's almost like Caitlin [Doughty] is making herself the punchline. Caitlin's like "I'm going to talk about death in a humorous way, so that I've already kind of committed the faux pas and now it makes it easier for you to access it."

The fourth and final theme for RQ1, tension release, concerns participant beliefs about how humor serves as a means of releasing tension or stress associated with death anxiety. Participants frequently stated that humor can be used to ground a person in a difficult conversation, name the "elephant in the room," that laughing about a scary topic makes it seem less intimidating, and how important normalizing death as just another part of life is for alleviating anxiety. ("[Humor] just kind of takes the emotional weight off that most people assign to [death].") Regarding this, one participant said the following.

Humor is a coping mechanism. Sometimes something is so dark that humor is the only thing that gets you through. It breaks the tension, and it helps address the unaddressable. Humor is pretty powerful. Now, I'm not saying you go to the funeral and go, "so, a Rabbi and a Priest walk into a bar..." I'm not saying that.

RQ2: What receiver factors do DPM members believe may *enhance* and/or *impede* someone's ability to enjoy humor about death?

Four themes about important receiver factors emerged in response to this research question: *dark sense of humor, generation/age, irreverence,* and *religion*.

The first theme, *dark sense of humor*, concerns a receiver's general appreciation of humor about morbid topics, and how that may influence the extent to which they are able to accurately detect humorous intent in a message about death. Participants discussed how people without appreciation of dark humor are inherently less likely to accurately perceive humorous messages in the context of death communication.

Regarding the importance of appreciation for dark humor on humorous reception, one participant, who works in the death industry, shared the following insight when asked, "what would you say to someone who says that death should never be joked about:"

When I'm in a professional context, I would definitely be like, "oh, I completely understand." [But outside of that context, I would be thinking], wow, dude, the stick is a little too far up your ass. Maybe you might want to dislodge it a little because it's causing you discomfort in life.

The second theme, *generation/age*, emerged because DPM participants spoke to the fact that the movement strongly appeals to younger generations (e.g., Millennials and

Generation Z) due to its underlying secular humanist and anti-capitalist perspectives.

Consequently, many DPM participants shared perspectives that people of older generations (e.g., Generation X and Baby Boomers) are less likely to "get" humor about death. Regarding this, one participant said, "Really dark humor seems to appeal to the Millennials the most. The [Generation] Xers and Boomers, I think they're less dark." A second participant corroborated this point, saying:

I feel like Boomers and [Generation] Xers kind of view death in a very, like, I don't want to think about it, I don't want to talk about it [way]. It's very taboo in their generations, whereas the Millennials and Gen Z, they're very much like... aaay [funny 'finger guns' gesture] I went to my therapist today and told them I wanted to off myself, and they almost made me go to the mental hospital [delivered with humorous, casual tone and laughter.]

Notably, these observations were present among many participants, spanning a variety of generations, but were especially prominent amongst DPM members who identified as Millennials and Generation Z. One older participant stated, "At this point, people are using "WTAF" ["what the actual fuck"] as like something we all say, whereas ten years ago even referencing the f-word would have been unheard of." Moreover, one thought-leader in the movement spoke to how the concept of advance care planning and a "good death" is inherently privileged, and messages about the importance of ACP, humorous or not, may not resonate with people from marginalized communities. Thought leaders spoke to how younger generations prioritize social justice within the movement. Regarding this, one thought leader gave the following insight:

You have to center those [marginalized] voices. You've gotta center their pain, and I think that's hard for privileged white folks to sit with. It's not just, "oh, somebody died." How did they die, man? They should still be here! This isn't like a bedside cancer thing. We're out here dying with knees in our backs!

The third theme, *irreverence*, concerns DPM participants' beliefs about tendencies and attitudes towards the appreciation of irreverent behavior (e.g., using profanity, sharing lewd stories, laughing at bawdy jokes, etc.) Participants noted that the taboo nature of death is important when considering the use of humor in that context, and indeed, people who enjoy irreverence are more likely to enjoy humor about an "off-limits" subject such as death. Many DPM members discussed how "nothing should be sacred" because human existence is too absurd to take seriously ("Life sucks when you take it seriously. So does death."). Notably, however, while most DPM members shared this sentiment, they also discussed the importance of context for irreverence, especially regarding death communication. All participants noted that irreverence must be used carefully with certain people ("[Profane statements like] 'get your shit together' are meant to shock and break down barriers, not shock and revolt."). Regarding appreciation for irreverence, especially about profanity and humor, one participant said the following:

I like [phrases such as] "fuck cancer" and "get your shit together" because it's the complete opposite of convention, and false manners, and anything that makes something rarified or precious. Nothing is precious to me.

[Having said that,] if, for a moment, you're wondering if humor is appropriate, don't go the humor route.

The fourth theme, *religion*, concerns DPM participants' views that, in general, people with dogmatic religious views are less likely to enjoy humor about death. Many participants discussed that people who identify as Christians are more likely to perceive death as a sacred subject that should not be joked about. Notably, every single participant discussed that they are non-religious or used to be religious but now identify as non-practicing; thus, while this factor may bear out empirically, it is possible that negative experiences with religion resulted in biases against religious people, especially against Christians, for this participant population ("I think a [Catholic person] might think it irreverent if I try to contextualize death as humorous.") Many leaders of the DPM, including Caitlin Doughty, are vocal atheists, and the movement contains a great deal of messages that emphasize humanistic approaches to death philosophy and are less than friendly to religious perspectives. For example, one participant, who started a "satirical online death cult," shared the following insight.

When [the satirical cult] first started, I was like, okay, let's be outwardly evil but secretly good. Let's flip the cult thing on its head. So, let's donate our merch[andise] store money to charity. And at first, I think we wanted to [donate] to an anti-cult organization. Unfortunately, I could not find an anti-cult charity that I trusted because they seemed like they were heavily

religiously based, almost like, 'No, don't join that cult; join ours instead.'
So, we settled on a rainforest charity because at least it's not divisive.

RQ3: What source and/or message factors facilitate humorous communication of topics related to death and dying?

Two themes about important source and/or message factors emerged in response to this research question: *comedic intentionality* and *social attraction*.

The first theme, *comedic intentionality*, concerns ways in which the message source can increase the chances humorous intent in a message will be received.

Specifically, participants spoke to the artistry involved in crafting humorous messages.

Examples of *comedic intentionality*, according to participants, include using funny voices or intonations, using irreverent language, structuring a joke to violate expectations in a way that elicits laughter, and choosing a medium that allows one to easily communicate humorous messages (e.g., internet memes.) In text-based media, participants discussed how meme formats, punctuation, and all capitalized text are meta-signals that cue an audience into the fact that humor is being attempted. Regarding this theme, one participant stated the following, "[Successful reception of humor] depends on how it's presented in the context of your conversation. Being hyperbolic is key."

The second and final theme for RQ3 is *social attraction*. Participants expressed praise for DPM media leaders, especially Caitlin Doughty, for their ability to generate community and affiliation. Indeed, every participant in this study spoke highly of Caitlin Doughty's ability to make listeners feel like she is their friend. Several participants expressed that they are good personal friends and regularly meet with Doughty, whereas

others knew of her work but didn't know her personally ("I love that wonderful, hip mortician lady!") Regarding the power of social attraction in DPM media, one participant stated the following.

I think people are always looking for a way to get over their fear or anxiety about death, and if they see somebody else [communicating about death] with confidence, they will automatically want to join in.

Notably, participants often discussed having to combat negative perceptions of the term "death positive." Nearly all participants, including several thought leaders within the movement, discussed their dislike of the term "death positive." ("Even though I'm good friends with Caitlin [Doughty], and I love what they're doing, [death positivity] is still such a misnomer. Why are you positive about death? People want to live.") Several participants, including influential thought-leaders within the movement, discussed that white people in the DPM, especially, are guilty of cultural appropriation of death rituals, and consequently, stated that they identify as "death positive adjacent." Nearly all participants stated that they disliked the term "death positive," but they loved the messages and tenets of the Order of the Good Death. Thus, there are potentially divisions, especially rooted in issues of race, power, and marginalization, within the movement, that likely influence the generalizability of these findings to other "death positive" or "death positive adjacent" individuals. Thus, because the movement itself has a name that even DPM members dislike, it is perhaps even more important to generate affiliation with listeners via a prosocial communication style.

Discussion

In general, members of the DPM suggest several mechanisms by which humor can mitigate death anxiety. Participants suggested that humor must be both perceived and enjoyed, death humor works via expectancy violation, and humor releases tension associated with topics that induce death anxiety. Members of the DPM also discussed receiver factors that likely influence the extent to which humorous messages about death are received well; these factors include, a dark sense of humor, age/generation, irreverence, and religion. Finally, members of the DPM noted that source factors including comedic intentionality (e.g., exaggerated delivery and silly details) and social attraction between source and receiver are important for facilitating successful communication of humorous messages in the EOL context. These observations will be discussed alongside consideration of additional literature, both social-scientific and other, and the end of this chapter will depict a model of DPM lay theories. Later, in chapter four, an updated, integrated model consisting both of DPM lay theories and social scientific theories will be presented.

RQ1 inquired about DPM members' perspectives regarding mechanisms of how and why humor works to mitigate death anxiety. The first set of themes includes observations that humor must be perceived, humor must be enjoyed once perceived, positive expectancy violation results from using humor about death, and humor about death results in tension release.

The first theme derived from DPM member responses is that humorous intent must first be perceived. This lay theory by DPM members is consistent with the way

humor is conceptualized in social-scientific literature. Specifically, in literature about humor, Lynch (2002) states that humor must be interpreted as such by receivers. Thus, lay theories by members of the DPM and social-scientific theories about humor production/reception appear to be consistent on the issue of the importance of accurate perception of humor.

The second theme derived from DPM member responses is that, after perception of humorous intent, the receiver must enjoy the humorous message. Once again, this lay theory articulated by members of the DPM is consistent with published literature on humor. Indeed, recall that messages are only considered humor if they elicit some sort of positive, pleasurable response in a receiver; otherwise, the messages can, at best, be conceptualized as "attempted humor" (Markiewicz, 1974). Thus, lay theories articulated by members of the DPM and published theories about humor mechanisms appear to be consistent about the necessity of receiver enjoyment.

The third theme derived from DPM member responses is that expectancy violation leads to positive reception of the message. Specifically, participants suggested that, because humor about death violates social norms, receivers may be pleasantly surprised by the novel communication approach. On a conceptual level, it seems that this lay theory is reasonable. Indeed, recall that the incongruity theory of humor posits that humor helps receivers interpret incongruous phenomena in their environments (Douglas, 1975; Plessner, 1970). Lynch (2002) posits that jokes rely upon messages which present elements that are inconsistent with the natural, rational order of a given context. In this instance, because DPM members stated they believe death is perceived as a taboo topic,

joking about the subject creates a violation of expectations, and according to the DPM lay theory presented here, that violation leads to positive reception of the humorous message. Also, recall that research using expectancy violations theory (EVT) as a guiding framework found that expectancy violations influenced perceived humor in a message (Walther-Martin, 2015). Further supporting this lay theory, Aillaud and Piolat (2012) found that cartoons with dark humor were rated as more surprising than cartoons that did not contain dark humor. These findings in the social-scientific literature lend credence to the DPM members' lay theory about expectancy violation facilitating positive reception of humorous messages about death.

The fourth theme derived from DPM member responses is that humorous messages mitigate death anxiety because they facilitate tension release. This lay theory, too, seems congruous with previously reviewed literature about humor. Indeed, Speck (1991) posits humorous messages have a fundamental structure that generates tension as a result of incongruity, which is followed by specific psychological mechanisms that facilitate tension reduction within the receiver. This position is further validated by findings that the playful nature of humorous messages allows receivers to perceive threatening health topics as more approachable, which has been found in contexts directly related to mortality, including organ donation campaigns (Weber et al., 2006) and working in a cadaver lab (Weller & Zorn, 1997).

The second set of themes, in response to RQ2, was derived from participant responses about receiver factors that are likely to influence the reception of humor about

death. Receiver factors discussed by DPM members include, possessing a dark sense of humor, age/generation, irreverence (especially profanity use/appreciation), and religion.

The first theme in response to RQ2 is that people who enjoy dark humor will prefer humor about death. In general, the DPM is a group that believes normalizing death and removing any sense of "sacredness" surrounding death are societal goods (The Order of the Good Death, 2021). Aillaud and Piolat (2012) conceptualize dark humor as a particular humor type that transgresses social and moral norms and often involves potentially unsavory topics, including death. Importantly, Saroglou and Anciaux (2004) conclude that dark humor can be perceived as antisocial and transgressive, a point further supported by findings that dark humor provokes mixed emotions including amusement, shame, and disgust (Aillaud & Piolat, 2011). These findings seem to support the DPM lay theory presented in this theme that people who appreciate humor that transgresses established social norms about death are much more likely to positively receive humorous death messages than those who ascribe a level of sacredness to death.

The second theme in response to RQ2 is that younger generations, especially Millennials and Generation Z, will be more receptive to humorous messages about death than older generations. This lay theory is prevalent in DPM media, too, as evidenced by a podcast clip about death positivity in which a hospice nurse shares her beliefs that young people are more receptive to the movement (Moss, 2016). Podcast host, D.S. Moss asked Amy Cunningham, a funeral director, "[In your job] as a funeral director, are you seeing [more] young people participating or has that always been there?" to which Cunningham responded, "I think new people are flooding into the funeral business. It's not an easy

business to penetrate, but folks in their 20s, 30s [are doing so]." Further, the primary media leaders of the DPM are, by and large, Millennials; this is apparent when examining the founding members page of the Order of the Good Death (2021). Importantly, in contrast to other DPM lay theories discussed in this study, to the best of the author's knowledge there have been no studies to date about whether people in certain generations enjoy dark humor more than others. Notably, the DPM members interviewed for this study were mostly of a younger generation and were keenly aware of online trends that have yielded intergenerational tension (e.g., "Ok, boomer"; Lim & Lemanski, 2020). Intergenerational animosity likely has influenced DPM member perceptions about how well their "brand" may appeal to older generations. The validity of this lay theory requires empirical verification to determine the extent to which potential biases against older generations have influenced DPM perceptions.

The third theme in response to RQ2 is that people who are irreverent prefer humor about death. Notably, this was a somewhat unexpected finding and became a central focus of the study going forward; thus, this part of the discussion is more detailed. Participants spoke frequently about their affinity for profanity, and how profanity in DPM humorous messages is appealing to them. During interviews, many participants spoke using a lot of profanity. Further, this casually profane approach is apparent in prominent DPM media. Of particular interest to the present study is the phrase, "get your shit together," which is a message upon which one prominent member of the DPM, Chanel Reynolds, has based her work on motivating people to engage in advance care planning. "Get your shit together" has become a primary "brand" for Reynolds, who

named her website and book about advance care planning after the phrase. It may seem paradoxical to use such an abrupt, profane phrase in the context of ACP, a process that requires sensitivity and support. yet, Reynolds has achieved a great deal of success using this phase and has helped many people through the ACP process. Indeed, Caitlin Doughty offered a testimonial on the back of Reynolds' (2019) book reading, "[Reynolds] is your funny, irreverent friend, who's here to show you tough love." Several DPM participants interviewed for this study were familiar with Reynolds' work and spoke about their appreciation of the specific phrase, "get your shit together." For example, participants said the following: "[the phrase 'get your shit together'] is modern, contemporary and hip," "Hearing ['get your shit together'] lets you immediately know this is not just a message from the AARP," "By using the word 'shit,' it makes me feel like a friend is telling me to do it. It implies urgency. It's eye catching and speaks to [Millennials]." Interestingly, one Amazon book review of Reynolds' book by a female minister supports claims levied by DPM participants regarding the lack of appeal for irreverent humor to religious people:

I am a minister. Many of my congregation have questions about how to approach preparing end-of-life documents and plans. I somehow missed the word 's**t' in the title and bought the book. I was very disappointed when I found the text sprinkled with offensive language. I deleted it from my Kindle. It is unfortunate that the book which probably has very helpful information was not written with a broad audience in mind which included a whole category of readers who will not tolerate offensive language.

In her book, Reynolds (2019, pp, 8–9) discusses her reasons for choosing "get your shit together" as the primary message:

The phrase "get your shit together" rings true. It's real. And human. This is how we actually feel and talk about this stuff... Talking about the things that scare or worry us in the most honest way we can is so powerful – but oddly, the colloquial sometimes rubs people the wrong way.

Moreover, regarding the irreverence and profanity of the phrase, Reynolds (2019, pp 8–9) shared the following story:

Among all the positive feedback and 'you go, girl' support I received at the launch of the Get Your Shit Together website, I needed only my fingers to count the number of 'You suck or 'I hate your bangs' letters I got, but there was one comment that made me wish I could shoot lasers out of my eyes. It came from a lawyer who took issue with my website's name and its 'coarseness of communication' because 'the whole process deserves more dignity.' To this I call bullshit... *Dignity* is a word often used to shut people up or to gaslight them. Let's stick with honesty.

Thus, it is clear from interviews in this study and other media produced by the DPM that profanity is an intentional, central communication approach used by this group. Moreover, the DPM members posit a lay theory that appreciation of profanity is likely to influence how receivers feel about messages related to death. Scientific consensus with this lay theory is, at best, mixed. Indeed, some studies have found benefits of profanity

use that coincide with DPM perspectives, including that profanity use decreases stress and pain (Robbins et al., 2011; Vingerhoets et al., 2013), profanity can be used to attract and entertain others (Kaye & Sapolsky, 2009), and people who use profanity are perceived as more honest (Feldman et al., 2017). However, other studies have demonstrated that profanity use violates traditional communication norms and can be interpreted as antisocial or even hostile (Stone et al., 2015). Further, Johnson and Lewis (2010) found that profanity use in formal contexts leads to expectancy violation. Because expectancy violations theory is a central guiding framework in the social-scientific literature about humor, and a lay theory articulated by members of the DPM in this study, the central role of profanity deserves more attention in the context of examining media about EOL communication, a context in which formality might be expected.

The fourth and final theme in response to RQ2 is that members of the DPM believe people who identify as religious are less likely to enjoy humor about death. Indeed, in response to the question, "what kind of people might not appreciate humor about death?" many members responded that religious people, especially Christians, would find humor distasteful or offensive in that context. Importantly, all DPM members interviewed for this study identified as atheist, agnostic, or not-currently practicing any religion. Moreover, several prominent figureheads of the movement, including Doughty, are vocal atheists. Several other DPM members referred to religions as cults, and thus, DPM bias against religion, especially Christianity, may have informed perspectives. Still, some empirical evidence offers support of this lay theory. Specifically, one study found religiosity was negatively associated with personality traits and cognitive structures

typically associated with humor (Saroglou, 2002). Whether religious people, especially Christians, are less likely to positively receive humor about death is an empirical question that requires further study.

The final research question sought to better understand DPM lay theories about what source/message factors facilitate positive reception of humor about death.

Responses to this research question yielded two themes: *comedic intentionality* and *social attraction*.

Recall that the first DPM lay theory from this study is that humor must be perceived to be effective. When asked a follow up question about how, specifically, communicators could make humorous intention as clear as possible, participants often spoke about the importance of including hyperbole, absurdity, and nonverbal cues (e.g., using one's voice in a funny way) to make humorous intent clear. This lay theory is supported by humor literature, which notes that playful meta-signals (e.g., exaggerated tones) help receivers perceive humor in messages (Podnar, 2013). In short, comedic intentionality requires that effort be put in on the part of the source to make humor obvious in the message, either by using playful meta-signals or intentionally incorporating silly or absurd elements into the message.

The final theme derived from DPM participants is that humor about death works best when receivers feel social attraction toward the source. Specifically, participants posited a lay theory that sources who are perceived as confident, casual, matter of fact, and "just like one of your friends" are more likely to successfully communicate humorous messages about death in a way that is enjoyable. This lay theory has

considerable empirical support in published literature. Indeed, there is a great deal of support for the intuitive idea that receivers are more likely to be influenced by sources they like than by sources they find objectionable (Eagly & Chaiken, 1993). Notably, however, studies have also found that source credibility is a much stronger factor than source liking for persuasion (Lupia & McCubbins, 1998); thus, this lay theory, too, must be examined empirically. Notably, participants often discussed misperceptions of the movement, primarily resulting from misunderstandings about the term "death positivity." Participants suggested that these misunderstandings necessitate extra effort in building affiliation with receivers. Participants discussed the importance of always being transparently altruistic, so receivers do not misinterpret the purpose of the group as something nefarious.

Each theme in this study can be considered a lay theory based on DPM participant perspectives. Below, in Figure 2, is a theoretical model based on these lay theories.

Quantitatively testing the entirety of this model is outside the scope of the present study, but components of the DPM lay theory model below will be integrated into a theoretical model based on social-scientific literature (see chapter two) and tested in the study presented in the following chapter. The model posits (a) comedic intentionality increases likelihood of receivers perceiving humor in a death message, (b) the relationship between perception of humor in a death message and enjoyment of humor in a death message is negatively moderated by religiosity, (c) the relationship between perception of humor in a death message and enjoyment of humor in a death message is negatively moderated by age, (d) sense of humor and irreverence increase likelihood of enjoying humor in a death

message, (e) enjoyment of a humorous death message results in positive expectancy violation, and (f) the relationship between enjoyment of a humorous death message and alleviation of death anxiety/tension is moderated by the extent to which receivers feel social attraction to the source.

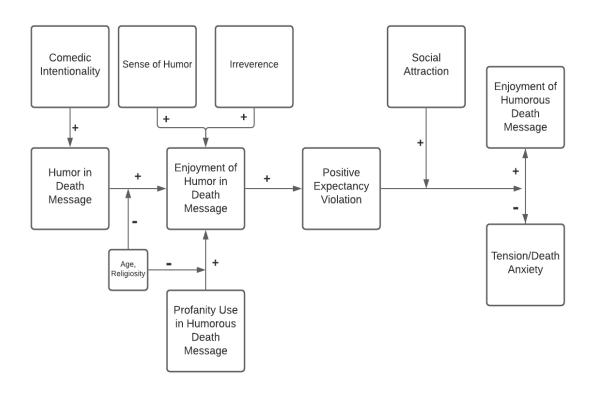


Figure 2. *Model of DPM Lay Theories about Humor in Death Messages.*

Limitations

As with all qualitative studies, several key limitations must be considered, including transferability of the findings to others in the population, the extent to which final analysis accurately represents participant perspectives, and the extent to which researcher bias may influence findings (Anderson, 2010).

Regarding the first issue, it is important to consider whether the findings from this study are transferable to other "death positive" individuals. Importantly, the sample of interviewees was recruited via purposive sampling, with the intention of gathering insights from especially influential and/or knowledgeable people within the movement, particularly regarding use of humor or advance care planning. Thus, it is likely that participants in this study are especially involved in the movement in comparison to the average DPM fan. This is significant because there are likely many fans of death positive media who may not share the same degree of passion and depth of thought as the people interviewed for this study. Indeed, it is logical that out of Doughty's millions of fans, many of them are more casually acquainted with the movement than this study's participants. To this end, it is possible that the depth of involvement for these individuals may have yielded strong perspectives that do not necessarily represent everyone within the death positive movement. Though, on the other hand, participant expertise of the topic can also be considered a strength of this study.

Additionally, the sample size of thought leaders was modest for this interview process. Due to difficulty reaching several significant leaders of the DPM during the COVID-19 pandemic, the researcher augmented the sample by interviewing other, smaller media content creators in the movement (e.g., independent death-positive artists on Instagram, people who run smaller [thousands rather than millions of followers] online death positive communities. Notably, in a quantitative study examining sixty indepth interviews, Guest et al. (2006) found that saturation consistently occurred within the first twelve interviews and basic elements for meta-themes were found in as few as six interviews; thus, this study of thirteen highly specialized interviewees certainly provides valuable insights that can guide future research. Finally, though the sample consisted primarily of white women, this is quite consistent with the general demographic makeup of leaders within the death positive movement (i.e., many of the most prominent members of the movement are white women).

The second issue, the extent to which findings accurately represent participant perspectives, is paramount. To account for this, after a participant made a point or shared an insight, the researcher interpreted the point in the moment, shared his interpretation, and asked whether his interpretation accurately represented what the participant believed. Occasionally, the participant corrected the researcher if the interpretation was not representative of the participants' perspective. During analysis, codes were not considered patterns enough to become themes unless the insight was independently shared by at least three different participants. This step was taken to mitigate the researcher's personal appreciation of DPM philosophies (i.e., this prevents the issue of

the researcher latching onto an idea that was particularly appealing to him, even if it was not consistently mentioned by other participants.) To mitigate issues of social desirability, the researcher worked to build rapport and trust with participants by self-identifying as a fan of the movement, so they would not feel like they had to translate or sanitize their perspectives about death positivity. Additionally, when available, the researcher read/viewed media by the participant beforehand to demonstrate interest in their work. This was in service of creating a trusting relationship where participants could share truthful perspectives without feeling judged. Every participant thanked the researcher for doing research on the movement after the interviews had concluded and asked to be kept apprised of the research going forward. All participants also asked to be contacted to help with future research.

The third issue, the extent to which the researcher may bias results, is especially germane for a single-authored, qualitative study. The researcher is an avid fan of media produced by the death positive movement. Thus, it is certain his affinity for the movement influenced all stages of design and analysis. To mitigate his own influence, the researcher consulted with other researchers who were unfamiliar with the movement to develop interview questions. During interviews, the researcher asked about both positive and negative experiences/opinions about the movement and asked about the upsides and downsides of humor in the context of death and dying. This is because focusing on positive elements alone would likely yield biased data that did not adequately criticize the DPM for its shortcomings in addition to praising its altruistic goals. Discussing the DPM with participants who identified as people of color provided fascinating perspectives that

the author had not previously considered. This also speaks to how the author's privilege as a straight, cisgender, white man likely influenced the study insofar as his background limited the questions that he was savvy enough to ask. During analysis, the researcher intentionally sought out codes about positive and negative experiences with the DPM, as well as upsides and downsides of using humor as an approach to motivate EOL communication. A primary limitation of this study is the lack of a second coder for the analysis process; but by engaging in perspective verification during interviews, and bracketing his own beliefs and experiences (Moustakas, 1994, p. 34), the researcher attempted to yield truthful data, which represented participant perspectives, both favorable and critical.

CHAPTER 4: PHASE TWO – MESSAGE TESTING EXPERIMENT

Review of Previous Findings

Recall from the previous phase with DPM members that both humor and profanity are important features of the DPM's communication approach. Although DPM members spoke highly of both message features, there are mixed findings in the literature about the persuasive efficacy of these approaches. Thus, this quantitative study was conducted to test an integrated theoretical framework based on social-scientific literature (chapter two) and DPM lay theories (chapter three). This new, integrated theoretical framework is presented below in Figure 3. Each component of the model that will be tested will be briefly discussed considering both published literature and DPM lay theories, and at least one corresponding hypothesis will be presented at the end of the discussion for each component. Notably, the evolving theoretical model built from DPM lay theories and presented at the end of chapter three contains more relationships than will be tested in this phase of the study; testing the entirety of that model is outside the scope of this project, and future research should carefully examine the rest of the model.

Model Explanation

The integrated theoretical model below (Figure 3) posits that humorous death messages result in positive expectancy violation, which increases perceptions of speaker/message effectiveness and decreases death anxiety/communication apprehension

about death. This model further posits that these mechanisms increase determinants of behavioral intention (i.e., attitudes, norms, PBC) and behavioral intention to engage in ACP. Importantly, based on DPM lay theories, the relationship between humor in a death message and positive expectancy violation is moderated by irreverence, age, and religiosity; that is, people who are more irreverent will experience more positive expectancy violation in response to a humorous death message, and older/more religious people will experience less positive expectancy violation in response to a humorous death message. Further, DPM lay theories suggest that profanity use is an important aspect of the model. Specifically, they posit that the relationship between profanity use in a death message and positive expectancy violation is moderated by irreverence, age, and religiosity; irreverence positively moderates the relationship, while age and religiosity negatively moderate the relationship.

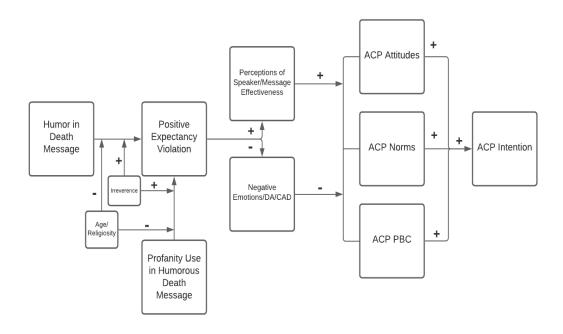


Figure 3. Integrated Theoretical Framework

Note. The model predicts positive expectancy violation in response to profanity in a humorous death message depends on receiver irreverence (positive moderator), age (negative moderator), and religiosity (negative moderator).

Testing the Integrated Theoretical Model

Humorous Death Messages as Expectancy Violation

Recall from chapter two that humor relies upon a structure whereby incongruities in a social environment are a source of enjoyable arousal for a receiver (Douglas, 1975; Plessner, 1970). Further, recall that this fundamental structure of humor has yielded several studies using expectancy violations theory (EVT) as a guiding framework (e.g., Walther-Martin, 2015). These findings are consistent with DPM lay theories about humor

successfully alleviating death anxiety via positive expectancy violation. Because both social-scientific literature and DPM lay theories agree on this point, the following hypothesis was posited.

H1: Humorous messages about ACP will result in greater positive expectancy violation than non-humorous messages about ACP.

Humorous Death Messages and Perceptions of Speaker/Message Effectiveness

Recall from the social-scientific literature presented in chapter two that humans use humor to build affiliation and amuse others as a form of play (Martin, 2010). Further, recall that the integrative affective-cognitive model of humor posits a "congruency effect," whereby positive cognitions result from positive affective responses to humor (Eisend, 2011). Moreover, EVT posits that positive expectancy violation results in deeper levels of message processing, and subsequently, greater persuasive potential (Hunt et al., 1989). These findings are consistent with DPM lay theories that humorous messages about death endear the listener to the speaker, and consequently, make the topic of EOL communication more appealing. Because consistent support for this DPM lay theory exists in the social-scientific literature, the following hypothesis was posited.

H2: In comparison to non-humorous messages about ACP, exposure to humorous messages about ACP leads to (a) increased perceptions of speaker effectiveness and (b) increased perceptions of message effectiveness.

Emotional Responses to Humorous Death Messages

Eisend (2009) found that humor both increases positive affective responses to messages and suppresses negative affective responses. Moreover, for threatening topics

(e.g., ACP), the playful lens of humorous messages allows receivers to perceive messages as more approachable (Weinberger & Gulas, 1992). DPM members offered lay theories that are congruent with these findings in scientific literature. Thus, the following hypothesis was posited.

H3: In comparison to non-humorous messages about ACP, exposure to humorous messages about ACP leads to (a) more positive emotional responses to the message and (b) less negative emotional responses to the message.

Humorous Death Messages and Death Anxiety/Communication Apprehension about Death

Several studies have used humor to make topics directly related to death more approachable. Specifically, Weber et al. (2006) found that humorous messages were more persuasive than non-humorous messages in motivating organ donation, and another study found that humor relieved tension for medical students prior to working in a cadaver lab (Weller & Zorn, 1997). DPM members, too, predicted that humor alleviates the primal terror of death anxiety and allows scary topics to be brought into the open for discussion. Thus, the following hypothesis was posited based on a convergence of social-scientific and lay theories on the matter of humor and death anxiety/communication apprehension about death.

H4: In comparison to non-humorous messages about ACP, exposure to humorous messages about ACP leads to (a) decreased death anxiety, and (b) decreased communication apprehension about death.

Determinants of Health Behavior and Humorous Death Messages

Recall that theory of planned behavior (TPB) is a prominent guiding framework for EOL communication research (Scherrens, 2018). ACP, especially, is a behavior that requires intentionality and forethought. TPB posits behavioral intention is the best predictor of behavioral engagement, and behavioral intention is, in turn, predicted by attitudes towards the behavior, norms about the behavior, and perceived behavioral control (PBC) (Ajzen, 1991). Several health communication studies have used TPB as a framework to evaluate humor interventions (e.g., Lee at al., 2015; Yoon & Tinkham, 2013). For example, Lee et al., (2015) found that humorous messages were persuasive in altering both attitudes and intentions to abstain from binge drinking. Further, because the stimuli in this experiment (see below) implement other-deprecating humor (i.e., humor that makes fun of people who have *not* engaged in ACP), based on similar findings about other-deprecating humor altering perceived norms about binge-drinking from Lee et al. (2015), I posit similar changes in norms will occur for the humorous messages. Finally, several studies have shown that laughter increases self-efficacy (i.e., perceived behavioral control) towards exercise (Green et al., 2007) and in the workplace (Beckman et al., 2007); because humor is useful for approaching difficult topics, I posit a similar increase will occur in PBC for ACP in response to humor. Thus, due to the appropriateness of TPB in the context of ACP, and previous findings about the benefits of using humor to persuade health behavior, the following hypotheses were posited.

H5: In comparison to non-humorous messages about ACP and a no-exposure control group, exposure to humorous messages about ACP leads to (a) more positive attitudes towards sharing EOL wishes with loved ones, (b) increased

subjective norms about sharing EOL wishes with loved ones, (c) increased perceived behavioral control towards sharing EOL wishes with loved ones, and (d) intention to share EOL wishes with loved ones.

H6: In comparison to non-humorous messages about ACP and a no-exposure control group, exposure to humorous messages about ACP leads to (a) more positive attitudes towards asking loved ones to share their EOL wishes, (b) increased subjective norms about asking loved ones to share their EOL wishes, (c) increased perceived behavioral control towards asking loved ones to share their EOL wishes, and (d) intention to ask loved ones to share their EOL wishes

Audience Characteristics and Humorous/Profane Death Messages

Although less support from social-scientific literature supports the following postulations, members of the DPM posited several lay theories about specific audience characteristics that warrant examination. First, DPM lay theories suggested that Christians would receive humorous messages about death less positively than atheists. While Saroglou (2002) found that Christians may lack cognitive structures associated with a sense of humor, others argue that possessing a sense of humor is a Christian virtue (Roberts, 1990). Furthermore, the sample of DPM members that posited lay theories in phase one were entirely atheist/agnostic/non-practicing; thus, there is reason to suspect a bias against Christians that may not bear out empirically. Regarding profanity, Beck (2009) posits that profane language may be a Gnostic affront to certain Christians and disgust associated with swear words is the same disgust one might feel towards death

(i.e., reminders of creatureliness evoke death anxiety). Keeping these factors in mind, the following research questions were investigated.

RQ1: In comparison to atheists/agnostics, do Christians experience less positive expectancy violation in response to (a) clean humorous messages about ACP and/or (b) profane humorous messages about ACP?

RQ2: In comparison to atheists/agnostics, do Christians rate speakers who deliver (a) clean humorous messages and/or (b) profane humorous messages about ACP as less effective?

RQ3: In comparison to atheists/agnostics, do Christians rate (a) clean humorous messages and/or (b) profane humorous messages about ACP as less effective?

DPM lay theories suggest that the DPM's communication style (e.g., casual, matter of fact, humorous, profane) would appeal more to younger generations than older generations. There is not enough evidence in the literature to support this lay theory at present, especially given the novelty of the present study's context. Thus, the following research questions were investigated.

RQ4: In comparison to people from younger generations (i.e., Millennials and Generation Z), do those from older generations (i.e., Generation X and older) experience less positive expectancy violation in response to (a) clean humorous messages about ACP and/or (b) profane humorous messages about ACP?

RQ5: In comparison to people from younger generations (i.e., Millennials and Generation Z), do those from older generations (i.e., Generation X and older) rate speakers who deliver (a) clean humorous messages and/or (b) profane humorous messages about ACP as less effective?

RQ6: In comparison to people from younger generations (i.e., Millennials and Generation Z), do those from older generations (i.e., Generation X and older) rate (a) clean humorous messages and/or (b) profane humorous messages about ACP as less effective?

Finally, DPM lay theories posit that people who do not use profanity regularly will respond less positively to any humorous messages about ACP, especially profane humorous messages. While profanity is associated with increased perceptions of honesty (Feldman et al., 2017), there is no substantial support for this lay theory in the social-scientific literature at present. Thus, the following research questions were investigated.

RQ7: In comparison to people who regularly use profanity, do people who use less profanity experience less positive expectancy violation when exposed to (a) clean humorous messages about ACP and/or (b) profane humorous messages about ACP?

RQ8: In comparison to people who regularly use profanity, do people who use less profanity rate speakers who deliver (a) clean humorous messages and/or (b) profane humorous messages about ACP as less effective?

RQ8: In comparison to people who regularly use profanity, do people who use less profanity rate (a) clean humorous messages and/or (b) profane humorous messages about ACP as less effective?

Methods

Overall Study Design

The previously discussed hypotheses and research questions were investigated with a true experiment (i.e., randomization with the presence of a control group) to ascertain the validity of predicted causal relationships within the integrated theoretical model. This section provides a short overview of the experiment, and each stage will be discussed in greater detail throughout this chapter.

First, the researcher created stimuli (non-humorous, clean humorous, and profane humorous) in the form of short podcast clips. Podcast clips were chosen because they would be easy to administer in an online format, and prominent DPM members frequently host and appear in podcasts. Indeed, one podcast episode called "Get Your Sh*t Together" hosted by Caitlin Doughty from the show "Death in the Afternoon" inspired the initial idea for this dissertation (Doughty, 2019). Next, the researcher conducted a small pilot test of the podcast stimuli to ascertain whether the humorous podcast clips were perceived as humorous and the non-humorous podcast clips were perceived as not humorous. After the stimuli were created and tested in the pilot test, the researcher conducted an online experiment using Amazon's Mechanical Turk.

Participants were randomly assigned to one of seven groups (non-humorous actor, clean humorous actor, profane humorous actor, non-humorous actress, clean humorous actress,

profane humorous actress, and no-exposure control) and asked questions to determine (a) their response to the message and (b) effects of the message on DVs relevant to EOL communication.

Stimuli Creation

The researcher, who is a trained actor/playwright, collaborated with a professional comedian/actress to write three scripts for fake podcast clips: clean humor, profane humor, and no humor. The scripts began with an introduction stating the title of the fake podcast ("Hello, and Welcome to Adulting 101," "Hello, and welcome to How to Stop Being a Shitty Adult," and "Hello, and welcome to How to Take Control of Your Life.") followed by the host's name. Next, the clips began with a death reminder "memento mori" ("you're going to die") and discussed how families often do not have complete information about values, lifestyles, and care preferences of their loved ones. Next, each of the scripts described a hypothetical scenario involving a college student who had fallen into a coma due to a road accident, and whose family didn't know what to do. The humorous clips were spoken with animated delivery and contained silly details; for example, the humorous clips contained funny voices of the parties in conflict and added humorous details, such as the risk of one's "psycho ex who only drinks, like, green kale smoothie boba teas" being involved in decision-making. The profane humorous clip is nearly identical to the clean humorous clip, but profanity is sprinkled throughout (e.g., "Get your ducks in a row" versus "Get your shit together," and "Who let Kylie back in

the room?" versus "Who the fuck let Kylie back in the room?"). Specifically, the profane script contained three uses of the word "shit," including two in the first ten seconds, four non-sexual uses of the word "fuck," and several other potentially offensive phrases (e.g., "your parents don't know dick about you" and "oh my God."). Unlike both humorous clips, the non-humorous clip is delivered in a straightforward manner, without intentionally silly/absurd details or profanity. The clips were as similar in length, ranging from three minutes and sixteen seconds to four minutes and forty-seven seconds. Humorous clips were marginally longer because, as discussed previously, humor often relies on adding vivid, absurd details.

Once written, three trained voice actors recorded the scripts. The actors were told to engage in a warm, animated style of delivery for both humorous scripts, and a straightforward but warm delivery for the non-humorous message. Next, the researcher conducted pilot testing (approved by the Institutional Review Board at George Mason University) with a convenience sample of participants. The purpose of the pilot test was to determine which set of clips (i.e., which actor's delivery) best suited the purposes of the study (i.e., the humorous clips were rated as funny, and the non-humorous clips were rated as not funny.)

Pilot Test Methods

Participants for the pilot test were recruited from several places, including the basic communication course at George Mason University, online communities (e.g., subreddits, Facebook group pages) devoted to gathering willing survey participants, and a convenience sample of the researcher's personal social network. Importantly, the

researcher instructed people in his own social network not to take the survey themselves, but rather, to pass the survey on to others who did not know the researcher personally.

Although each actor recorded three clips (i.e., clean humorous, profane humorous, and non-humorous), only the clean humorous and non-humorous clips were tested in this pilot experiment. This decision was made based on several factors. First, the clean humorous script and profane humorous script were very similar, except for strong profanity sprinkled into the profane script; thus, the researcher felt it was unnecessary to test whether a clip with strong profanity would be perceived as more offensive than the same script sans profanity. Moreover, the researcher felt that the structure and delivery was similar enough between the profane and clean clips that understanding whether the clean clip was perceived as humorous would be enough to conclude similarly about the profane clip. Second, recruiting enough participants for six groups was extremely difficult for this pilot phase; thus, recruiting for nine groups would have been impractical in terms of achieving adequate statistical power to detect differences between messages. Thus, the decision was made to focus the pilot test on determining whether the humorous clips were perceived as humorous, whether the non-humorous clip was perceived as nonhumorous, and which of the performers' deliveries were best suited for the final experiment.

The pilot experiment was conducted on Qualtrics. After indicating consent, participants were randomly assigned to one of seven conditions, each of which was exposed to one of six possible podcast clips. Specifically, each person would listen to one of the following clips: clean humor by actor one, non-humor by actor one, clean humor

by actor two, non-humor by actor two, clean humor by the actress, or non-humor by the actress.

After exposure to the podcast clip, participants were asked several sets of questions to determine their reactions. First, participants were asked to indicate how they felt about the clip using a five-item, seven-point semantic differential scale (not humorous/humorous; not funny/funny; not amusing/amusing; not offensive/offensive; not vulgar/vulgar) (Nabi et al., 2007; Cavazza & Guidetti, 2014). Next, participants were given a six-item, five-point Likert scale asking whether they thought the clip they just listened to was powerful, informative, meaningful, convincing, worth remembering, and attention-grabbing (Davis et al., 2013; also used by Zhao et al., 2019). Next, participants were given a four-item, five-point scale (not at all to very) about how much the clip made them feel afraid, worried, uneasy, and happy (Zhao et al., 2019).

Pilot Test Results

Results of Levene's Test of Equality of Error Variances indicated homogeneity of variance (p=.76). A one-way ANOVA indicated significant differences between conditions, F(5)=6.93, p<.001, $\eta_p{}^2=.26$, power = .99. Results of Tukey's HSD post-hoc test indicated significant differences between groups on perceived humor. Specifically, humorous messages by actor two and the actress were rated significantly funnier than actor one's humorous message. Further, for both the actress and actor two, the humorous messages were rated significantly funnier than the non-humorous messages. For more specific results and descriptive statistics, see Table 2 below.

 Table 2. Descriptive Statistics for Podcast Condition on Perceived Humor

Humorous	Non-Humorous		
M (SD)	M (SD)		
3.65 (1.81) _{bcdef}	2.73 (1.51) _{ace}		
4.88 (1.56) _{abdf}	2.73 (1.76) _{ace}		
4.51 (1.72) _{abdf}	2.37 (1.62) _{ace}		
	M (SD) 3.65 (1.81) _{bcdef} 4.88 (1.56) _{abdf}		

Note. Subscripts denote statistically significant Tukey's HSD post-hoc tests between conditions at p < .05.

Discussion of Pilot Test Results

Actor one's humorous clip was significantly less funny than humorous clips by actor two and the actress. This indicates actor one's clips would not be ideal for an experiment testing differences between humorous and non-humorous stimuli.

Conversely, the actress's humorous clip was rated as significantly funnier than her non-humorous clip; the same was true for actor two's humorous clip in comparison to his non-humorous clip. The contrast between humorous and non-humorous conditions for both the actress and actor two indicated that their clips would both be more appropriate

_a Humorous Actor 1, _b Non-humorous Actor 1, _c Humorous Actor 2, _d Non-humorous Actor 2,

e Humorous Actress, f Non-humorous Actress

for the final experiment. Moreover, the actress's and actor two's humorous clips were not statistically significantly different from one another in perceived humor.

During this pilot test, one participant reached out to the researcher, requesting a link to the whole podcast episode from which the clip she listened to (the clean humorous actress) originated. The researcher informed this participant that the podcast clips were not real and were formulated specifically for this experiment. This anecdotal evidence provided further confidence that the clips were suitably realistic and effective for the main experiment.

Main Experiment Recruitment and Demographics

Participants were recruited for the main experiment using Amazon's Mechanical Turk (N = 695) and paid \$1.00 USD for participating. Mechanical Turk ("MTurk") is a widely used tool for conducting online surveys and experiments because it allows researchers to gather a quality sample of participants quickly and affordably (Paolacci et al., 2015). Participants were only eligible if they were adults from the United States, age eighteen and older; participant ages ranged from 20 to 77 (M = 38.56, SD = 11.36). Importantly, to gather a high-quality sample, only MTurk workers with approval ratings of previous work greater than or equal to 95% were eligible to participate. For detailed participant demographics, see Table 3.

 Table 3. Experiment Participant Demographics

Characteristic		N
Gender	Male	410
	Female	280
	Other	5
Race/Ethnicity	White	513
·	Black/African American	107
	Asian	34
	Hispanic/Latinx	26
	Other	15
Religion	Christian	545
J	Atheist/Agnostic	99
	Other	51
Total		695

Experimental Procedure

After consenting to participate in the study, all participants were exposed to pretest survey measures. Several of these measures will be discussed in greater detail in the section below. First, participants were given a scale intended to measure their overall sense of humor (Thorson & Powell, 1993). Next, participants were asked how much they use profanity in specific contexts (Rassin & Muris, 2005). Then, participants were given scales to measure trait death anxiety (Templer et al., 2016) and communication apprehension about death (Carmack & DeGroot, 2016).

After completing the pre-test measures, participants were randomly assigned to one of seven conditions: clean humor (actor or actress), profane humor (actor or actress),

non-humor (actor or actress), or control (no exposure). Each group listened to the respective podcast clip, except the control group, who was not exposed to any clip. Prior to listening to the clips, participants in the humorous conditions were told that they would listen to a podcast clip hosted by a professional writer and *comedian*, while participants in the non-humorous condition were told that they would listen to a podcast clip hosted by a professional writer and *performer*. This decision was made due to previous literature which suggests that "comedic credibility" is an important factor for humorous messages (Nabi et al., 2007).

Next, participants who were exposed to a podcast condition (i.e., everyone but the control group) were given scales measuring perceived humor (Nabi et al., 2007), perceived offensiveness (Cavazza & Guidetti, 2014), perceived speaker effectiveness (Walther-Martin, 2015 based on dimensions of source evaluation from McCroskey & Jensen, 1975), perceived message effectiveness (Zhao et al., 2019), positive and negative emotional responses to the message (Zhao et al., 2019) , and expectancy violation variables—surprise and liking— in response to the message (Burgoon & Walther, 1990).

Afterwards, all participants answered survey items measuring attitudes, norms, PBC, and intention to share/ask others about EOL wishes (measure based on guidelines from Ajzen, 2006; used in the ACP context previously by Brophy, Seiter, & Zhao, 2021); beliefs about perceived benefits of and barriers towards ACP (Brophy, Seiter, & Zhao, 2021); death anxiety (post-test; Templer et al., 2016); communication apprehension about death (post-test; Carmack & DeGroot, 2016); familiarity with death positive media (asking how familiar they were with Caitlin Doughty's books, the Ask a Mortician

Youtube channel, The Order of the Good Death, and the Death Positive Movement); religious affiliation; religiosity (from Huber & Huber, 2012); racial/ethnic background; gender identity; age; and political beliefs (political party affiliation, and ideology from very liberal to very conservative). Finally, participants were given the option to provide an email address to be contacted for a follow-up qualitative interview.

Independent Variables

Condition

During the experiment, participants were randomly assigned into one of seven conditions: non-humorous actress, non-humorous actor, clean humorous actress, clean humorous actor, profane humorous actress, profane humorous actor, and no-exposure control. Because preliminary analysis showed no significant difference between the actor and actress for perceived humor, for final analysis, the original conditions were collapsed into four by combining the actress and actor message conditions: non-humorous, clean humorous, profane humorous, and control.

Religion

Participants were asked to identify their religious affiliation. Religious affiliations were later collapsed into three categories: Christian, atheist/agnostic, and other.

Generation

At the end of the experiment, participants were asked to identify their age.

Participants were sorted into two categories: Generation Z/Millennial [ages 18 through]

40], and Generation X and Older [41 and older] based on criteria from Pew Research about generational divides (Dimock, 2019).

Profanity Use

Profanity use was measured by asking participants how often [less than once per year, a few times per year, a few times per month, a few times per week, a few times per day] they swore in several contexts [face-to-face/in private/in writing] (Rassin & Muris, 2005). A categorical variable with three levels was created by averaging scores: low profanity use (lowest number through 2.99), moderate profanity use (3 through 4) and high profanity use (4.01 through highest number).

Dependent Variables

Perceived Humor and Perceived Offensiveness

Perceived humor and perceived offensiveness were measured with seven-point semantic differential items. A composite perceived humor measure was created by averaging three items (not humorous/humorous, not funny/funny, not amusing/amusing; $\alpha = .9$), and a composite perceived offensiveness measure was created by averaging two items (not offensive/offensive, not vulgar/vulgar; $\alpha = .84$) (Cavazza & Guidetti, 2014).

Perceived Speaker Effectiveness

Perceived speaker effectiveness was measured with three seven-point semantic differential items about the listener's feelings towards the speaker in the clip (trustworthy/deceptive [recoded], likable/unlikable [recoded], uninformed/knowledgeable) (Walther-Martin, 2015; based on dimensions of source

evaluation from McCroskey & Jensen, 1975). A composite measure was created by averaging the three items, $\alpha = .68$.

Perceived Message Effectiveness

Perceived message effectiveness was measured via a seven-point Likert scale (strongly disagree to strongly agree) asking listeners how they felt about the clip they just listened to (powerful, informative, meaningful, convincing, worth remembering, attention grabbing) (Davis et al., 2013; also used by Zhao et al., 2019). A composite measure was created by averaging the items, $\alpha = .92$.

Emotional Response

On a five-point scale from "not at all" to "very," participants were asked how much the previous clip made them feel afraid, worried, uneasy, happy, and amused (Zhao et al., 2019). The items for afraid, worried, and uneasy were averaged to make a composite negative emotional response measure, $\alpha = .9$. The items for happy and amused were averaged to make a composite positive emotional response measure, $\alpha = .78$.

Positive Expectancy Violation

Expectancy violations have traditionally been operationalized as a combination of surprise in response to a message and source liking (e.g., Burgoon & Walther, 1990; Johnson & Lewis, 2010). To measure surprise in response to the clip, participants were asked to complete five items (seven-point Likert scale from strongly disagree to strongly agree) from Burgoon and Walther (1990). Reliability analysis indicated that two items were significantly depressing internal consistency of the measure ["The speaker

communicated their message differently than I anticipated" and "The speaker's manner of communicating their message was unusual."] ($\alpha = .54$). As such, those items were excluded, ultimately yielding a composite variable consisting of three items measuring surprise in response to the podcast clip ($\alpha = .78$) (e.g., the re-coded item "The speaker communicated their message how you would expect most others to communicate"

To measure liking in response to the clip (i.e., the "positive" part of positive expectancy violation), participants were asked to complete five items (e.g., "the speaker communicated their message in a way most people would find enjoyable" and "the speaker communicated their message in a way I liked.") from Burgoon and Walther (1990). Importantly, several items were cut from the original scale because they measured response to interpersonal interaction (e.g., the ability to interact effectively within a dyad), which was not relevant to the present study's focus on responses to one-way media (i.e., a podcast). Reliability analysis indicated that two items were significantly depressing internal consistency of the measure ["The speaker had a very unpleasant manner of communicating their message" and "The speaker's way of communicating their message was undesirable" (yielding reliability $\alpha = .66$). As such, those items were excluded, ultimately yielding a composite variable consisting of three items, averaged, measuring liking in response to the clip ($\alpha = .82$) (e.g., "The speaker communicated their message in a way I liked").

The final composite expectancy violation variable was created by converting the composite liking measure to a scale of -3 to +3 and multiplying that by the seven-point

composite surprise scale, thus yielding a new scale of positive expectancy violation ranging from -21 to +21.

Death Anxiety

DA was measured using an adapted version of Templer et al.'s (2006) death anxiety scale. This adapted scale was previously used in the context of ACP by Brophy, Seiter, & Zhao (2021). The composite variable consisted of sixteen items (e.g., "I am very afraid to die," and "I often think about how short life really is."), averaged ($\alpha = 0.78$).

Communication Apprehension About Death

CAD was measured using the Communication Apprehension about Death Scale (CADS; Carmack & DeGroot, 2016). This scale consisted of twelve items (e.g., as "I feel anxious talking about how it will feel to be dead," and "I avoid talking about death altogether."), averaged ($\alpha = .97$).

Theory of Planned Behavior Outcome Variables

TPB outcome variables were measured according to guidelines by Ajzen (2006) and Fishbein and Ajzen (2009). TPB items measuring attitudes, perceived norms, perceived behavioral control, and intention were presented to all participants with respect to two different behaviors: 1) sharing one's EOL wishes with loved ones in the near future and 2) asking loved ones to share EOL wishes in the near future (see Table 4 for all reliability coefficients of ACP behavior determinants).

Attitudes. Attitudes towards the two different ACP behaviors were measured via seven-point semantic differential asking participants whether sharing/asking about EOL

wishes would be: good/bad, pleasant/unpleasant, foolish/wise, necessary/unnecessary, useful/useless, easy/difficult. These items were averaged to create two composite variables: attitudes towards sharing EOL wishes and attitudes towards asking about EOL wishes.

Norms. Norms towards the two different ACP behaviors were measured using three seven-point Likert-type items from strongly agree to strongly disagree: "Most people who are important to me would approve of me [sharing my end-of-life care wishes/asking my loved ones to share their end-of-life wishes with me] in the near future," "Most people I respect and admire would approve of me [sharing my end-of-life care wishes/asking my loved ones to share their end-of-life wishes with me] in the near future," and "Most people like me have [shared their end-of-life care wishes/asked their loved ones to share their end-of-life wishes]." These items were averaged to create two composite variables: norms towards sharing EOL wishes and norms towards asking about EOL wishes.

Perceived Behavioral Control. PBC towards the two different ACP behaviors were measured using two seven-point Likert-type items from strongly agree to strongly disagree: "I am confident that I could [share my end-of-life care wishes with loved ones/ask my loved ones to share their end-of-life wishes] in the near future," and "[Sharing my end-of-life care wishes/asking my loved ones to share their end-of-life wishes with me] in the near future is up to me." These items were averaged to create two composite variables: PBC towards sharing EOL wishes and PBC towards asking about EOL wishes.

Intention. Intention to engage in the two ACP behaviors was measured using two seven-point Likert-type items from strongly agree to strongly disagree: "I intend to [share my end-of-life care wishes with loved ones/ask my loved ones to share their end-of-life wishes] in the near future," and "I will make plan to [share my end-of-life care wishes with loved ones/ask my loved ones to share their end-of-life wishes] in the near future." These items were averaged to create two composite variables: intention to sharing EOL wishes and intention to ask about EOL wishes. For correlations of all dependent variables in this study, see Table 5.

Table 4. *Reliability of ACP DVs.*

Variable	α
Attitude Toward Sharing EOL Wishes	.75
Norms Towards Sharing EOL Wishes	.62
PBC Towards Sharing EOL Wishes	.64
Intention to Share EOL Wishes	.71
Attitude Toward Asking about EOL Wishes	.71
Norms Towards Asking about EOL Wishes	.67
PBC Towards Asking about EOL Wishes	.57
Intention to Ask about EOL Wishes	.81

TABLE 5. Correlations of All DVs.

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Perc. Speaker Eff.						•										
2. Perc. Message Eff.	.43**															
3. Positive Expect. Viol.	.48**	.57**														
4. Death Anxiety	.03	.19**	.01													
5. Comm App. Death	14**	.35**	03	.63**												
6. ACP Share Attitudes	.56**	.08	.13**	19**	34**											
7. ACP Share Norms	.24**	.46**	.14**	.05	.2**	.22**										
8. ACP Share PBC	.26**	.28**	.14**	.01	01	.28**	.61**									
9. ACP Share Intention	.26**	.48**	.22**	.06	.16**	.24**	.61**	.54**								
10. ACP Ask Attitudes	.53**	.12**	.13**	12	27**	.74**	.2**	.24**	.2**							
11. ACP Ask Norms	.18**	.52**	.13**	.17**	.35**	.1*	.69**	.5**	.58**	.18**						
12. ACP Ask PBC	.21**	.38**	.12**	.01	.09*	.16**	.57**	.57**	.53**	.26**	.62**					
13. ACP Ask Intention	.2**	.51**	.17**	.07	.27**	.12**	.57**	.42**	.68**	.19**	.64**	.56**				
14. Negative Emotions	2**	.34**	01	.38**	.7**	41**	.14**	08	.13**	34**	.28**	.07	.25**			
15. Positive Emotions	03	.45**	.24**	.05	.4**	19**	.26**	.003	.21**	1**	.29**	.12**	.3**	.41**		
16. Perceived Humor	2	.48**	.26**	.14**	.43**	18**	.25**	.03	.24**	12**	.31**	.14**	.32**	.4**	.75**	
17. Perceived Offens.	4**	.09*	3**	.18**	.54**	37**	.15**	04	.09*	28**	.28**	.05	.21**	.54**	.49**	.55**

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

Analysis

Data Cleaning and Quality Checking

The original sample (N = 707) was reduced to the final sample (N = 695) by removing participants who stopped before stimuli exposure, failed both attention checks ("please select slightly disagree"), or completed the survey in an impossible amount of time (e.g., completing the survey in five minutes when they were in a condition that required listening to a four-minute podcast clip).

MANOVAS

Message Response Variables. See Table 4 for correlations between all DVS in the study. To determine differences in responses to podcast condition messages, a MANOVA was conducted with four independent variables (podcast condition [non-humorous, clean humorous, profane humorous], religion [Christian, atheist/agnostic], age/generation [Millennials and younger, Generation X and older], and profanity use [low profanity use, moderate profanity use, high profanity use]). Importantly, although a control group exists for podcast condition, this was a no-exposure condition, and thus, the group was not included in this MANOVA model which specifically tested responses to podcast clips. This model included seven dependent variables: perceived speaker effectiveness, perceived message effectiveness, positive expectancy violation, positive emotional response, negative emotional response, perceived humor, and perceived offensiveness.

EOL Communication Variables. To determine differences between groups for EOL communication DVs, a MANOVA was conducted with four independent variables

(podcast condition [non-humorous, clean humorous, profane humorous, control], religion [Christian, atheist/agnostic], age/generation [Millennials and younger, Generation X and older], and profanity use [low profanity use, moderate profanity use, high profanity use]). This model included ten dependent variables, including death anxiety, communication apprehension about death, attitudes towards sharing EOL wishes, norms about sharing EOL wishes, PBC towards sharing EOL wishes, intention to share EOL wishes, attitudes towards asking others about EOL wishes, norms about asking others about EOL wishes, PBC towards asking others about EOL wishes, and intention to ask others about EOL wishes.

Results

Message Response Variables

Box's M test for the equality of covariance matrices was significant, F (532, 20633.9) = 2.07, p<.001, so Pillai's trace values were used. Levene's Test of Equality of Error Variances indicated heterogeneity of variance for all message response DVs (p<.05); thus, a Games-Howell post hoc test was used to determine between-group differences. See Table 9 for descriptive statistics and detailed information about which groups differed for each message response DV.

Multivariate tests showed significant main effects for condition, F (14, 1038) = 10.25, p < .001, $\eta_p^2 = .12$, power = 1; religion, F (7, 518) = 17.76, p < .001, $\eta_p^2 = .19$, power = 1; age/generation, F (7, 518) = 4.14, p < .001, $\eta_p^2 = .05$, power = .99; and profanity use, F (14, 1038) = 2.29, p < .01, $\eta_p^2 = .03$, power = .98. Multivariate tests showed significant interaction effects for condition by religion, F (14,

1038) = 2.26, p < .001, $\eta_p^2 = .04$, power = 1; and condition by generation/age, F (14, 1038) = 2.6, p < .001, $\eta_p^2 = .03$, power = .99. Multivariate effects indicate no significance for condition by profanity use, F (28, 2084) = 1.34, p = .11, $\eta_p^2 = .02$, power = .97.

Tests of between-subjects effects indicated that there were significant main effects for condition on all message response DVs, except negative emotional response. See Table 6 for details and Table 9 for descriptive statistics for podcast condition on all message response DVs.

Table 6. Main Effects for Podcast Condition on Message Response DVs.

DV	F	df	Sig.	η_p^2	Power
Positive Expectancy Violation	8.18	2	<.001	.03	.96
Perceived Message Efficacy	9.03	2	<.001	.03	.97
Perceived Speaker Efficacy	6.93	2	.001	.03	.92
Perceived Humor	25.37	2	<.001	.09	1
Perceived Offensiveness	14.57	2	<.001	.05	1
Negative Emotional Response	0.81	2	.446	.003	.18
Positive Emotional Response	10.11	2	<.001	.04	.99

Tests of between-subjects effects indicated significant interaction effects between condition and religion for all message response variables, except perceived speaker effectiveness, perceived offensiveness, and negative emotional response (see Table 7 for details). Additionally, tests of between-subjects effects indicated significant interaction effects between condition and age/generation for positive expectancy violation, perceived message effectiveness, and perceived speaker effectiveness (see Table 8 for details). Finally, tests of between-subjects effects indicated significant interaction effects between condition and profanity use for only positive expectancy violation, F(4) = 3.01, p = .02, power = .8.

Table 7. Interaction Effects of Podcast Condition and Religion on Message Response DVs

DV	F	df	Sig.	η_p^2	Power
Positive Expectancy Vio.	4.24	2	.02	.02	.74
Perceived Message Eff.	6.33	2	.002	.02	.89
Perceived Speaker Eff.	2.67	2	.07	.01	.53
Perceived Humor	6.69	2	.001	.03	.92
Perceived Offensiveness	1.08	2	.34	.004	.24
Neg. Emotional Response	.33	2	.72	.001	.1
Pos. Emotional Response	4.92	2	.008	.02	.81

Table 8. Interaction Effects of Podcast Condition and Generation on Message Response DVs

DV	F	df	Sig.	η_p^2	Power
Positive Expectancy Vio.	11.75	2	.02	.04	.99
Perceived Message Eff.	3.97	2	.002	.02	.71
Perceived Speaker Eff.	3	2	.07	.01	.58
Perceived Humor	1.23	2	.001	.005	.27
Perceived Offensiveness	1.58	2	.34	.006	.34
Neg. Emotional Response	.45	2	.72	.002	.12
Pos. Emotional Response	.12	2	.008	0	.07

 Table 9. Descriptive Statistics for Podcast Condition on Message Response DVs

	No-Humor	Clean Humor	Profane Humor
N	186	181	193
	M (SD)	M (SD)	M (SD)
Perceived Speaker Eff.	a. 5.01 (1.45)	b. 4.6 (1.32) ^a	c. 4.42 (1.4) ^a
Perceived Message Eff.	a. 5.39 (1.13)	b. 5.04 (1.38) ^a	c. 5 (1.44) ^a
Pos. Expectancy Vio.	a. 1.97 (2.89)	b. 1.41 (4.05)	c35 (6.2) ^a
Positive Emotions	a. 2.75 (1.34)	b. 3.12 (1.18) ^a	c. 3.07 (1.15) ^a
Negative Emotions	a. 2.93 (1.23)	b. 2.85 (1.24)	c. 2.69 (1.31)
Perceived Humor	a. 3.7 (2.1)	b. 4.5 (1.64) ^a	c. 4.45 (1.58) ^a
Perceived Offensiveness	a. 3.6 (2.13)	b. 3.82 (1.85)	c. 4.53(1.66) ^{ab}

Note. Significant (p < .05) differences between conditions are denotated by superscripts. For example, if no humor was significantly different from clean humor for perceived speaker effectiveness, both would have superscripts; no- humor would have a superscript b and clean humor would have superscript a

Hypothesis 1.

H1 posited that humorous messages about ACP would result in greater positive expectancy violation than non-humorous messages about ACP. Results indicated no significant differences between non-humorous and clean humorous conditions for positive expectancy violation. Moreover, results indicated that profane humor results in

significantly less positive expectancy violation than non-humorous messages. Thus, H1 was not supported. See Table 9 for details and descriptive statistics.

Hypothesis 2.

H2 posited that in comparison to non-humorous messages about ACP, exposure to humorous messages about ACP would lead to (a) increased perceptions of speaker effectiveness and (b) increased perceptions of message effectiveness. Results indicated that perceptions of speaker effectiveness were significantly higher for speakers in non-humorous conditions in comparison to both humorous conditions; thus, H2 was not supported. See Table 9 for details and descriptive statistics.

Hypothesis 3.

H3 posited that in comparison to non-humorous messages about ACP, exposure to humorous messages about ACP would lead to more (a) positive emotional responses to the message and (b) fewer negative emotional responses to the message. Results indicated that both clean and humorous conditions generated significantly more positive emotional responses than the non-humorous condition. However, results indicated no significant differences between groups for negative emotional response. Thus, H3 was partially supported. See Table 9 for details and descriptive statistics.

Research Question 1.

RQ1 asked whether Christians, in comparison to atheists/agnostics, would experience less positive expectancy violation in response to (a) clean humorous messages about ACP and/or (b) profane humorous messages about ACP. Analysis indicated a significant interaction effect. Contrary to DPM predictions, the pattern of results

indicated that atheists/agnostics experienced less positive expectancy violation in comparison to Christians when exposed to the clean humorous message. However, consistent with DPM predictions, Christians experienced less positive expectancy violation in comparison to atheists/agnostics when exposed to profane humorous messages. See Figure 4 for a graph of the interaction effect based on estimated marginal means and see Table 10 for descriptive statistics of religion on all message response DVs.

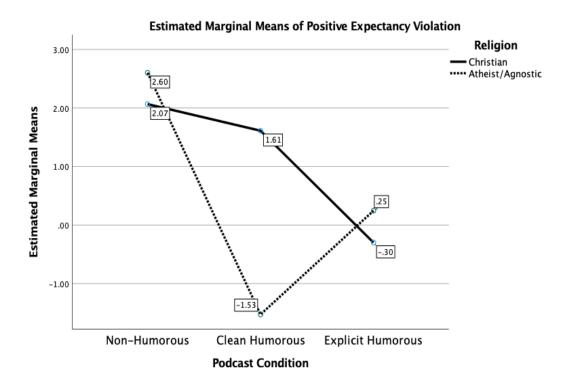


Figure 4. Interaction Between Condition and Religion for Positive Expectancy Violation

Research Question 2

RQ2 asked whether Christians, in comparison to atheists/agnostics, would rate speakers who deliver (a) clean humorous messages and/or (b) profane humorous messages about ACP as less effective. The pattern of results indicated that, in comparison to Christians, atheists/agnostics did not rate speakers as being more effective in the clean humorous condition; indeed, curiously, atheists/agnostics rated speakers in the clean humorous condition as being substantially less effective than Christians did. Consistent with DPM predictions, however, atheists/agnostics rated speakers in profane humorous conditions more favorably than Christians did. Interestingly, both groups rated speakers in the non-humorous condition as being more effective, but this was especially stark for atheists/agnostics. See Figure 5 below for a graph of the interaction effect based on estimated marginal means.

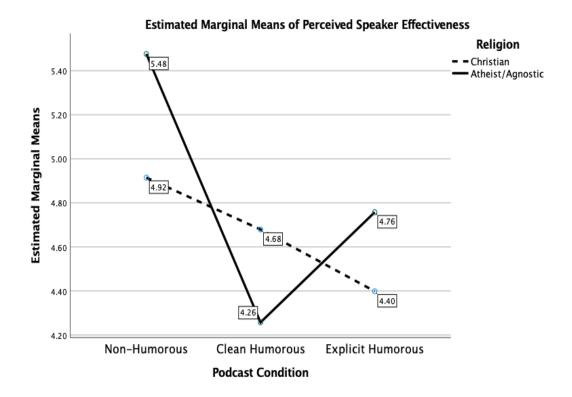


Figure 5. Interaction Between Condition and Religion for Perceived Speaker Effectiveness

Research Question 3

RQ3 asked whether Christians, in comparison to atheists/agnostics, would rate (a) clean humorous messages and/or (b) profane humorous messages about ACP as less effective. The pattern of results was completely inconsistent with DPM predictions.

Indeed, Christians rated all messages as more effective than atheist/agnostics did,

especially the clean humorous condition. See Figure 6 for a graph of the interaction effect based on estimated marginal means.

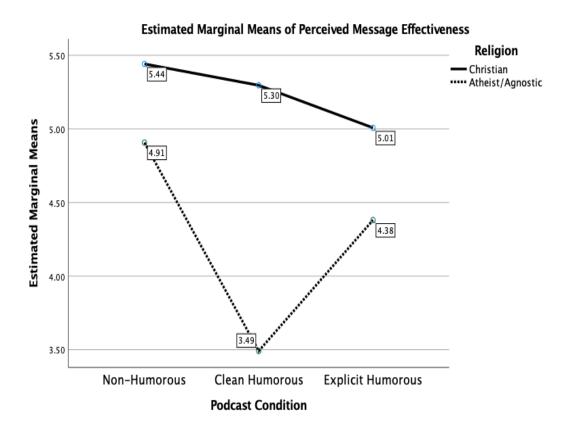


Figure 6. Interaction Between Condition and Religion for Perceived Message Effectiveness

 Table 10. Descriptive Statistics for Podcast Condition with Religion

				Atheist/Agnostic					
	Condition	No	Clean	Profane	Total	No	Clean	Profane	Total
		Humor	Humor (N	Humor (N	N =	Humor	Humor	Humor	N =
		(N=152)	= 154)	= 170)	476)	(N =	N =	(N = 23)	84)
						34)	<i>27</i>)		
		M(SD)	M(SD)	M(SD)	M (SD	M(SD)	M(SD)	M(SD)	M (SD
Message	Perceived	4.89	4.64	4.37	4.62	5.53	4.33	4.75	4.93
Response DVs	Speaker Eff.	(1.41)	(1.28)	(1.4)	(1.38)	(1.52)	(1.55)	(1.46)	(1.58)
	Perceived	5.48	5.32	5.06	5.27^{*}	4.98	3.49	4.52	4.37^{*}
	Message Eff.	(1)	(1.04)	(1.43)	(1.19)	(1.56)	(1.99)	(1.42)	(1.78)
		1.55	1.01	20	1.05	205	0.2	0.2	1.00
	Pos.	1.77	1.81	.28	1.25	2.85	92	.83	1.09
	Expectancy Vio.	(2.52)	(3.26)	(6.21)	(4.43)	(4.1)	(6.66)	(6.34)	(5.82)
	Positive	3.04	3.25	3.09	3.12*	1.47	2.35	2.87	2.14*
	Emotions	(1.3)	(1.09)	(1.16)	(1.19)	(.58)	(1.4)	(1.09)	(1.19)
	Negative	3.11	3.07	2.77	2.98^{*}	2.11	1.59	2.1	1.94*
	Emotions	(1.17)	(1.15)	(1.31)	(1.22)	(1.17)	(.93)	(1.16)	(1.11)
	Perceived	4.15	4.72	4.71	4.53*	1.72	3.27	4.45	2.96^{*}
	Humor	(2)	(1.43)	(1.64)	(1.72)	(1.15)	(2.15)	(1.58)	(1.98)
	Perceived	4.04	4.13	4.7	4.3*	1.43	2.13	3.3	2.2^{*}
	Offens.	(2.02)	(1.74)	(1.61)	(1.82)	(1.02)	(1.48)	(1.47)	(1.5)

Note. The MANOVA models contained four IVs (podcast condition, religion, generation/age, and trait profanity use). * next to means in the "Total" column indicates that a significant main effect difference was found between means for religion at p<.05. Additionally, the control condition contained no-exposure, so participants in the control condition were not asked questions about responses to any message.

RQ4 asked whether people from older generations (i.e., Generation X and older), in comparison to those from younger generations (i.e., Millennials and Generation Z), would experience less positive expectancy violation in response to (a) clean humorous messages about ACP and/or (b) profane humorous messages about ACP. DPM predictions appear to be correct in this instance, because younger participants experienced more positive expectancy violation than older participants for both clean and profane humorous conditions. See Figure 7 below for a graph of the interaction effect based on estimated marginal means and see Table 11 for descriptive statistics for age/generation on all message response DVs.

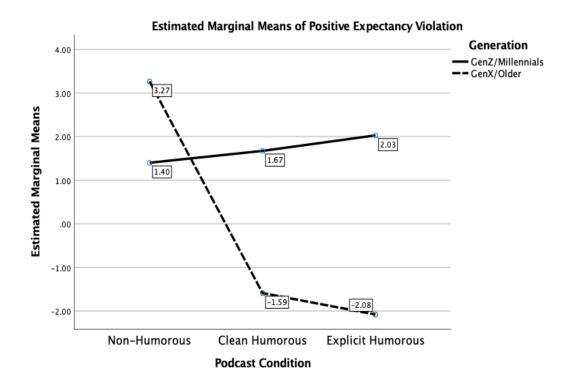


Figure 7. Interaction Between Condition and Generation for Positive Expectancy Violation

RQ5 asked whether people from older generations (i.e., Generation X and older), in comparison to those from younger generations (i.e., Millennials and Generation Z), would rate speakers who deliver (a) clean humorous messages and/or (b) profane humorous messages about ACP as less effective. The pattern of results indicated partial support for DPM predictions. Specifically, older participants rated speakers in the non-

humorous condition much higher than younger participants did. Moreover, older participants rated speakers in clean humorous conditions considerably less effective than younger participants did. However, contradicting part of the DPM prediction, older participants rated speakers in the profane humorous condition moderately more effective than younger participants did. See Figure 8 for a graph of the interaction effect based on estimated marginal means.

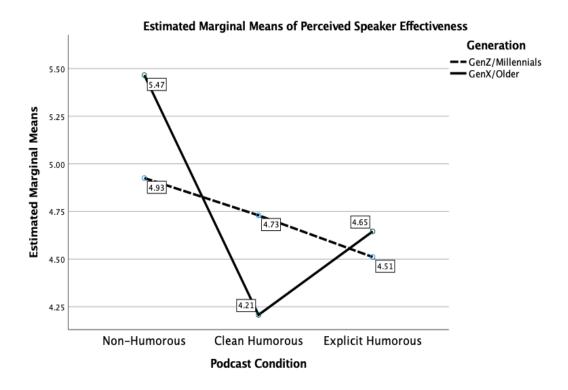


Figure 8. Interaction Between Condition and Generation for Perceived Speaker Effectiveness

RQ6 asked whether people from older generations (i.e., Generation X and older), in comparison to those from younger generations (i.e., Millennials and Generation Z), would rate (a) clean humorous messages and/or (b) profane humorous messages about ACP as less effective. The pattern of results indicated support for DPM predictions. Specifically, older participants rated the non-humorous condition as being more effective than younger participants did. Moreover, older participants rated the clean humorous condition as being considerably less effective than did younger participants and rated the profane humorous condition slightly lower in comparison to younger participants. See Figure 9 for a graph of the interaction effect based on estimated marginal means.

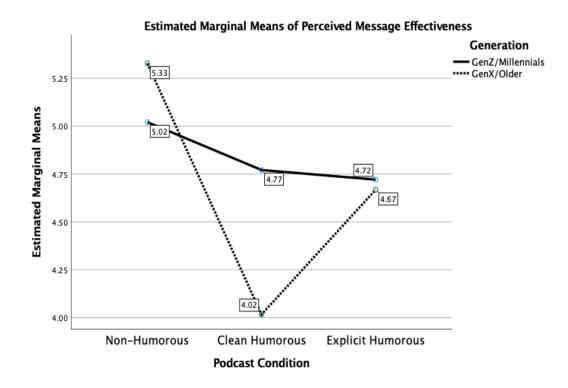


Figure 9. Interaction Between Condition and Generation for Perceived Message Effectiveness

 Table 11. Descriptive Statistics for Podcast Condition with Generation

			(N	Younger Iillennials/Gener	ounger Older (Generation X and Olds/Generation Z)					
Cond.		No Humor (N = 118)	Clean Humor (N = 128)	Profane Humor (N = 138)	Total (N = 384)	No Humor (N = 68)	Clean Humor (N = 53)	Profane Humor (N = 55)	Total (N = 176)	
		M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	
Message	Perceived	4.83	4.67	4.42	4.63	5.3	4.4	4.4	4.75	
Response DVs	Speaker Eff.	(1.44)	(1.3)	(1.32)	(1.36)	(1.41)	(1.39)	(1.6)	(1.53)	
	Perceived	5.35	5.23	5.12	5.23	5.46	4.59	4.69	4.96	
	Message Eff.	(1.12)	(1.16)	(1.27)	(1.19)	(1.17)	(1.74)	(1.78)	(1.6)	
	Pos.	1.38	1.8	1.46	1.55*	2.98	.46	-2.45	.52*	
	Expectancy Vio.	(2.88)	(3.22)	(4.87)	(3.81)	(2.65)	(5.5)	(8.11)	(6.09)	
	Positive	3.05	3.3	3.22	3.19*	2.25	2.66	2.7	2.5*	
	Emotions	(1.26)	(1.07)	(1.1)	(1.14)	(1.33)	(1.32)	(1.22)	(1.3)	
	Negative	3.18	3.05	2.79	3.00*	2.48	2.37	2.44	2.44*	
	Emotions	(1.15)	(1.16)	(1.28)	(1.21)	(1.24)	(1.31)	(1.36)	(1.3)	
	Perceived	4.12	4.75	4.82	4.58*	2.98	3.91	4.32	3.68*	
	Humor	(1.98)	(1.5)	(1.49)	(1.68)	(2.1)	(1.81)	(1.9)	(2.03)	
	Perceived	4.02	4.03	4.47	4.18	2.76	3.35	4.68	3.54	
	Offens.	(2.02)	(1.74)	(1.59)	(1.79)	(2.1)	(2.02)	(1.83)	(2.14)	

Note. The MANOVA models contained four IVs (podcast condition, religion, generation/age, and trait profanity use). * next to the means in the "Total" column indicates a significant main effect difference was found between means for generation at p<.05. Additionally, the control condition contained no-exposure, so participants in the control condition were not asked questions about responses to any message.

RQ7 asked whether people who use less profanity, in comparison to people who use more profanity, would experience less positive expectancy violation when exposed to (a) clean humorous messages about ACP and/or (b) profane humorous messages about ACP. The pattern of results indicated substantial support for this DPM prediction. Indeed, participants who use little profanity reported substantially lower positive expectancy violation for both the clean humorous and profane humorous conditions in comparison to the non-humorous conditions. Further, people who use moderate and high amounts of profanity both reported substantially greater positive expectancy violation in comparison to people who use little profanity for the clean humorous and profane humorous conditions. Thus, DPM predictions that people who use a lot of profanity would more greatly appreciate humorous messages about death, both clean and profane, were supported. See Figure 10 for a graph of the interaction effect based on estimated marginal means and see Table 12 for descriptive statistics for profanity use on all message response DVs.

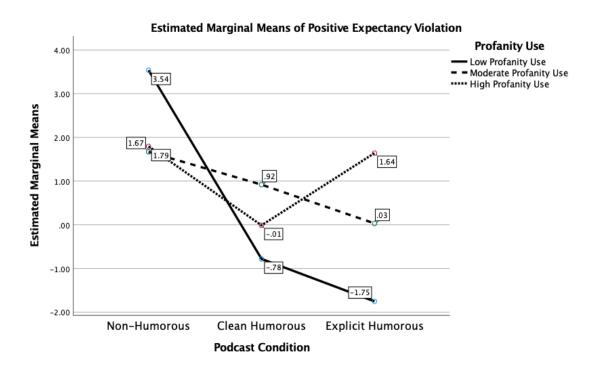


Figure 10. Interaction Between Condition and Profanity Use for Positive Expectancy Violation

RQ8 asked whether people who use less profanity, in comparison to people who use more profanity, would rate (a) clean humorous messages and/or (b) profane humorous messages about ACP as less effective. The pattern of results indicated some

interesting findings that both support and contradict DPM predictions. First, participants who use little profanity rated speakers in non-humorous conditions considerably more effective than participants who use moderate or high amounts of profanity. Second, all but the low profanity use group rated the speakers in the clean humorous messages as less effective than the speakers in the profane humorous condition. Finally, participants who use high amounts of profanity rated the profane speakers considerably more effective than participants who use little profanity. See Figure 11 below for a graph of the interaction effect based on estimated marginal means.

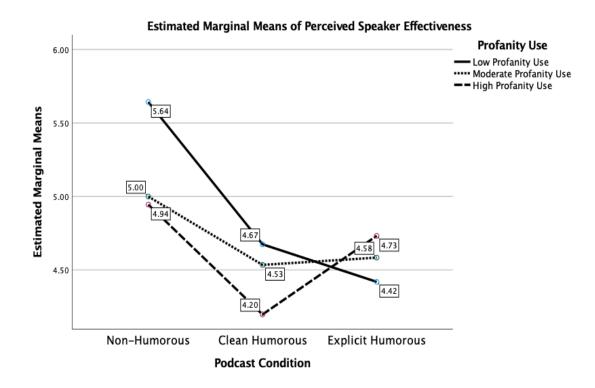


Figure 11. Interaction Between Condition and Profanity Use for Perceived Speaker Effectiveness

RQ9 asked whether people who use less profanity, in comparison to people who use more profanity, would rate (a) clean humorous messages and/or (b) profane humorous messages about ACP as less effective. The pattern of results indicated substantial support for this DPM prediction. Specifically, although all participant groups rated the non-humorous messages more effective than the humorous conditions, both the moderate profanity use and high profanity use groups rated profane humorous messages

more effective than the low profanity use group did. Interestingly, the clean humorous message was rated least effective by all groups. See Figure 12 below for a graph of the interaction effect based on estimated marginal means.

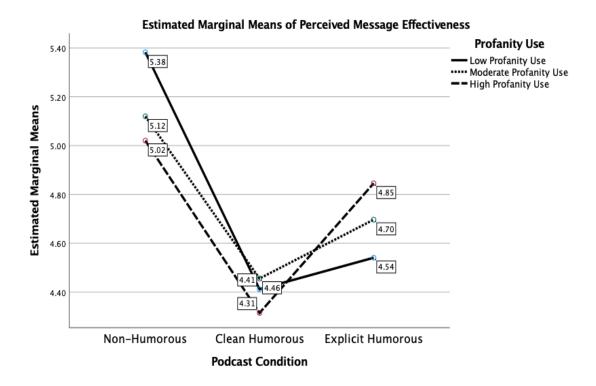


Figure 12. Interaction Between Condition and Profanity Use for Perceived Message Effectiveness

 Table 12. Descriptive Statistics for Condition with Profanity Use for All Message Response DVs

		a.	Low P	rofanity	Use	b. M	loderate	Profani	ity Use	c.	High P	rofanity	Use
Cond.		NH	СН	PH	Tot.	NH	СН	PH	Tot.	NH	СН	PH	Tot.
N		47	35	52	134	83	102	89	274	56	44	52	152
		M	M	M	M	M	M	M	M	M	M	M	M
		(SD)	(SD)	(SD)	(SD)	(SD)	(SD)	(SD)	(SD)	(SD)	(SD)	(SD)	(SD)
DVs	Perceived	5.58	4.9	4.28	4.9	4.84	4.52	4.4	4.58	4.77	4.53	4.58	4.63
	Speaker	(1.32)	(1.47)	(1.54)	(1.55)	(1.42)	(1.25)	(1.3)	(1.32)	(1.48)	(1.38)	(1.33)	(1.43)
	Eff.	` /	` /	` /	. ,		` ′	` '	, ,		` /	, ,	` '
	Perceived	5.3	4.79	4.32	4.8	5.36	5.01	5.04	5.13	5.5	5.34	5.6	5.49
	Message	(1.13)	(1.4)	(1.62)	(1.46)	(1.11)	(1.2)	(1.19)	(1.18)	(1.18)	(1.71)	(1.37)	(1.41)
	Eff.	` /	· /	,	,		. ,	, ,	` /		,	, ,	,
	Pos.	3.16	.75	-1.8	.61	1.51	1.7	.69	1.31	1.63	1.24	1.93	1.62
	Expec.	(2.85)	(4.74)	(8.95)	(6.62)	(3.04)	(3.49)	(5)	(3.94)	(2.42)	(4.7)	(3.79)	(3.65)
	Vio.	, , , ,			, ,			` '	, , ,			,	, ,
	Positive	1.89	2.3	2.47	2.22 ^{bc}	2.99	3.16	3.16	3.1a	3.13	3.66	3.51	3.4a
	Emotions	(.93)	(1.09)	(1.19)	(1.1)	(1.25)	(1.02)	(.99)	(1.08)	(1.47)	(1.25)	(1.19)	(1.32)
	Negative	2.13	2.25	2.33	2.24 ^c	3.04	2.87	2.64	2.84	3.4	3.3	3.16	3.3ª
	Emotions	(.95)	(1.03)	(1.32)	(1.12)	(1.13)	(1.22)	(1.11)	(1.16)	(1.28)	(1.28)	(1.48)	(1.34)
	Perceived	2.26	3.8	3.9	3.3°	3.92	4.55	4.82	4.44	4.61	4.95	5.2	4.92ª
	Humor	(1.3)	(1.46)	(1.83)	(1.73)	(1.94)	(1.5)	(1.32)	(1.63)	(2.25)	(1.91)	(1.65)	(1.87)
	Perceived	2.04	2.74	4.32	3.11 ^c	3.74	3.88	4.43	4.02	4.56	4.58	4.91	4.69 ^a
	Offens.	(1.25)	(1.32)	(1.75)	(1.78)	(1.98)	(1.77)	(1.4)	(1.75)	(2.26)	(2.01)	(1.91)	(2.07)

Note. "Cond" is podcast condition; NH is "no humor," "CH" is clean humor, "PH" is profane humor, "C" is control, and "Tot" is total. The low profanity use participant group is denoted with superscript a, the moderate profanity use participant group is superscript b, and high profanity use participant group is superscript c. Significant (p < .05) differences in main effects are denotated by superscripts. For example, if the low profanity use group was different from the high profanity use group in negative emotions, the former would have a superscript c and the latter superscript a in the "Tot" column. Significance between groups was determined using Tukey HSD post-hoc test.

EOL Communication Variables

Box's M test for the equality of covariance matrices was significant, F (990, 36258.34) = 1.56, p < .001, so Pillai's trace values were used.

Multivariate tests showed no significant main effects for condition, F (30, 1767) = 1.31, p = .12, η_p^2 = .02, power = .97. Moreover, no significant interaction effects were found for condition by religion [F (30, 1767) = 1.29, p = .14, η_p^2 = .02, power = .97], condition by generation [F (30, 1767) = .75, p = .13, η_p^2 = .01, power = .74], or condition by profanity use [F (60, 3552) = 1.24, p = .1, η_p^2 = .02, power = 1]. However, some isolated findings were significant, despite the overall pattern of results indicating non-significance.

First, tests of between-subjects effects found a significant relationship between condition and norms about sharing EOL wishes, F(3) = 2.65, p = .048, $\eta_p^2 = .01$, power = .65. Specifically, it appears perceived norms about sharing EOL wishes slightly decreased for participants in the clean humor condition (see Table 13 for details). Second, a significant relationship was found between profanity use and communication apprehension about death, F(2) = 5.23, p < .01, $\eta_p^2 = .02$, power = .83 (consult the "Total" column of Table 20 for details). Third, significant relationships were found between age/generation for several EOL communication variables (for details, consult the "Total" columns of Table 18). Fourth, a significant interaction effect was found between condition and religion for death anxiety $[F(3) = 3.62, p = .01, \eta_p^2 = .02, power = .8]$, communication apprehension about death $[F(3) = 3.62, p = .01, \eta_p^2 = .02, power = .8]$

.8], and norms about sharing EOL wishes $[F(3) = 2.86, p = .01, \eta_p^2 = .01, power = .69]$. Specifically, it appears all three variables were significantly lower for atheists/agnostics across several conditions (see Table 16 for details).

For details and descriptive statistics about podcast condition on EOL communication variables, see Table 14. For more details about tests of between-subjects effects, see Tables 13, 15, 17, and 19. For descriptive statistics for podcast condition on EOL communication DVs see Table 14. For descriptive statistics for podcast condition by religion on EOL communication DVs, see Table 16. For descriptive statistics for podcast condition by age/generation on EOL communication DVs, see Table 18. For descriptive statistics for podcast condition by profanity use on EOL communication DVs, see Table 20.

H4 posited that, in comparison to non-humorous messages about ACP, exposure to humorous messages about ACP would lead to (a) decreased death anxiety, and (b) decreased communication apprehension about death. This hypothesis was not supported.

H5 posited that, in comparison to non-humorous messages about ACP, exposure to humorous messages about ACP would lead to (a) more positive attitudes towards sharing EOL wishes with loved ones, (b) increased subjective norms about sharing EOL wishes with loved ones, (c) increased perceived behavioral control towards sharing EOL wishes with loved ones, and (d) intention to share EOL wishes with loved ones. H5, too, was not supported.

H6 posited that, in comparison to non-humorous messages about ACP, exposure to humorous messages about ACP would lead to (a) more positive attitudes towards

asking loved ones to share their EOL wishes, (b) increased subjective norms about asking loved ones to share their EOL wishes, (c) increased perceived behavioral control towards asking loved ones to share their EOL wishes, and (d) intention to ask loved ones to share their EOL wishes. H6, too, was not supported.

 Table 13. Main Effects for Podcast Condition on EOL Communication DVs

DV	F	df	Sig.	η_p^2	Power
Death Anxiety	2.18	3	.09	.01	.56
Comm. App. Death	2.13	3	.1	.01	.54
ACP Share Attitudes	.37	3	.78	.002	.12
ACP Share Norms	2.65	3	.048	.01	.65
ACP Share PBC	.31	3	.82	.002	.11
ACP Share Intention	.73	3	.54	.004	.21
ACP Ask Attitudes	.74	3	.53	.004	.21
ACP Ask Norms	1.38	3	.25	.01	.37
ACP Ask PBC	.12	3	.95	.001	.07
ACP Ask Intention	1.21	3	.31	.01	.33

 Table 14. Descriptive Statistics for Podcast Condition on EOL Communication DVs.

Condition	No-Humor	Clean Humor	Profane Humor	Control
N	186	181	193	84
	M (SD)	M (SD)	M (SD)	M (SD)
Death Anxiety	4.28 (.87)	4.14 (.75)	4.22 (.9)	4.26 (.96)
Comm. App. Death	4.46 (1.69)	4.38 (1.6)	4.51 (1.59)	4.54 (1.56)
ACP Share Attitudes	4.97 (1.12)	4.89 (1.18)	4.79 (1.2)	4.9 (1.1)
ACP Share Norms	5.4 (.94)	5.29 (1.06)	5.38 (1.04)	5.47 (.93)
ACP Share PBC	5.68 (1.03)	5.51 (1.1)	5.62 (1.08)	5.67 (.9)
ACP Share Intention	5.48 (1.07)	5.35 (1.21)	5.38 (1.09)	5.21 (1.13)
ACP Ask Attitudes	4.81 (1.16)	4.74 (1.14)	4.68 (1.14)	4.73 (1.03)
ACP Ask Norms	5.32 (.97)	5.1 (1.19)	5.26 (.95)	5.3 (.98)
ACP Ask PBC	5.48 (1.05)	5.39 (1.14)	5.42 (1.04)	5.35 (1.06)
ACP Ask Intention	5.34 (1.25)	5.18 (1.19)	5.31 (1.23)	5.05 (1.5)

Table 15. Interaction Effects for Podcast Condition and Religion on EOL Communication DVs

DV	\overline{F}	df	Sig.	η_p^2	Power
Death Anxiety	3.62	3	.01	.02	.8
Comm. App. Death	3.62	3	.01	.02	.8
ACP Share Attitudes	.56	3	.64	.003	.17
ACP Share Norms	2.86	3	.04	.01	.69
ACP Share PBC	.3	3	.82	.002	.11
ACP Share Intention	.55	3	.65	.003	.16
ACP Ask Attitudes	1.57	3	.2	.01	.42
ACP Ask Norms	1.16	3	.32	.01	.31
ACP Ask PBC	.45	3	.72	.002	.14
ACP Ask Intention	.93	3	.43	.01	.26

TABLE 16. Descriptive Statistics for Podcast Condition with Religion for EOL Communication DVS.

			Christian	1				Atl	heist/Agno	$\begin{array}{cccccccccccccccccccccccccccccccccccc$				
	Cond.	No Humor (N = 152)	Clean Humor (N = 154)	Profane Humor (N = 170)	Control (N = 69)	Total (N = 545)	No Humor (N = 34)	Clean Humor (N = 27)	Profane Humor (N = 23)	N =	N =			
EOL DVs	Death Anxiety	4.3 (.77)	4.18 (.65)	4.21 (.81)	4.39 (.74)	4.24* (.75)	4.18 (1.23)	3.9 (1.16)	4.26 (1.44)					
	Comm. App. Death	4.73 (1.53)	4.63 (1.47)	4.59 (1.56)	4.93 (1.3)	4.68* (1.5)	3.32 (1.84)	3 (1.62)	3.89 (1.74)					
	ACP Share Att.	4.87 (1.14)	4.85 (1.22)	4.78 (1.24)	4.8 (1.08)	4.83* (1.19)	5.38 (.93)	5.16 (.94)	4.89 (.88)					
	ACP Share Norms	5.48 (.94)	5.39 (.97)	5.39 (1.05)	5.47 (.91)	5.42* (.98)	5.12 (.89)	4.73 (1.34)	5.29 (.99)	5.47 (1.06)	5.1* (1.09)			
	ACP Share PBC	6.04 (.77)	5.5 (1.03)	5.6 (1.09)	5.57 (.87)	5.58 (1.04)	5.67 (1.2)	5.59 (1.46)	5.74 (1)	6.1 (.91)	5.82 (1.1)			
	ACP Share Intention	5.53 (.96)	5.41 (1.1)	5.4 (1.02)	5.27 (1.01)	5.42* (1.03)	5.23 (1.46)	5.06 (1.67)	5.2 (1.51)	4.93 (1.6)	5.13* (1.53)			
	ACP Ask Attitudes	4.75 (1.86)	4.7 (1.16)	4.71 (1.17)	4.65 (1.02)	4.71 (1.15)	5.08 (1)	5 (1.03)	4.43 (.9)	5.1 (1.02)	4.91 (1.01)			
	ACP Ask Norms	5.45 (.92)	5.24 (1.1)	5.35 (.94)	5.34 (.92)	5.35* (.98)	4.72 (.99)	4.31 (1.36)	4.58 (.79)	5.09 (1.24)	4.62* (1.12)			

ACP Ask PBC	5.51 (.99)	5.44 (1.05)	5.47 (1.03)	5.33 (1.04)		5.3 (1.28)		5.02 (1.04)	5.43 (1.19)	5.19* (1.27)
ACP Ask	5.48	5.32	5.37	5.18	5.36*	4.71	4.31	4.83	4.43	4.59*
Intention	(1.1)	(1.04)	(1.18)	(1.36)	(1.14)	(1.63)	(1.58)	(1.53)	(1.96)	(1.63)

Note. The MANOVA model contained four IVs (podcast condition, religion, generation/age, and trait profanity use). * next to the means in the "Total" column indicates a significant main effect difference was found between means for religion at p<.05. Additionally, the control condition contained no-exposure, so participants in the control condition were not asked questions about responses to any message

Table 17. Interaction Effects for Podcast Condition and Generation on EOL Communication DVs

DV	F	<i>df</i> 3	Sig.	η_p^2	Power
Death Anxiety	1.55	3	.2	.01	.41
Comm. App. Death	.36	3	.78	.002	.12
ACP Share Attitudes	.03	3	.99	0	.06
ACP Share Norms	.61	3	.61	.003	.18
ACP Share PBC	.24	3	.87	.001	.1
ACP Share Intention	2.12	3	.1	.01	.54
ACP Ask Attitudes	.58	3	.63	.003	.17
ACP Ask Norms	.21	3	.89	.001	.1
ACP Ask PBC	.78	3	.51	.004	.22
ACP Ask Intention	.33	3	.8	.002	.12

 $\textbf{Table 18.} \ \textit{Descriptive Statistics for Podcast Condition with Generation for EOL Communication DVs}$

		Younger (Millennials/Generation Z)					(Older (Ge	neration X	and Olde	r)
Cond.		No Humor (N = 118)	Clean Humor (N = 128)	Profane Humor (N = 138)	Control (N = 46)	Total (N = 430)	No Humor (N = 68)	Clean Humor (N = 53)	Profane Humor (N = 55)	Control (N = 38)	Total (N = 214)
EOL DVs	Death Anxiety	4.31 (.78)	4.22 (.61)	4.28 (.81)	4.17 (.89)	4.26* (.76)	4.22 (1)	3.94 (.99)	4.07 (1.08)	4.35 (1.04)	4.14* (1.03)
	Comm. App. Death	4.81 (1.45)	4.67 (1.4)	4.67 (1.46)	4.66 (1.43)	4.71* (1.43)	3.84 (1.91)	3.7 (1.84)	4.08 (1.82)	4.4 (1.72)	3.97* (1.84)
	ACP Share Attitudes	4.87 (1.05)	4.85 (1.17)	4.64 (1.16)	4.75 (1.07)	4.77* (1.13)	5.13 (1.22)	5.01 (1.21)	5.18 (1.23)	5.08 (1.12)	5.12* (1.2)
	ACP Share Norms	5.33 (.98)	5.26 (1.08)	5.29 (1.09)	5.45 (.92)	5.31* (1.04)	5.54 (.86)	5.37 (1.01)	5.6 (.85)	5.5 (.93)	5.51* (.91)
	ACP Share PBC	5.49 (1.09)	5.4 (1.04)	5.5 (1.14)	5.48 (.91)	5.47* (1.07)	6.01 (.83)	5.78 (1.2)	5.93 (.86)	5.89 (.83)	5.91* (.94)
	ACP Share Intention	5.42 (1.07)	5.32 (1.19)	5.22 (1.11)	5.22 (1.06)	5.31 (1.12)	5.57 (1.08)	5.43 (1.24)	5.76 (.91)	5.2 (1.23)	5.52 (1.12)
	ACP Ask Attitudes	4.72 (1.13)	4.73 (1.19)	4.61 (1.06)	4.66 (1.08)	4.68 (1.12)	4.96 (1.2)	4.77 (1.02)	4.85 (1.31)	4.82 (.97)	4.86 (1.15)
	ACP Ask Norms	5.32 (.98)	5.07 (1.2)	5.23 (.96)	5.2 (1.02)	5.2* (1.05)	5.33 (.96)	5.19 (1.15)	5.33 (.95)	5.4 (.94)	5.31* (1)

		5.35 (1.14)				5.47 (1.13)	5.5 (1.08)	5.58 (1.04)
ACP Ask Intention	5.33 (1.2)	5.23 (1.16)	5.2 (1.25)	5.24 (1.23)	5.35 (1.33)	5.05 (1.25)	4.97 (1.61)	5.26 (1.34)

Note. * in the total column indicates a significant main effect was found at p < .05. between younger and older age groups.

Table 19. Interaction Effects for Podcast Condition and Profanity Use on EOL Communication DVs

DV	\overline{F}	df	Sig.	η_p^2	Power
Death Anxiety	1.94	6	.07	.02	.72
Comm. App. Death	1.59	6	.15	.02	.61
ACP Share Attitudes	.19	6	.98	.002	.1
ACP Share Norms	.9	6	.49	.01	.36
ACP Share PBC	.97	6	.44	.01	.39
ACP Share Intention	1.67	6	.13	.02	.64
ACP Ask Attitudes	.53	6	.79	.01	.21
ACP Ask Norms	.94	6	.46	.01	.38
ACP Ask PBC	1.72	6	.12	.02	.65
ACP Ask Intention	1.58	6	.15	.02	.61

TABLE 20. Descriptive Statistics for Podcast Condition with Profanity Use for EOL Communication DVs

	Low Profanity Use							Moderate Profanity use					High Profanity Use				
Cond.		NH	СН	PH	С	T	NH	СН	PH	С	T	NH	СН	PH	С	T	
N		47	35	52	26	160	83	102	89	42	316	56	44	52	16	168	
EOL DVs	Death Anxiety	4.15 (1.2)	3.99 (1.13)	4.18 (1.06)	4.34 (1.34)	4.16 (1.13)	4.3 (.77)	4.14 (.6)	4.15 (.86)	4.27 (.63)	4.2 (.73)	4.35 (.78)	4.23 (.68)	4.39 (.77)	4.09 (1.01)	4.3 (.78)	
	Comm. App. Death	3.71 (1.54)	3.4 (1.63)	3.86 (1.76)	3.92 (1.6)	3.73 ^{bc} (1.64)	4.44 (1.56)	4.5 (1.35)	4.42 (1.31)	4.8 (1.26)	4.5 ^{ac} (1.39)	5.1 (1.77)	4.89 (1.81)	5.29 (1.54)	4.86 (2)	5.08 ^{ab} (1.73)	
	Share Att.	5.33 (1.04)	5.1 (1.2)	5.04 (1.17)	5.08 (.89)	5.15 ^{bc} (1.09)	4.83 (1.07)	4.89 (1.15)	4.79 (1.17)	4.78 (1.07)	4.83 ^a (1.12)	4.86 (1.21)	4.75 (1.24)	4.54 (1.27)	4.92 (1.47)	4.74 ^a (1.26)	
	Share Norms	5.28 (1.01)	5.24 (1.09)	5.17 (1.2)	5.28 (1.18)	5.24° (1.11)	5.34 (.86)	5.2 (.9)	5.19 (.93)	5.47 (.74)	5.27° (.88)	5.63 (.98)	5.53 (1.33)	5.91 (.86)	5.77 (.91)	5.7 ^{ab} (1.05)	
	Share PBC	5.64 (1.15)	5.66 (1.23)	5.47 (1.33)	5.7 (1.09)	5.6° (1.21)	5.51 (1.05)	5.37 (1.01)	5.42 (1.03)	5.45 (.73)	5.43° (.99)	5.98 (.85)	5.73 (1.18)	6.12 (.66)	6.19 (.77)	5.98 ^{ab} (.9)	
	Share Intention	5.47 (1.13)	5.27 (1.33)	5.23 (1.17)	5.37 (1.12)	5.33° (1.18)	5.31 (1.08)	5.28 (1)	5.17 (1.06)	5.2 (.87)	5.25° (1.02)	5.72 (.97)	5.6 (1.49)	5.88 (.9)	4.97 (1.69)	5.66 ^{ab} (1.2)	
	Ask Attitudes	5.25 (1.01)	4.98 (.97)	4.77 (1.1)	4.87 (.87)	4.97 ^{bc} (1)	4.66 (1.12)	4.68 (1.12)	4.67 (1.1)	4.74 (.95)	4.68 ^a (1.09)	4.66 (1.25)	4.67 (1.3)	4.6 (1.26)	4.49 (1.43)	4.63 ^a (1.27)	
	Ask Norms	5.22 (.81)	4.99 (1.21)	5.04 (1)	5.15 (1.03)	5.1° (1)	5.19 (.85)	4.97 (1.09)	5.1 (.86)	5.29 (.81)	5.11° (.93)	5.6 (1.19)	5.51 (1.32)	5.75 (.9)	5.56 (1.3)	5.62 ^{ab} (1.15)	
	Ask PBC	5.46 (1.05)	5.37 (1.3)	5.14 (1.23)	5.32 (1.06)	5.32° (1.17)	5.34 (.98)	5.24 (1.06)	5.25 (.93)	5.3 (.99)	5.28° (.99)	5.7 (1.13)	5.74 (1.14)	5.98 (.75)	5.53 (1.3)	5.78 ^{ab} (1.05)	
	Ask Intention	5.28 (1.15)	4.99 (1.27)	4.84 (1.22)	4.98 (1.5)	5.02° (1.26)	5.15 (1.29)	5.09 (1.04)	5.25 (1.22)	5.12 (1.1)	5.15° (1.17)	5.67 (1.21)	5.53 (1.39)	5.88 (1.04)	4.97 (2.3)	5.6 ^{ab} (1.36)	

Note. Table displays means with standard deviations in parentheses. "Cond" is podcast condition; NH is "no humor," "CH" is clean humor, "PH" is profane humor, "C" is control, and "Tot" is total. The low profanity use participant group is denoted with superscript a, the moderate profanity use participant group is superscript b, and high profanity use participant group is superscript c. Significant (p < .05) differences in main effects are denotated by superscripts. For example, if the low profanity use group was different from the high profanity use group in negative emotions, the former would have a superscript c and the latter superscript a in the "Tot" column. Significance between groups was determined using Tukey HSD post-hoc test.

Discussion

Summary and Stimuli Appropriateness

This experiment yielded interesting and useful findings regarding how different groups of people respond to different stimuli about ACP. Specifically, the purpose of this experiment was to test an integrated theoretical framework based on social-scientific literature and DPM lay theories about how/why messages about ACP featuring humor and/or profanity may be received differently and how specific audience characteristics influence responses to different stimuli. More importantly, this experiment sought to examine whether humorous stimuli could be a useful motivational tool for inspiring people to engage in two specific ACP behaviors: sharing EOL wishes with loved ones and asking loved ones to share EOL wishes. In general, results indicated significant differences between responses to non-humorous, clean humorous, and profane humorous stimuli, but mixed support for the integrated theoretical model's predictions about humor in the context of ACP motivation. Moreover, results indicated that this intervention, (i.e., exposure to a short podcast clip) had no significant effects on determinants of behavior according to TPB, death anxiety, or communication apprehension about death. Details of specific findings are discussed below.

To begin with, it is important to address issues related to the nature of the stimuli used in this experiment. Indeed, to make conclusions based on an experiment testing humorous stimuli versus non-humorous stimuli, it is necessary to know whether participants perceived humor when intended and did not perceive humor when not

intended. Further, it is also important to understand whether profane stimuli were perceived as more offensive than non-profane stimuli.

Based on analysis, it was clear that the podcast clips, co-written by a professional comedian, were significantly different from one another in terms of how funny and offensive they were perceived to be. Both humorous conditions were perceived to be significantly more humorous than the non-humorous condition, regardless of whether a man or a woman delivered the script. Moreover, the profane humorous condition was perceived to be significantly more offensive than the non-humorous and clean humorous conditions. The humorous conditions were identical in content to the non-humorous condition but included small details with intentionally exaggerated or absurd phrases added in (e.g., the non-humorous script said, "Imagine you are the victim of an unexpected road accident," whereas the humorous conditions said, "Imagine you're walking down the street and get hit by a falling construction crane, 'cause yeah, that stuff actually happens in Brooklyn, believe it or not!"]. This technique of adding exaggerated, surprising, and visually striking descriptions to enhance humor in a joke is frequently used by comedy writers and stand-up comedians. By way of example, veteran comedian Jerry Seinfeld is famous for observational humor that relies on both relatability and surprise, which are enhanced by sharing detailed visuals surrounding the experience that inspired the joke (Zafarris, 2019). Moreover, the profane humorous condition contained frequent, casual profanity (e.g., "Okay, if you get hit by a fuckin' bus tomorrow, and you're in a coma, who is gonna be in the hospital with you making sure what you want is what happens to you?" and "You're gonna die someday, and it's important for you to get

your shit together.") Other than the profanity, the profane humorous script was identical to the clean humorous script, so it is apparent the profanity itself was an important variable in determining perceived offensiveness.

Message Response Hypotheses and Research Questions

Several hypotheses and research questions were posited regarding the extent to which humor and profanity in podcast clips about ACP, and certain receiver factors, would influence the extent to which participants experienced positive expectancy violation, perceptions of speaker effectiveness, perceptions of message effectiveness, positive emotional response, and negative emotional response. The following sections discuss results related to these hypotheses and research questions.

Positive Expectancy Violation.

H1 posited that humorous messages about ACP, compared to non-humorous messages about ACP, would result in greater positive expectancy violation. However, this hypothesis was not supported. Indeed, no significant differences were found between non-humorous and clean humorous conditions for positive expectancy violation. In fact, the profane humorous condition resulted in significantly less positive expectancy violation than the non-humorous condition. These results are inconsistent with DPM predictions about humor and profanity in the context of death resulting in a "pleasant surprise" due to violations of social norms. It may be the case, as noted in chapter one, that death is a particularly sensitive topic, where norm violations are more likely to be frowned upon. Some previous research, for example, indicates that the use of profanity results in negative expectancy violations (e.g., see Johnson & Lewis, 2010). Whatever the

case, from an applied perspective, this finding indicates that humor-plus-profanity is a potentially risky communication strategy in the context of ACP. Moreover, based on the results of the present study, it may be the case that the DPM's predictions about the "pleasant" nature of surprise is inaccurate. Instead, negative expectancy violation seems more likely to occur when implementing profanity into a message about death, a context in which propriety might be expected.

That said, a recurring theme throughout the results of this study is that reactions to humor and profanity vary based on individual differences, including one's religious background, age/generation, and tendency to use profanity. With regard to religion, for example, RQ1 asked whether Christians, in comparison to atheists/agnostics, experience less positive expectancy violation in response to (a) clean humorous messages about ACP and/or (b) profane humorous messages about ACP. Mixed support was found for DPM predictions. Specifically, as members of the DPM predicted, Christians, compared to atheists/agnostics, experienced less positive expectancy violation in response to the profane humorous message. Further analysis indicated Christians rated the profane humorous message as substantially more offensive than atheists/agnostics did. However, contrary to DPM predictions, atheists/agnostics experienced significantly less positive expectancy violation in response to the clean humorous condition. Beck (2009) posits that profanity may function as Gnostic affront to certain Christians, especially those who associate reminders of the body as offensive to their spiritual position (e.g., whether they believe that Jesus was immune to bodily functions to which "mortals" are subject.) This study's findings demonstrate a need for future research examining potential mediators

and moderators that allow deeper and more nuanced investigation into the role of religion, humor, irreverence, and EOL communication. Notably, approximately 85% of participants in the study were Christians, which is considerably higher than the national average of 65% (Pew Research Center, 2019). This discrepancy in subgroup size may have affected precision of results with regard to the atheist/agnostic group.

With regard to age/generation, RQ4 asked whether older generations (Generation X and older) experience less positive expectancy violation than younger generations (Millennials and Generation Z) when exposed to clean and/or profane humorous messages about ACP. While DPM predictions about religion affecting positive expectancy violation were mixed, results indicated support for the DPM's predictions about generation in this context. Specifically, in comparison to older participants, younger participants experienced more positive expectancy violation for both clean and profane humorous conditions. On the other hand, regardless of age/generation, research participants experienced greater positive expectancy violation for the non-humorous condition, which seems to contradict previous empirical findings about humor (e.g., Walther-Martin, 2015). One possible explanation is that humor and/or profanity decreased the extent to which both groups liked the source, which can result in negative outcomes (e.g., decreased persuasiveness) (Eagly & Chaiken, 1975). On the other hand, this study is predicated on perspectives that the taboo nature of death in tandem with nontraditional communication styles would result in expectancy violation in the first place. Walter (1991), however, presents convincing arguments that death communication is not as taboo as many people think it is. If, in fact, that is the case, it is likely that expectancy

violations theory may have limited utility in the context of examining novel communication approaches in the EOL context.

On the other hand, some individual differences may make people more sensitive to certain message features (e.g., profanity) than others. Indeed, based on this notion, RQ7 asked whether people who rarely swear, compared to those who swear frequently, are less likely to experience positive expectancy violation for humorous and/or profane messages about ACP. Results indicated that, in comparison to participants who use moderate and large amounts of profanity, those who use little profanity experience lower positive expectancy violation when exposed to both clean humorous and profane humorous conditions. These findings lend credence to the DPM's predictions that people who are less irreverent (in this instance, people avoid using profanity) are less likely to respond well to humor and/or profanity in the context of a "proper" context like death communication.

Perceived Speaker and Message Effectiveness.

H2a-b posited that humorous messages about ACP would lead to more favorable perceptions of speaker and message effectiveness in comparison to non-humorous messages about ACP. The hypotheses were not supported, however. In fact, the pattern of results were in the opposite direction of those predicted. Specifically, non-humorous speakers and messages were rated more effective across the board. As such, these results were inconsistent with expectations articulated by members of the DPM, yet in line with some previous empirical research. Several studies, for example, have found that using

humor (Eisend, 2009) and profanity (Kottke & MacLeod, 1989; Johson & Lewis, 2010) decrease perceptions of a source's credibility.

Again, however, results of this study indicated that reactions to humor and profanity may vary as a function of individual differences, including one's religious background, age/generation, and tendency to use profanity. With regard to religion, for instance, RQ2 and RQ3 asked whether Christians would rate humorous and/or profane speakers/messages as less effective than would atheist/agnostic receivers. Results were, again, mixed. Specifically, atheists/agnostics rated speakers in profane humorous conditions as more effective than Christians did. However, both Christians and atheists/agnostics rated non-humorous speakers and messages as more effective overall. Further, a curious finding is that atheists/agnostics rated the clean humorous condition as significantly less effective than Christians did. In fact, Christians rated all messages, including humorous ones, as being more effective than atheists/agnostics did. Such findings run counter to predictions from both the DPM and social scientific research that supports the DPM's prediction. Specifically, Saroglou (2002) found that religiosity was negatively associated with "personality traits, cognitive structures, and social consequences typical to humor." Moreover, Saroglou (2002) suggested that religious people who have good senses of humor likely possess that quality despite their religiosity rather than because of it. In opposition to this point of view, some Christian faith leaders posit that Christianity is a religion of joy; ergo, because humor is joyful, Christians should endorse humor as a virtue (Roberts, 1990). Similarly, Joeckel (2008) offers the position that certain sorts of Christians (e.g., those who possess openness to ambiguity,

interpretive flexibility, and are low in dogmatism) are more likely to embrace humor than others. Interestingly, atheists/agnostics rated clean humorous messages as being significantly less effective than both non-humorous and profane humorous messages.

This is a very curious finding, largely unexplainable by anything in the current literature, that warrants further message testing research. It is possible that Christians have a general tendency to be more receptive to the topic, or at least, Christians may be less likely to share negative feedback in response to someone else's work on a survey.

Regarding age/generation, RQ5 and RQ6 asked whether older participants would rate humorous and/or profane speakers/messages as less effective than would younger participants. Results were mostly congruent with DPM predictions. Specifically, older participants perceived non-humorous messages and speakers as being significantly more effective than younger participants did. Furthermore, older participants rated the clean humorous speakers and messages as being less effective than younger participants did. Interestingly, however, older participants rated speakers in the profane humorous condition as being slightly more effective than younger participants did, thereby partially contradicting DPM predictions. Specifically, during the qualitative interviews for phase one of this project, members of the DPM, which consists largely of Millennials, expressed doubt that their current message strategies would appeal to older generations. Many noted, for example, that people from older generations, particularly Baby Boomers, would perceive the topic as improper and, compared to other generations, would possess a lesser sense of humor.

From an applied perspective, the incongruity between DPM expectations and the findings from this study speaks to the potential effects of negative stereotypes. Notably, the DPM is largely an online social movement and several participants directly referred to the "generation war" online. This tension is aptly discussed in a study examining the proliferation of the "Ok, Boomer" online phenomenon, in which younger generations typically dismiss Baby Boomers who they perceive as behaving in an entitled, uninformed, or offensive manner (e.g., "Climate change isn't real" "Ok, boomer.") (Lim & Lemanski, 2020). Intergenerational animosity likely plays a part in the less than generous perceptions shared by some DPM participants about older generations regarding reception of humor in the EOL context. While some claims were supported (e.g., participants from the Baby Boomer generation preferred the non-humorous approach), in general, older generations were more receptive of all ACP messages than younger generations were. Thus, it might be worthwhile to find commonalities between generations rather than perpetuate ideas that Baby Boomers as a group are unlikely to be receptive to the DPM's ideals.

RQ8 and RQ9 asked whether people who swear less, compared to those who swear more, would rate humorous and/or profane speakers/messages as less effective. Results indicated that participants who use little profanity rated non-humorous speakers and messages as more effective than participants who use more profanity. Additionally, all groups, except the low profanity use group, rated speakers in the clean humorous condition as less effective than speakers in profane humorous condition. Interestingly, the clean humorous speakers/messages were rated least effective for all groups. While all

participant groups rated the non-humorous speakers/messages as being more effective overall, it is apparent that the extent to which someone swears—which, perhaps, is indicative of their overall "trait irreverence" – is an important factor when considering using humor and/or profanity in messages intended to motivate ACP. This is a consequential finding for the DPM because of the prevalence of both humor and profanity in its media. In phase one, DPM members expressed belief that humor would positively impact perceptions of the speaker, and prominent DPM media figures attempt to cultivate an image of casual friendship rather than paternalism. This goal is made apparent by Caitlin Doughty's testimony of Chanel Reynold's book about ACP ["Chanel Reynolds], is your funny, irreverent friend, who's here to show you tough love..." (Reynolds, 2019). Perceived homophily (i.e., similarity between source and receiver) is an important factor in attitudinal change research in the context of health information (Wang et al., 2008), and this is certainly a plausible explanation for these findings as well. In other words, using profanity as a communication tactic should only be considered if members of the target audience are known for being profane themselves; although, overall, the non-humorous approach was rated as being more effective than both the clean humorous and profane humorous approaches. It is likely that humor and profanity may have resulted in decreased speaker credibility, and thus, decreased perceptions of message effectiveness (Eisend, 2009; Kottke & MacLeod, 1989; Johson & Lewis, 2010).

Emotional Response to the Message.

H3 posited that, in comparison to non-humorous messages about ACP, clean humorous and profane humorous messages would result in increased positive affective responses to the message and decreased negative affective responses to the message. Results indicated that both clean and profane humorous conditions generated significantly more positive emotional responses than the non-humorous condition, but no significant differences between groups were found for negative emotional response. These findings support previous studies, which found that humorous messages enhance positive affect (Eisend, 2011). Humor's function as a means of suppressing negative emotions (perhaps via catharsis) was spoken about by DPM participants in phase one and is further supported in literature (e.g., Robbins et al., 2011; Vingerhoets et al., 2013); however, this study found no significant relationships between humor or profanity and suppressing negative emotions. It may be the case that the topic of death is perceived so negatively that humor is simply unable to erase negative emotional responses; however, the fact that humor may "soften the blow" by adding increased positive affective response is a worthwhile consideration for campaign designers who wish to motivate ACP.

EOL Communication Variables

Beyond responses to messages about ACP, analyses were conducted to determine whether exposure to different types of messages about ACP resulted in decreased death anxiety, decreased communication apprehension about death, increased attitudes towards sharing EOL wishes/asking others about EOL wishes, increased norms about sharing

EOL wishes/asking others about EOL wishes, increased perceived behavioral control towards sharing EOL wishes/asking others to share EOL wishes, and increased intention to share EOL wishes/ask others to share EOL wishes. While several significant findings emerged regarding responses to messages, no significant differences were found between any of the four groups (non-humorous, clean humorous, profane humorous, and no-exposure control) for any EOL communication DVs.

Death Anxiety and Communication Apprehension About Death.

H4a-b posited that, in comparison to non-humorous messages about ACP, exposure to humorous messages about ACP would result in decreased death anxiety and decreased communication apprehension about death. No significant differences were found between any group, including the control group; thus, this hypothesis was not supported. Though, a significant main effect was found for religion that indicates atheist/agnostics have lower death anxiety and communication apprehension about death. In addition, H5a-d posited that, in comparison to a non-humorous message, humorous messages about ACP would lead to more positive attitudes towards sharing EOL wishes with loved ones, increased perceived norms about sharing EOL wishes, increased perceived behavioral control towards sharing EOL wishes, and increased intention to share EOL wishes. No significant differences were found between any group, including the control group; thus, none of these hypotheses were supported.

These findings that humorous stimuli were no more successful than nonhumorous stimuli for decreasing death anxiety/communication apprehension about death or influencing determinants of health behaviors in this context is contrary to predictions from the DPM and several similar studies examining the motivational effects of humor in health contexts (e.g., Lee et al., 2015). There are several possible reasons for these results.

First, based on results from a meta-analysis demonstrating small effect sizes for mediated health campaigns on health behavior change, Snyder et al. (2004) recommended that scholars should set modest expectations and goals. Furthermore, Snyder et al. (2004) offered an important conceptual distinction that must be considered when designing campaigns to influence specific health behaviors, which they called "adoption type." To summarize, when setting expectations, researchers must determine whether the advocated behavior in a campaign message is asking receivers to commence a new behavior, prevent an undesirable new behavior, or cease/reduce an old behavior. According to Snyder et al. (2004), this distinction is important because effect sizes often correspond to the type of behavior being advocated. Considering this—while also keeping in mind that the podcast messages in the present study advocated for commencing a potentially unpleasant, and for many, new, behavior (i.e., ACP)—it is interesting to note that campaigns advocating for commencing two other health behaviors, mammography screening and organ donation registration, have modest effect sizes of .04 and .05, respectively (Snyder et al., 2004; Feeley & Moon, 2009). Importantly, the effect sizes in the meta-analytic studies just discussed concern influencing behavior change, not merely behavioral intention; it is likely the stimuli from this study would not influence behavior because there were no significant differences in behavioral intention between conditions. Moreover, although meta-analyses are useful tools for determining the potential efficacy

of health campaigns, it is important to consider the bias in social sciences towards publishing significant over non-significant findings (Duyx et al., 2017; Mlinarić. et al., 2017). When such biases are considered, it is likely that modest effect sizes reported in meta-analyses are even smaller because campaigns without significant behavioral change results, such as the present study, were not included in the meta-analyses. Importantly, the stimuli in this study consisted of a short (less than five minutes) podcast clip, which simultaneously sought to teach and persuade listeners to engage in a behavior which, likely, they believe is (a) of little relevance and/or (b) unpleasant (i.e., a behavior which is exacerbated by death anxiety and communication apprehension about death). With that in mind, it is possible that a more involved intervention (e.g., a longitudinal intervention that involves a community in a more active and enduring way) may be more persuasive than the short podcast clips used in this intervention. Future research should explore this possibility.

Second, agenda-setting theory posits that mass media messages are useful for setting the stage for public thought and discussion but are limited insofar as changing behavior (McCombs & Shaw, 1993). That said, Yang and Stone (2009) found that interpersonal networks in tandem with mass media messages are often most successful in setting agendas and mindsets in favor of specific advocated behaviors. Furthermore, Yang and Stone (2009) found that certain groups of people are more media-reliant, typically, the authors suggested, better educated, older, white men who are more interested in information than entertainment. Similarly, Ogata Jones et al. (2006) found that younger women were more likely to be persuaded to engage in breast cancer

screening (another conceptually similar behavior to ACP) by interpersonal sources rather than media sources. With that in mind, without an interpersonal network accompanying the podcasts in this study, the podcasts may have been less potent to change behavior.

Even though treatment conditions in this study did not change participants' intention to behave, the study has several significant findings that can guide future research and praxis of EOL communication interventions. First, for populations who do not already identify with the DPM, humorous messages can be a risky approach. Specifically, results of this study suggest that humor may lead to unfavorable perceptions of speaker and message effectiveness. Profane humor, especially, is likely to have this effect and in general be more offensive to people outside of the movement. If the target audience is from an older generation, a non-humorous/non-profane approach is advised.

It is also important to consider how, in general, the findings of this study often contradict predictions by the DPM. First, it is clear from the Order of the Good Death website (2021) and prominent media figures advocating for non-profit funeral homes and consumer protection, that the DPM is altruistic in nature. It is also clear from interviews with the DPM, that many of its members identify with groups outside of traditional societal norms. Given previous research, this is an important consideration. Indeed, Brewer (2007) found that people on the fringes of society often build strong bonds with one another and perceive outsiders to that group as hostile. Moreover, the DPM consists of primarily younger people who do not identify as religious. It is clear, however, that the DPM is a successful social group, which has positively impacted many lives around the world via media and advocacy. However, it is important to critique the DPM insofar as

their communication approach, as shown in this study, may contradict their goal to help as many people as possible overcome death anxiety (The Order of the Good Death, 2021). Unfortunately, results from this study indicate that some of their often-used communication approaches (i.e., humor and profanity) may not achieve this goal for many Americans. There is an apparent bias against religion present in the DPM. This study, for example, indicates that Christians may, in fact, be more receptive to messages about death communication than atheists/agnostics. As such, if the organization's goal is to help as many people as possible, it would be wise for the DPM to explore viable approaches for creating messages that appeal more broadly.

Limitations

This phase of the study has several limitations worth discussing. I will explain how potential issues related to sampling, sample size, instrumentation, time constraints, and cultural biases may have impacted the present study's findings and offer suggestions for future research.

First, this study used MTurk to gather its sample. Although research, including a systematic review of thirty-five studies using MTurk for medical research (Mortensen & Hughes, 2017), conclude that MTurk samples are of higher quality than lab participants and college student samples, others have discussed important limitations of using an MTurk sample. Specifically, Harms and DeSimone (2015) argue that MTurk samples suffer from the same limitations as other samples (e.g., predominantly western, educated, industrialized, rich, and democratic). Further, they argue that professional MTurk workers have unique characteristics (e.g., chronically or recently unemployed persons,

people who spend a disproportionate amount of time online) that may influence quality of data yielded. Thus, while steps were taken in this study to verify data quality (e.g., the use of attention checks, looking for straight lining, and appropriate amount of time spent on the task), it is important not to overgeneralize results from this study due to the inherent limitations of the MTurk sample. Moreover, the pilot study (on which several initial decisions for the final experiment were based) was drawn from a very small convenience sample of college students, the researcher's personal contacts, and people willing to "exchange" survey completion tasks on social media.

The sample size of this study is another important limitation to consider. While the sample was large enough to create reasonably sized groups to detect some differences between conditions, group sizes were both small and uneven when additional independent variables were added to models to test for interaction effects—subgroups based on religiosity were particularly unbalanced, containing nearly 85% Christians in comparison to the national average of 65% (Pew Research Center, 2019). This is a significant limitation insofar as many predictions from the DPM concerned examining how subgroups of people would respond to different conditions. Future research should carefully recruit people who identify with specific demographic characteristics on which their research questions and hypotheses depend to ensure large and even group sizes for statistical analysis.

Next, it is important to consider weaknesses in the analysis process. Specifically, because the purpose of this phase of the study was to test a new model based on qualitative findings, more sophisticated approaches, such as structural equation modeling,

would offer important advantages. Unfortunately, such procedures are beyond the skillset of the sole researcher for this dissertation project. Future research should employ more sophisticated statistical techniques to test the conceptual relationships examined in this study.

ACP is a behavior with many barriers (Seiter, 2020) and involves several steps, including preparation, action, and follow-up (Abney et al., 2014). Thus, the fact that the survey was only conducted at one point in time is a significant limitation of a study intended to measure intention to engage in ACP. While the third phase of the study presented in the next chapter involves qualitative interviews with participants several weeks after the initial experiment, future research should consider use a longitudinal design, employing several quantitative surveys over time to see if ACP intention/behaviors change for participants. Moreover, the data were collected during the COVID-19 pandemic, a cataclysmic event, which has forced people to confront mortality daily in media (e.g., Allsop, 2020; Grippe, 2020). This may be a significant confounding factor for the present study, and future researchers should replicate this experiment when the pandemic subsides.

Directions for Future Research

In addition to correcting for the limitations of this exploratory study, future research should build upon its findings. Specifically, other types of humor should be examined, insofar as perception of humor is culture-specific and dynamic. Additionally, future research should continue to examine the potential benefits and detriments of profanity as a persuasive approach in this and other health contexts. This study's findings

regarding religion are largely contrary to DPM predictions. Future research may further investigate the role of religiosity by zeroing in on its important sub-dimensions (e.g., Christian conservatism, religious dogmatism, flexibility in religious beliefs, etc.; see Joeckel, 2008). Finally, it is imperative that future research examines different kinds of humorous and/or profane interventions beyond mere exposure to a short podcast clip. For example, it might be worthwhile to measure intention towards ACP before and after a workshop run by members of the DPM.

Conclusion

The present study examined the effectiveness of different types of messages about ACP that are representative of DPM rhetoric. In general, this study found that non-humorous messages are more likely to be perceived as effective, especially for Christians, older generations, and people who avoid using profanity, than clean and profane humor messages. Although this study offers important findings regarding message reception, it appears that simple exposure to a podcast clip, humorous or not, was not a powerful enough intervention in this instance to decrease death anxiety or communication apprehension about death, motivate change in attitudes, subjective norms, perceived behavioral control, or intention to engage in ACP behaviors.

CHAPTER 5: PHASE THREE – QUALITATIVE INTERVIEWS WITH EXPERIMENT PARTICIPANTS

Background

The purpose of this final phase of the project was to examine participants' experiences with the intervention in phase two with more depth. Specifically, this interview process was designed to elucidate unique findings from phase two and offer further insights about the accuracy of DPM predictions from phase one. This method of conducting qualitative interviews after a quantitative experiment is known as sequential explanatory design and is valuable because it allows the researcher to refine and explain statistical findings by collecting rich data rooted in participants' perspectives (Ivankova et al., 2006). Moreover, by conducting these interviews a few weeks after the initial survey, this phase serves a secondary purpose as an exploratory longitudinal assessment of intentions to engage in ACP after initial exposure to the intervention. By conducting interviews after a quantitative experiment, researchers can gain deeper understanding of results and add depth to interpretation of those findings. This is especially important for this study because several predictions from the theoretical model were not supported by the data in phase two. Further, because the interviews in this phase occurred several weeks after the initial experiment, this phase allows for at least some understanding of potential effects of the podcast intervention over time.

This phase of the study sought to gain deeper understanding of several findings from the quantitative experiment. First, while the humorous conditions were perceived as more humorous than non-humorous conditions, it is worthwhile for campaign designers to understand details about what from each podcast clip amused participants (e.g., phrases, parts of the story, delivery). Next, it is useful to better understand why participants apparently perceived humorous podcast conditions as less effective than nonhumorous podcast conditions (e.g., perceptions of lower credibility, offensiveness, etc.). Additionally, results from phase two seem to indicate that humorous clips increased positive emotional responses but had no effect on negative emotional responses; it would be useful for future campaigns to understand specifically what aspects of each clip evoked positive and/or negative emotional responses. Finally, several DPM lay theories about different groups of people (e.g., religious people, older people, people who use little profanity) have minimal, if any, support in the literature and mixed support in phase two of this project. It would be helpful to gain deeper understandings of how people with those traits respond to each clip. With these reasons as a guide, the following research questions were posed:

RQ1: What, if anything, was most memorable about the podcast clips weeks later?

RQ2: What, specifically, did participants like or dislike about (a) non-humorous clips, (b) clean humorous clips, and (c) profane humorous clips?

RQ3: Since first exposure to the podcast clips, have participants' intentions changed towards ACP?

Methods

Participants were recruited via email after indicating interest in participating in a follow-up interview during the initial MTurk online experiment. Of the total sample of participants who indicated interest by leaving their email addresses (N = 171), a small portion agreed to participate in the interview (N = 9). The researcher sent four follow-up emails, addressed individually to each participant, but ultimately only nine were willing to participate. See Table 21 for participant demographic information.

Interviews lasted between 15-20 minutes and were conducted via Zoom video chat. After the conclusion of the interview, participants were paid \$5.00. Participants were first asked what, if anything, they remembered about the podcast clip from the initial survey. Next, the clip to which they were originally exposed was played again to refresh their memories. Then, they were asked to discuss what if anything was notable about the clip this time around, what if anything they liked about the clip, what if anything they disliked about the clip, what if any emotions the clip evoked for them, whether they could envision listening to the rest of the clip in their spare time, what they thought about ACP as a result of the clip, and what their future intentions were to engage in ACP. Additionally, participants who were played the non-humorous clips were asked how they thought they would feel if the clips were (a) humorous and (b) profane. Similarly, the participants exposed to the clean humorous clips were asked how they would feel if the clips contained intermittent strong profanity (and were provided examples), and participants exposed to the profane condition were asked whether they would prefer the clip without the profanity. Notably, not a single person interviewed

during this phase had heard of Caitlin Doughty or the DPM. Interviews were conducted alongside analysis and stopped once it was clear that no other participants were willing to be interviewed. Although it is unlikely that true data saturation occurred in just nine interviews, Guest et al. (2006) found that important meta-themes in qualitative research are most often found after six interviews, three fewer than the present study. In tandem with two other phases, this final phase, despite its small sample size, offers useful findings to guide future research to support message testing studies about ACP. During interviews, the researcher would repeat his interpretation of what participants said for the participant to verify, refute, or revise that interpretation.

 Table 21. Phase Three Demographic Information

Pseudonym	Gender	Race/Ethnicity	Age	Condition	Religion	AD
Peter	Man	Asian	32	Profane Actress	Christian	No
Timothy	Man	White	57	No-Humor Actress	Agnostic	No
Charles	Man	Black	29	No-Humor Actress	Catholic	No
Jay	Man	White	70	Profane Actress	Christian	Yes
Matt	Man	White	32	Clean Actress	Atheist	No
Hannah	Woman	White	32	Clean Actress	Atheist	No
Linda	Woman	White	46	Non-Humor Actor	Christian	No
Susan	Woman	White	66	Clean Actor	Atheist	Yes
Eliza	Woman	White	21	Clean Actor	Atheist	No

Analysis

Interview recordings were manually transcribed by the researcher. Next, the researcher read over the transcripts to get a sense of the data. Then, the researcher began a process of open coding, taking "chunks" of data based on singular ideas, summarizing the main idea of each chunk, and naming the idea. Once the entire transcripts had been open coded, the researcher grouped codes together based on similarities. After that, the researcher examined patterns of similarities, which were grouped into themes if at least

three participants independently spoke to the idea. Finally, once themes were decided upon based on patterns of common ideas, the researcher selected exemplar quotes to illustrate each theme.

Results

RQ1: What, if anything, was most memorable about the podcast clips weeks later?

No participant was able to remember anything specific from the podcast clip they heard a few weeks prior, humorous, or not. This finding is interesting insofar as humor literature has discovered in several instances that humorous messages are more memorable than non-humorous messages, and indeed, often result in a "sleeper effect" (Nabi et al., 2007). Notably, several participants (N = 3) remembered the survey questions themselves, even accurately reciting a few. Turner-McGrievy et al. (2013) discuss how e-health interventions with podcasts are novel but lack interactivity. It is important to consider that the sample for this study came from MTurk, and indeed, most participants mentioned that they have taken hundreds of surveys in the weeks between the time data were initially collected and the follow-up interview. Future research testing the memorability of humorous versus non-humorous messages should consider sampling from a population that does not engage in research often and utilize more interactive methods alongside the podcast clip to enhance potential for memorability.

RQ2: What, specifically, did participants like or dislike about (a) non-humorous clips, (b) clean humorous clips, and (c) profane humorous clips?

The next research question sought to understand what, in each podcast condition, participants responded to and whether their responses were positive or negative. Analysis

yielded five themes and several subthemes. The first theme –*clean humor has broad* appeal—contains two subthemes: *parental tone versus friendly tone*, and *profanity is risky*.

Regarding the first subtheme, parental tone versus friendly tone, 100% of participants in the non-humorous conditions (N=3) noted that the non-humorous condition had a tone like a lecture or an overly serious public service announcement. Although one participant said that "hearty, pragmatic people who like to prepare for everything" would like the non-humorous tone, all participants in the non-humorous conditions indicated that the tone of the clip would not go over well with many people, especially younger people. Regarding this, one participant said, "It was a little bit of a lecture. Like, something my parents would say. If I told my teenager this, they would be like, "shut up, mom." [laughter]." In contrast, to the lecturing tone of the non-humorous messages, the humorous conditions were perceived as having a casual tone. One participant said the following regarding this insight, "It was like casual conversation between two friends."

Regarding the second subtheme, *profanity is risky*, 100% of participants who were asked (N = 8; the first interviewee was not asked this question) shared the insight that profanity is, at best, a risky communication strategy. One participant shared the insight that clean humor is usually the better choice over profane humor because there is no risk of offending people who use profanity when using clean humor. Specifically, this participant said:

I would be okay with [the clip containing profanity]. I mean, I curse like a sailor. But I like the clean version of it. I think it's for a wider variety of people. Because people who curse like sailors are never offended by something without curse words, but people who don't curse like sailors generally *can* be offended by things with profanity in them. So, to get a wider audience, you should keep the profanity out of it, even though I wouldn't mind it personally.

To reinforce this point, when exposed to the profane clip, one man (notably, the oldest participant) shared the following strongly worded perspective about the profane humorous clip delivered by the woman:

She has a very bad language disability. Anybody that has to use that much [profanity] needs to increase their vocabulary. It's like she's trying to impress me, and it's really boring and boorish. Come on, honey. Improve your language skills!

The next theme, *exaggeration is funny*, has two subthemes: *animated delivery* and *absurd details*.

The first subtheme, *animated delivery*, concerns the ability of speakers to use their voices in ways that are engaging and entertaining to listeners. By design, the deliveries for both humorous conditions were warm and animated, while the non-humorous conditions were warm but subdued. When asked about feelings toward speakers in the non-humorous clips, the most positive feedback was about their ability to enunciate ["His voice was very clear. I had no issues understanding it."]. In contrast, participants had

many positive things to say about how the animated deliveries in the humorous conditions kept their attention, amused them, and endeared the speakers to them.

Specifically, one participant said the following about the woman in the clean humorous clip.

I appreciate the podcaster kind of putting emphasis on different kinds of voices. I could totally see [the character's] ex-girlfriend talking like that, and the parents being confused! [laughter] ... She made me feel comfortable. And I believe she could go from voicing characters to going back to her normal method of speech while delivering an effective message about end-of-life planning. It was entertaining, and yet, I also felt it was informative.

The second subtheme, *absurd details*, concerns participants' observations about how absurd details written into the scripts of the humorous podcast clips were the stand-out "funny" moments. Indeed, four out of six participants exposed to humorous conditions mentioned the falling crane, boba tea, and "my dog's definitely gonna die" bits from the clips as being funny. Regarding this, one participant said the following when asked which parts of the profane humorous clip, if any, he found funny:

When she was describing being hit by a crane. I mean, there's a whole lot of other things that can happen to you, but hit by a crane? I mean you can drive a car, you can cross the street... but hit by a crane?! [Laughter].

The third theme, *memento mori*, concerns participants' responses to the reminder of mortality in the beginning of each podcast clip. Five of nine participants asked—without specific prompting about the "memento mori" in the introduction – how this was

a surprising, attention-grabbing, often effective introduction to the podcast clip.

Specifically, one participant said the following of the memento mori introduction:

The directness, right off the bat, saying everyone is going to die. It's an important message for young people. [That introduction] grabs your attention and makes you listen to what the person is about to say, whereas a gradual approach might not grab someone's attention.

Notably, when delivered in an animated fashion, the memento mori appeared to enhance humor in the humorous conditions. In the humorous conditions, participants frequently discussed how the memento mori made them laugh. Specifically, one participant said the following.

[The introduction] was very matter of fact about it. I did laugh at the beginning of 'I'm going to die, you're going to die, the dog's going to die. Oh, and by the way I'm going to die too.' Because it's irreverent. It's treating it lightly. It's better than a lot of sobbing.

The fourth theme, relevance to specific age groups, contains two subthemes: generation-specific language and similarities between audience and speaker/character.

The first subtheme, *specific language*, concerns how participants perceive that specific words and phrases may be vary in relevance between different age groups. Specifically, one participant talked about the use of the word "adulting" in the clean humorous podcast, which was introduced as "Adulting 101." Regarding this, one Millennial participant stated:

I like the title "Adulting 101" because I think it reaches a Millennial audience. I did however read an article about things that Gen[eration] Z dislikes Millennials for. Or things Millennials are [considered] dated for. And one of those things is the term "adulting." So, I think it would be reaching my audience...but my criticism [is that the term] "adulting" reaches a limited market.

The second subtheme, *similarities between audience and speaker/character*, concerns the importance of ensuring the script for the intervention is delivered by a source the audience relates to, and, if the clip contains a narrative, whether or not the characters in that narrative have similar lived experiences to the target audience. The scripts were written to be relevant to a wide variety of age groups, including a narrative that involves both a college-aged person and his parents. Unfortunately, it became clear after interviewing participants from both groups that only younger audience members perceived the podcast as relevant. In fact, all five younger participants (four Millennials and one Generation Z) expressed that they related to the speaker and characters in the clip, and all four participants from Generation X or older expressed that the clip was not "for them." Specifically, one Millennial participant shared the following perspective, "The way that the presenter said the message was quite relatable with my generation. It's appealing with us." In contrast, one Baby Boomer participant shared the following perspective:

I'm not the target audience for that particular clip, because I am an older person.

So, this is obviously aimed at younger people. If I put myself in the frame of a younger person, I would think I could relate to it. I think if an older person who is

a parent hears that, they're going to be pretty irritated. No matter how true it is that you don't know your children, parents will never admit to that.

RQ3: Since first exposure to the podcast clips, have participant intentions changed towards ACP?

The final theme of this study, *humor motivates the moderately involved*, is especially important and relevant to the previous phases. This theme concerns the finding that, in contrast to previous quantitative results from phase two of the study, participants can indeed be motivated to engage in ACP after exposure to a humorous podcast clip. Notably, this was only the case for individuals with moderate previous interest in ACP (i.e., they had thought about ACP but never actually engaged in any sort of conversation about it); people with no interest in ACP or people who had already engaged in ACP did not report any interest in engaging in the behavior (or engaging in the behavior again). Even more notably, only the humorous conditions seemed to motivate specific intentions regarding planning future ACP; participants who had never engaged in ACP who were exposed to the non-humorous condition expressed that they believed the behavior was important but then said that they probably would not do it soon due to busy schedules. Regarding this phenomenon, one Millennial participant, who had not previously engaged in ACP and was exposed to the clean humorous condition, shared this insight:

I work with an attorney, and we do things like health care directives. But I always put off planning for my own estate because I don't own [a home]. So, I wouldn't create a trust. And I have no contact with my family. But I didn't consider the fact that accidents happen every day, and now I'm thinking about cashing in on my

lawyer friend's offer to draft a durable power of attorney for me! Just as a fail-safe because I don't want anybody making medical decisions that can't be reversed. My wishes aren't in writing. What I got from it is, emergencies happen, it's better to have a plan.

In response to this statement, the researcher asked if she was thinking about having that conversation before the interview or if the podcast is what sparked this interest in doing ACP. She responded with the following:

The podcast made me think about it. The thing of the crane falling out of the sky is really what did it for me. Anything can happen. We can get hit by a bus; anybody can. I got a little bit panicked because I realized that I don't have an emergency plan myself for if I were to get hit by a bus or something. And I kind of feel the need to really get that handled before anything happens.

Another Millennial participant who had never engaged in ACP (but acknowledged interest in the topic) and was exposed to the profane humorous condition expressed a similar response to the follow up question, affirming that the podcast inspired a desire to call his older sister later in the week to express his desire not to be kept alive while in a coma so others could have the medical resources. The specificity of these plans (e.g., naming a specific conversational partner, making an appointment for a time in the very near future, specific points of conversation) potentially speak to the power of the humorous podcast intervention for at least three younger participants who had not previously engaged in ACP. Importantly, these three individuals did not remember much of the MTurk experiment from a few weeks prior, which may speak to the fact that the

interview itself, alongside the podcast, may have served as its own more powerful intervention. Thus, the answer to RQ3, at least for several participants, is that the intervention appears to have influenced their intentions to engage in ACP in the near future. See Table 22 for summary of all themes from this phase of the study.

 Table 22. Phase Three Themes

THEME	SUBTHEME(S)	EXPLANATION	EXAMPLE(S)
CLEAN HUMOR HAS BROAD APPEAL	Parental tone versus friendly tone	Humorless messages that tell someone what they should do are received as paternalistic lectures. In contrast, humor creates a casual tone, like one would find between friends.	
	Profanity is risky	Strong language limits an audience to those who are not offended by cursing.	
EXAGGERATION IS FUNNY	Animated delivery	A skilled actor who uses varied and interesting voices is engaging.	Using different voices/accents to differentiate characters in a narrative example.

	Absurd details	Writing situations and phrases into the script that are unusual, exaggerated, or absurd enhances perceived humor.	A story about a person being hit by something outlandish (e.g., a falling crane, an ice cream truck) rather than something mundane (e.g., a car).
"MEMENTO MORI"		In the introduction, reminding the audience of their	"You're going to die."
		mortality in a direct, matter-of-fact manner grabs the receiver's attention.	"Let's face it, we're all going to be worm food someday."
RELEVANCE TO SPECIFIC AGE GROUPS	Generation- specific language	Use phrases that appeal to the target audience.	"Adulting" is a common phrase among Millennials, but Generation Z dislike the phrase and Baby Boomers don't perceive it as relevant.
	Similarity between audience and speaker/character	The speaker and any characters in a narrative should be relatable in terms of current lived experiences to the target audience.	A twenty-year old main character in a narrative about ACP may not be relatable to an older audience.
HUMOR MOTIVATES THE MODERATELY INVOLVED		In contrast to the completely unmotivated, people who have some interest in ACP but have never "pulled the trigger" express strong motivation to engage in the behavior after	

listening to humorous clips about the
 process.

Discussion

Participants, regardless of condition, did not remember the podcast clips they heard a few weeks prior. This is contrary to previous findings from Nabi et al. (2007) who found that humorous stimuli are more likely to result in a "sleeper effect," and be more memorable in the future. As noted in an earlier chapter, it is possible this finding occurred because the sample was not only drawn from MTurk, but it also included people with a "resume" for completing previous tasks effectively. Indeed, all participants mentioned that they had taken many surveys in the previous weeks; thus, it is probable that the humorous stimuli would have been more memorable to a population outside of MTurk workers, many of whom are "professional" survey takers.

Notably, in contrast to findings from phase two, participants expressed overwhelming support for clean humor over non-humorous and profane humorous conditions. Participants expressed that the non-humorous condition sounded like a lecture, and indeed, it is possible the clip's tone induced psychological reactance (Brehm & Brehm, 1981). In short, the literature on psychological reactance posits that people who feel their autonomy is threatened will experience negative cognitions, which often leads to counterarguing and resistance, rather than successful persuasion (Brehm & Brehm, 1981). Furthermore, psychological reactance often manifests as a hostile affective

response to a message (Dillard & Shen, 2005). Participants discussed how the non-humorous condition made them feel infantilized, although interestingly, the humorous conditions contain the exact same information, but no participant offered thoughts about the humorous conditions inducing psychological reactance.

Responses to the profane humorous message were also stark. For participants who dislike profanity, the swear words present in the profane clip were enough in and of themselves to dissuade enjoyment and intention to share the clip with others. Even participants who claimed to use profanity themselves expressed that profanity should not be used in this context, to attract a wider audience. In short, not a single participant expressed a favorable opinion of the profanity; instead, opinions ranged from neutral to strongly against use of profanity in the podcast clip. This is consistent with previous findings from phase two that profanity was perceived as offensive and is consistent with literature stating that profanity can lead to negative expectancy violation (Johnson & Lewis, 2010).

Participants in the humorous conditions expressed that small, absurd details were funny to them. Details in the story of the person being hit by a falling construction crane, the phrase "the dog is *definitely* gonna die," and the narrative of an intrusive ex-partner obsessed with boba tea were often cited as funny and effective elements of the clip. Comedians often use the technique of adding silly or absurd details to stories (Zafarris, 2019), and it is likely that these small details alongside an exaggerated delivery (e.g., animated, distinct voices) are likely what led to the differences in perceived humor between conditions in the previous phase of this project. Researchers who wish to design

humorous stimuli in the future would be wise to emulate this study by also hiring a professional comedian to co-write scripts and add absurd/exaggerated details.

Each of the clips started with a "memento mori," which is a reminder of one's mortality. Participants in all conditions spoke to how starting the clip with this statement was attention-grabbing. However, in the non-humorous condition, the jarring nature of the memento mori was not well received, and indeed, one participant suggested that a "softer approach" would be better. In contrast, when delivered with humor (i.e., animated voice), participants spoke to how that introduction caught their attention because it made them laugh. This finding reinforces previous studies, which found that humor decreases tension when related to emotionally distressing topics (e.g., Weber et al., 2006; Weller & Zorn, 1997). In general, the "memento mori" was a strong start to the clips in terms of grabbing attention. The DPM and related organizations frequently use the memento mori technique in media, and it seems like doing so with a light approach (e.g., with humor) is a good choice for grabbing attention without alienating listeners.

While interviewing participants of different ages, it became clear that older generations did not perceive the podcast to be relevant to them or their experiences. In contrast, younger people, especially Millennials, related to both the speaker and the college-aged main character of the narrative in the clip. As discussed previously, homophily between the source and the receiver is an important determinant of perceived credibility when it comes to motivating health behaviors (Wang et al., 2008). It is clear, in this instance, that future researchers should craft narratives and hire speakers that

emphasize similarities with a target audience rather than hope to reach a broad audience that is very different from the speaker/characters.

Perhaps the most notable and surprising finding from this study is that some participants (i.e., young people who were mildly to moderately interested in ACP) seemed strongly motivated to engage in ACP after listening to the humorous podcast clips a second time. Indeed, after listening to the humorous clips, three participants who had never formally engaged in ACP, expressed a detailed plan about future ACP, including a specific conversational partner, topics of conversation, and a time in the very near future. When asked whether they had been thinking about that before or whether it was the podcast that inspired this motivation, all three participants stated that it was the podcast that inspired a newfound interest in the behavior. Interestingly, two of these participants listened to the clean humorous podcast and the other listened to the profane humorous podcast; moreover, another participant in the same age group with moderate interest in ACP expressed no increased motivation to engage in ACP after listening to the non-humorous podcast. While causal claims cannot possibly be made from the perspectives of just a few participants, it is still notable that these participants stated that the podcast stimuli inspired increased ACP intention. Perhaps a better explanation is that it wasn't solely the podcast inspiring this newfound interest in the behavior, but rather, the podcast in tandem with the twenty-minute interview. In other words, it is possible that the interview itself, alongside the podcast, served as a second, more powerful intervention than just listening to the podcast alone. This speaks to the importance of future research about interventions involving other components beyond simple exposure

to a short media clip about ACP. Indeed, interpersonal closeness and rapport developed between the researcher and participants, alongside the podcast clips, possibly contributed to the newfound interest in ACP for these individuals. Moreover, it may be that continued participation in ongoing ACP research and the possibility of increased social desirability pressure contributed to this apparent change in heart, too.

It is quite interesting that the results from this final phase seem to coincide much more with predictions from the DPM, while also diverging considerably from the findings of the quantitative experiment in phase two. Indeed, looking at the findings from the quantitative study, one might be tempted to conclude that humorous stimuli are not a worthwhile approach in the context of ACP motivation; these conflicting findings, while further muddying the waters to an extent, indicate that this is a complex area requiring further study.

Limitations

Limitations of this final phase are significant. That said, rather than viewing this phase as a complete study in and of itself, it is best to think of these findings as supplemental to the findings of phases one and two. First and foremost, the small sample size for this study must be addressed. Nine people from an MTurk sample, which scholars note already has issues as far as representativeness of the general population (e.g., Harms & DeSimone, 2015), is not enough to make any sort of strong claims about the extent to which these perspectives are likely to accurately represent the other participants who chose not to be interviewed. Indeed, the most that can be said about the present study's findings is that steps were taken to ensure the opinions and perspectives

of these nine individuals were represented truthfully. Additionally, the researcher worked alone during interviews and analysis. While he attempted to be objective during analysis (e.g., making note of findings that both support and refute predictions and findings from the previous phase) it is impossible that he was entirely objective in this process.

CHAPTER 6: GENERAL DISCUSSION AND EVOLUTION OF THE DEATH MESSAGE PROCESSING MODEL

The purpose of this final chapter is to provide a brief and retrospective encapsulation of the entire project, focusing primarily on the degree to which interviews from phase one informed the nature of inquiry in phase two, and the degree to which results across phases correspond or contradict one another. In addition, after highlighting insights and findings from each of the three phases, a final integrated model will be presented, and conclusions about the overall project and its contributions will be discussed.

Brief Review of Guiding Literature

The following section will briefly recap important findings from social scientific and non-scientific literature. For more in-depth discussion, see chapter two and the beginning of chapter three.

Advance Care Planning

Recall that advance care planning (ACP) is the process of communicating with others about EOL wishes (Butler et al., 2014). ACP is best conceptualized as a preventative health behavior because it leads to decreased burden on families, fewer ICU admissions, fewer in-hospital deaths, increased satisfaction with care, and clarity about a patient's wishes (Houben et al., 2014; Tierney et al., 2001; Wright et al., 2008; Zhang et

al., 2009). Despite these benefits, fewer than one-third of American patients engage in ACP (Rao et al., 214; Yadav et al., 2017). Thus, this project was undertaken as part of a budding research program intended to find message strategies to motivate American patients to engage in ACP with their families.

Theory of Planned Behavior

The theory of planned behavior (TPB) posits that behavioral intention best predicts engagement in specific behaviors (Ajzen, 1991). Further, TPB states that attitudes towards the behavior, norms about the behavior, and perceived behavioral control towards the behavior predict behavioral intention (Ajzen, 1991). TPB is widely used as a theoretical framework in health research (for meta-analyses, see McEachen et al., 2011; Godin & Kok, 1996; Rich et al., 2015). Because ACP is a complex behavior that requires intentionality, scholars have identified TPB as a prominent framework to guide research about ACP (Scherrens et al., 2018). For example, Seiter and Brophy (2020) found that inducing worry in patients motivates information seeking behavior about EOL communication. The present dissertation study builds upon that work by examining more positive approaches (i.e., humor) to motivating ACP.

Terror Management Theory

Topics that can be perceived as morbid, such as death and dying, naturally arise during ACP. Thus, it was critical for this study to consider the role of death anxiety and communication apprehension about death as factors that potentially de-motivate ACP. Terror management theory is a prominent theory that posits people engage in cognitive defenses to stave off death anxiety (Burke et al., 2010). First, TMT posits *proximal* death

defenses manifest in conscious cognitions that protect receivers from death anxiety (i.e., you need not fear death because you are young, healthy, important, attractive, etc.).

Second, TMT posits *distal* death defenses occur when thoughts of death are subconscious, which results in behaviors like worldview defense and finding increased importance in symbolic cultural traditions (Burke et al., 2010). In the context of health, the terror management health model (TMHM) posits that increasing mortality salience in receivers results in avoidance of advocated health behaviors (Goldenberg & Arnd, 2008); this is an especially germane and troubling finding for motivating a health behavior like ACP that directly involves discussing death and dying.

Understanding effects of messages on death anxiety is important, but perhaps more relevant to communication researchers is a related phenomenon: communication apprehension about death. Communication apprehension about death, like death anxiety, is counterproductive in EOL health contexts. Specifically, Carmack & DeGroot (2020) found that communication apprehension about death negatively impacted the extent to which people were willing to register as organ donors. This is significant, because both ACP and organ donation are behaviors that (a) concern future outcomes, (b) necessitate thinking about death and dying, and (c) lack adequate buy-in from the public. Thus, the need to find a message strategy to counteract negative emotions like death anxiety and make topics like ACP seem more approachable was a primary motivation of this study. Consequently, investigating the persuasive efficacy of humorous messages about death emerged as a central priority of this research.

Humor

Humor is a communicative activity that is conceptualized as intentional, verbal and/or non-verbal messages that elicit pleasurable responses in receivers (i.e., laughter) (Booth-Butterfield & Booth-Butterfield, 1991; Lynch, 2002). The incongruity theory of humor posits that humor has a fundamental structure whereby arousal or tension is evoked in a receiver in response to a perceived incongruity within an environment, which is followed by a psychological mechanism that allows the receiver to enjoy the incongruity (Plessner, 1970; Speck, 1991).

Benefits of Humor as a Persuasive Strategy

Recall that humor works by affecting both emotions and cognitions of receivers (Eisend, 2011). In advertising contexts, humor has considerable advantages insofar as increasing receiver attitudes towards the ad and brand (Eisend, 2009). Further, humor increases both positive affective responses and decreases negative affective responses to messages (Eisend, 2009). Moreover, humorous messages catch receiver attention and are more memorable than non-humorous messages (Eisend, 2009; Nabi et al., 2007).

Of particularly utility for health communication scholars, humorous messages make potentially threatening topics seem more approachable. For example, humorous messages have been found to decrease binge-drinking intentions in college students (Lee et al., 2015). Further, humorous messages have been shown to be more persuasive in the context of both alcohol and drug abuse campaigns (Conway & Dube, 2002). Even more promising, humorous messages were more persuasive than sad messages in motivating organ donation, another future oriented, EOL communication behavior, like ACP. Further

supporting this point, Weller and Zorn (1997) found that humor was beneficial in decreasing tension for medical students in cadaver labs.

Drawbacks of Humor as a Persuasive Strategy

Although humor has benefits as a persuasive strategy, humor has several noted drawbacks, too. Specifically, in advertising, humor has been found to decrease perceptions of source credibility, has little impact on receiver comprehension of the message, and little ability to influence purchase behavior (Eisend, 2009). Indeed, in the context of advertising, Weinberger and Gulas (1992) conclude that humorous messages do not have significant advantages over non-humorous messages. Humor can also undermine the seriousness of issues (Petty & Cacioppo, 1979), which is an especially important drawback for health communication research. Indeed, one study found that humorous messages decreased severity perceptions of unprotected sex, which in turn decreased intentions to practice safe sex (Moyer-Guse et al., 2011). Another study found that sarcastic, humorous anti-drug messages were less persuasive than non-humorous sarcastic anti-drug messages (Alabastro et al., 2012).

Expectancy Violations Theory

In the context of persuasion, expectancy violations theory (EVT) posits that positively perceived violations of expectations persuade receivers in the direction of the advocated position, whereas negatively perceived violations of expectations either do not persuade, or even counter-persuade, receivers (Burgoon et al., 1989). Because humor inherently relies upon perceived incongruities among an expected, rational order in an

environment (Plessner, 1970; Speck, 1991), EVT is an apt theoretical framework for research examining humor.

Walther-Martin (2015) found that humorous political ads resulted in positive expectancy violations and resulted in favorable evaluations of the source. In educational contexts, use of humor by instructors results in positive expectancy violation (Sidelinger, 2014). However, another study demonstrated that humor could result in negative expectancy violations, too, when a humorous pun by a political candidate resulted in decreased credibility and voter support (Bullock & Hubner, 2020). To the best of the author's knowledge, no studies have used EVT to examine humor in the EOL context. However, an influential social group known as the "death positive movement" (DPM) frequently uses humorous rhetoric to motivate healthy EOL communication. Figure 13 below depicts the theoretical model based on social scientific literature (note that this model is identical to Figure 1 from chapter two).

The model in Figure 13 below posits that perceived humor results in positive expectancy violation, which increases positive affect and decreases death anxiety/communication apprehension about death. In turn, this process increases determinants of behavioral intention (i.e., attitudes, norms, and PBC), behavioral intention to engage in ACP, and eventually behavioral engagement in ACP. In short, humor mitigates the unproductive relationship between death anxiety/communication apprehension about death and ACP intention. This initial phase of model construction elucidated the important roles of humor's influence on both emotions and cognitions,

humor about death as expectancy violation, death anxiety/communication apprehension about death, and determinants of ACP according to TPB.

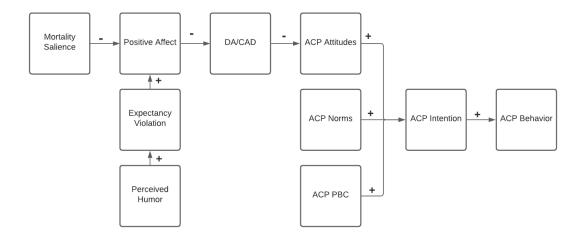


Figure 13. Theoretical Model Depicting the Role of Humor in ACP Motivation, Derived from TPB, TMT, Integrative Affective-Cognitive Model of Humor, and EVT.

Note: TPB is an abbreviation of theory of planned behavior; TMT is an abbreviation of terror management theory; EVT is an abbreviation of expectancy violations theory; ACP is an abbreviation of advance care planning; DA/CAD is an abbreviation for death anxiety and communication apprehension about death, respectively; and PBC is an abbreviation for perceived behavioral control.

The Death Positive Movement

Caitlin Doughty is a three-time New York Times best-selling author, influential YouTube content creator (nearly 150 million views at present), and the de-facto figurehead of the DPM. The DPM is a social movement that includes smaller organizations such as The Order of the Good Death, Death Cafes and Death Salons, among others. Few researchers have studied communication behaviors of the DPM; though, one study found that Death Café facilitators advocate for changing EOL communication norms, and validate stories, desires, and fears about death. (Baldwin, 2017). Most importantly to the present study, by Doughty's admission, humor is an integral component of the DPM's rhetorical approach towards motivating EOL communication. Irreverence and wit are prevalent in DPM media, including books such as "Will my Cat Eat My Eyeballs? And Other Questions About Dead Bodies" (Doughty, 2019) and podcasts (e.g., an ACP education episode titled, "Get Your Sh*T Together;" Doughty, 2019). Mortensen and Cialdini (2010) recommend that researchers begin studies by examining real world phenomena; thus, studying behaviors of an influential social group like the DPM is an excellent place to begin exploring strategies to motivate ACP.

Review of Findings from Previous Phases

Phase One: DPM Interviews

Recall that the purpose of this project's first phase–interviews with DPM leaders and members—was to elicit lay theories about why humorous messages about death communication might be effective, how to create humorous messages about death communication, under what circumstances humorous messages about death communication might be effective, and for whom messages about death communication might be effective. During this phase, interviewees emphasized the importance of exaggeration and animated delivery, which became instrumental in developing humorous stimuli for use in phase two of this project. Moreover, phase-one interviews were also instrumental in identifying and elucidating important demographic and personality characteristics that might influence message reception. Based on interview findings, message recipients' age/generation, religion, and propensity for using profanity became crucial focal points in later phases of the project. In fact, participants' propensity for using profanity became central to the development of research questions for this project. Specifically, many of the research questions addressed in phase two were derived from interviewees' observations about whether clean or profane humor would be more persuasive. Finally, and perhaps most importantly, phase-one interviews prompted ideas related to expectancies. Specifically, members of the DPM suggested that humor about death likely results in a "pleasant surprise" for message recipients, thereby inspiring the researcher to consider the central role of positive expectancy violation in the persuasion process. That said, several observations from members of the DPM were not included in

the present study, including the notion that a dark sense of humor may play a role in how persuasive messages are received and responded to. Future studies should examine each of these potentially important constructs. Consult Figure 14 for a conceptual model of lay theories provided by the DPM (note that Figure 14 is identical to Figure 2 presented in chapter three.)

Figure 14 posits (a) comedic intentionality increases likelihood of receivers perceiving humor in a death message, (b) the relationship between perception of humor in a death message and enjoyment of humor in a death message is negatively moderated by religiosity, (c) the relationship between perception of humor in a death message and enjoyment of humor in a death message is negatively moderated by age, (d) sense of humor and irreverence increase likelihood of enjoying humor in a death message, (e) enjoyment of a humorous death message results in positive expectancy violation, and (f) the relationship between enjoyment of a humorous death message and alleviation of death anxiety/tension is moderated by the extent to which receivers feel social attraction to the source.

This phase of model construction echoed several components of the model built from social scientific literature (i.e., humor as expectancy violation, humor alleviating death anxiety by breaking tension) and added several key moderators (i.e., age, religiosity, irreverence) and a second key independent variable in the study (i.e., profanity in a message).

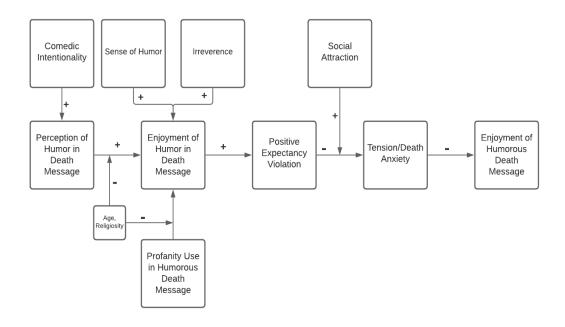


Figure 14. Model of DPM Lay Theories Regarding Humor and Death Communication

Note. There is no positive/negative direct effect posited between profanity use in humorous death message and positive expectancy violation; the model predicts positive expectancy violation in response to profanity in a humorous death message depends on receiver irreverence (positive moderator), age (negative moderator), and religiosity (negative moderator).

Phase Two: MTurk Experiment

Recall that the purpose of phase two was to quantitatively examine an integrated theoretical framework based on both social-scientific literature and DPM lay theories.

This integrated theoretical framework is presented below in Figure 15. This theoretical model posits that humorous death messages result in positive expectancy violation, which

increases perceptions of speaker/message effectiveness and decreases death anxiety/communication apprehension about death. This model further posits that these mechanisms increase determinants of behavioral intention (i.e., attitudes, norms, PBC) and behavioral intention to engage in ACP. Importantly, based on DPM lay theories, the relationship between humor in a death message and positive expectancy violation is moderated by irreverence, age, and religiosity; that is, people who are more irreverent will experience more positive expectancy violation in response to a humorous death message, and older/more religious people will experience less positive expectancy violation in response to a humorous death message. Further, DPM lay theories suggest that profanity use is an important aspect of the model. Specifically, they posit that the relationship between profanity use in a death message and positive expectancy violation is moderated by irreverence, age, and religiosity; irreverence positively moderates the relationship, and age/religiosity negatively moderate the relationship.

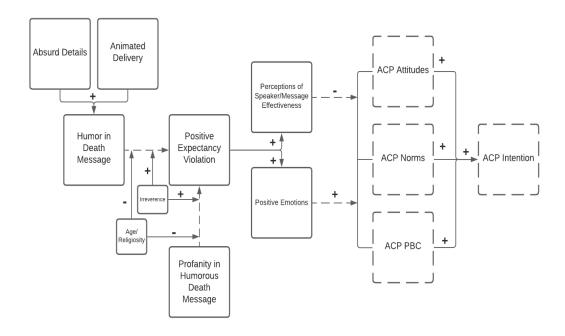


Figure 15. *Integrated Theoretical Framework.*

Note. The model predicts positive expectancy violation in response to profanity in a humorous death message depends on receiver irreverence (positive moderator), age (negative moderator), and religiosity (negative moderator). Dotted lines indicate lack of support or mixed empirical support during the phase two experiment.

Prior to conducting a larger experiment, a pilot test examining whether the clean humorous podcast conditions and non-humorous podcast conditions were received as intended. Results of the pilot test indicated that the stimulus podcasts functioned as intended. As a result, these podcasts were used as stimulus materials for a larger

investigation. Specifically, in an online message-testing experiment, MTurk workers were exposed to one of several humorous, non-humorous, or control conditions, and then asked to complete measures assessing their personal characteristics (e.g., age, propensity for using profanity, religious background) and their reactions (e.g., perceived speaker/message effectiveness, positive expectancy violation, death anxiety, communication apprehension about death, intention to share/ask about EOL wishes, etc.) to the stimulus podcasts. Results of the MTurk experiment both confirmed and disconfirmed several relationships posited in the integrated theoretical model in Figure 15 above. First, consistent with the pilot study, humorous stimuli, both clean and profane, were perceived as more humorous than the non-humorous stimuli, and the humorous-plus-profane condition was perceived as more offensive than the clean stimuli clips.

Because the content of the clips was identical except for humor/profanity, it is most likely that the animated delivery and absurd details in humorous clips were responsible for this difference.

Contrary to predictions of the integrated theoretical model, speakers in the humorous conditions, especially the profane-plus-humor condition, were rated as less effective than speakers in the non-humorous condition. Moreover, both clean humorous and profane humorous messages were, overall, rated less favorably than non-humorous messages for perceived message effectiveness.

Regarding individual differences, the accuracy of DPM lay theories was mixed.

First, regarding religious background, DPM lay theories predicted that Christians would not enjoy humorous messages about ACP. While Christians indeed experienced less

positive expectancy violation in response to profane humorous messages, atheists/agnostics experienced less positive expectancy violation in response to the clean humorous message in comparison to Christians. Further, Christians rated all messages, including humorous messages, as more effective than atheists/agnostics did.

Second, regarding age, DPM lay theories predicted that younger (versus older) people would show more appreciation for humorous messages about ACP. This finding was mostly supported in the data insofar as people from younger (versus older) generations experienced more positive expectancy violation for both the clean humorous and profane humorous conditions. Further, young people rated all humorous conditions as more effective than older people did.

Third, the DPM's lay theory predicted that receivers' propensity to use profanity would influence their reception of profane messages. This notion was supported in the data. Specifically, participants who use high amounts of profanity rated the profane speakers more favorably than did participants who use little profanity. The DPM identified this important personality characteristic in phase one, and indeed, this prediction appears to be empirically supported by phase two of the study. Though, interestingly, the clean humorous condition was rated lowest for all groups in perceived message effectiveness.

Although the humorous messages/speakers were generally rated as being less effective than the non-humorous messages/speakers, in line with DPM lay predictions, humor and profanity appear to yield higher positive emotional response. Interestingly, however, there were no significant effects between conditions for negative emotions.

This speaks, perhaps, to humor's potential in elevating positive affective responses to threatening messages, which is consistent with past findings in social-scientific humor literature (e.g., Eisend, 2009; Lee et al., 2015), though this result contradicts previous findings that humor mitigates negative emotions (Eisend, 2009; Weller & Zorn, 1997).

Notably, this study offers several interesting findings about expectancy violation. First, no significant differences were found between non-humorous and clean humorous conditions, but profane humorous conditions resulted in significantly less positive expectancy violation. Further, in comparison to atheist/agnostics, Christians experienced significantly less positive expectancy violation when exposed to the profane humor condition. Younger people, in comparison to older people, experienced more positive expectancy violation when exposed to both the clean and profane humor conditions. Finally, in comparison to people who use more profanity, people who use less profanity experienced less positive expectancy violation when exposed to both the clean and profane humor conditions. Thus, predictions about positive expectancy violation were largely unsupported insofar as main effects, but partially supported insofar as interaction effects were found between condition and important traits identified by DPM lay theories.

Finally, regardless of exposure to non-humorous, clean humorous, or profane humorous stimuli, participants did not report significantly more positive attitudes towards ACP, higher subjective norms about ACP, higher perceived behavioral control towards ACP, or greater intentions to engage in ACP in the near future than the control group. Further, there were no significant differences between podcast conditions for death

anxiety or communication apprehension about death. Results of this study indicate that a more powerful intervention may be required to motivate participants to engage in a behavior with as many barriers as ACP. Ultimately, the findings of this phase seem to indicate that humor as a message component is more likely to influence perceptions of speaker/message effectiveness and emotions rather than determinants of health behavior change specified by TPB. Attention and message processing alone are not sufficient conditions for behavior change; however, both are important components of the persuasion process (McGuire, 1968; McGuire, 1976; Kleinhesselink & Edwards, 1975).

Phase Three: Follow-Up Interviews with MTurk Workers

Recall that the purpose of the final phase of this study was to gain in-depth insights from participants who engaged in the experiment a few weeks prior. Although the sample size was especially small for this phase, the interviews yielded findings that both elucidate and obfuscate those from previous phases.

Participants from this final phase indicated that the non-humorous podcast condition was unappealing, primarily because it induced feelings of psychological reactance (i.e., the tone was "parental" in an undesirable way). Moreover, participants from this phase strongly recommended against using profane humor due to the risk of offending potential audiences. Specifically, several participants, especially older participants, were offended by the profane humor and expressed many reasons why it should not be used. In fact, even participants who claimed they use a great deal of profanity in their own lives noted that the risk of offending others with strong language is too high to make using profanity worthwhile in this context. In short, these findings about

the risks of profane humor and the benefits of clean humor seem to support predictions, but not findings, from phase two. This is paradoxical, and indeed, warrants future research on the effects of clean versus profane humor in the EOL context.

Participants from the study confirmed predictions and elucidated findings about why each clip was accurately perceived as humorous or non-humorous in the experimental phase of the study. Specifically, as DPM lay theories from phase one predicted, participants in the third phase noted the absurd details and animated delivery present in the humorous conditions. Future researchers should use these guidelines to construct humorous stimuli for health campaigns.

Participants also discussed the importance of the "memento mori" (mortality reminder, "you're going to die") in the beginning of the podcast clips. Specifically, all participants noted that the memento mori caught their attention immediately, but only participants in the humorous condition spoke positively of the memento mori.

Participants in the non-humorous condition stated that the memento mori was, in this context, too harsh, leading them to feel anxious. In contrast, the memento mori in the humorous conditions were discussed as factors that both amused and motivated participants to listen. This finding suggests that memento moris, in tandem with humorous meta-signals (e.g., animated delivery), may account for the fact that humorous conditions yielded more positive emotional responses than non-humorous conditions in phase two.

The participants in phase three echoed the DPM's lay theory predictions about age group being a significant factor in reception of stimuli about ACP. Notably, although

the podcast clips featured characters who were parents of a college-aged child, all four older participants stated that the clip was "not for them." In contrast, four younger participants (i.e., Millennials and Generation Z), discussed that they found the speaker and main character in the narrative (a college student) relatable. This indicates that perceived homophily (Wang et al., 2008) between the speaker, characters, and audience is an important factor for writing scripts for stimuli intended to motivate ACP.

Finally, one of the most interesting findings from this study is that young people who had never engaged in ACP, but expressed moderate interest in the behavior, seemed motivated by humorous, but not the non-humorous, clips. Although the sample size is far too small in this instance to make any strong claims, three younger participants who fit the previous description noted that it was the podcast specifically that motivated them to make a specific plan for ACP in the near future. Importantly, each of these individuals had heard the clips before, so it is likely not solely the podcast that motivated such a stark change, but rather, the podcast in tandem with the interview itself that served as a more powerful intervention.

Thus, it is clear from this review that several findings remained consistent across one or more of the phases, yet others contradicted one another. Based on a consideration of the ensemble of findings, I present the Death Message Processing Model (DMPM) (see Figure 16 below). Note, in Figure 16, boxes and arrows which are not drawn with solid lines were inconsistent between phases, and thus, require significant scrutiny. All relationships in this model require future research, but those findings should be examined with extreme rigor and skepticism.

The Death Message Processing Model suggests the following: (a) absurd details and animated delivery increase perceptions of humor in messages about death, (b) the relationship between perception of humor in a death message and positive expectancy violation is negatively moderated by age, (c) the relationship between perception of humor in a death message and positive expectancy violation is negatively moderated by religiosity, (d) the relationship between perception of humor in a death message and positive expectancy violation is positively moderated by receiver irreverence (i.e., the extent to which receivers use/appreciate profanity), (e) the relationship between profanity in a humorous death message and positive expectancy violation is negatively moderated by age, (f) the relationship between profanity in a humorous death message and positive expectancy violation is negatively moderated by religiosity, (g) the relationship between profanity in a humorous death message and positive expectancy violation is positively moderated by receiver irreverence, (h) positive expectancy violation in response to messages about death (humorous or not) results in increased perceptions of speaker and message effectiveness, (i) humor in a message about death results in increased positive emotional responses to the message, (j) humorous messages about death have no discernable advantage over non-humorous messages about death for influencing death anxiety, communication apprehension about death, attitudes, norms, PBC, or intention to engage in ACP.

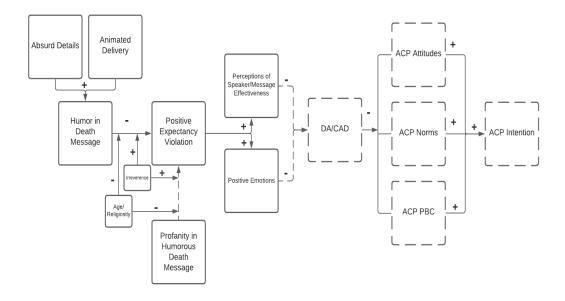


Figure 16. Death Message Processing Model

Note: Boxes or arrows with dotted lines indicate conceptual relationships with mixed findings between phases of this study; these relationships especially, necessitate future research.

Theoretical and Practical Implications

Slater and Gleason (2012) suggest that research should refine existing concepts in established theories. This study offers important findings to refine theories of humor as a persuasive mechanism. Specifically, while other studies have examined humor as a construct broadly, this investigation offers advice to scholars about how to design

humorous interventions (i.e., animated delivery and absurd details) and provides both quantitative and qualitative findings elucidating the differences between clean and profane humor in the EOL context.

Slater and Gleason (2012) provide a comprehensive list of ways in which research studies can contribute to theory and knowledge. Using their list as a guide, I will discuss several ways in which the three-phases of investigation contribute to our knowledge as health communication scholars and behavior change practitioners. Further, this study elucidates contingent conditions (McLeod & Reeves, 1980; Slater & Gleason, 2012) insofar as the phases examined how different populations (e.g., religious groups, age groups, etc.) responded to stimuli intended to motivate ACP. Moreover, the strong design of this mixed-methods study (i.e., qualitative, then quantitative, then qualitative) yielded a framework to serve as a guide for additional research. Specifically, the Death Message Processing Model emerged from a combination of rigorous qualitative observation and quantitative testing based on an initial integrated theoretical framework, which was grounded in both scientific literature and DPM lay theories.

Theory of Planned Behavior

The present study expands upon work on ACP using TPB as a guiding framework. Specifically, this study's findings indicate a complex and muddy relationship between humorous message reception and determinants of ACP according to TPB (i.e., attitudes, norms, PBC, behavioral intention). While past studies have shown promise in using negative emotions to motivate EOL communication behaviors (e.g., worry; Seiter & Brophy, 2020), there were no differences between conditions (i.e., non-humorous,

clean humorous, profane humorous, control) for any determinant of ACP behavior according to TPB. However, findings from phase three indicate that humorous messages in tandem with an in-depth interpersonal conversation about ACP may influence behavioral intention. Importantly, this finding from phase three was found with both clean and profane humorous messages, but not the non-humorous message. Thus, it is likely that short humorous stimuli are less effective than negatively-valenced emotional stimuli for influencing intention, but a more powerful intervention combining humorous stimuli and interpersonal connectedness may achieve better results.

Terror Management Theory

Contrary to past findings that humor makes topics related to death more approachable (i.e., cadaver lab, Weller & Zorn, 1997; organ donation, Weber et al., 2006), this study found limited empirical support for the idea that humorous messages decrease death anxiety or communication apprehension about death. Indeed, the quantitative experiment indicated no differences between groups for death anxiety nor communication apprehension about death. During the phase three interviews, however, anecdotal evidence from participants does support this claim, as the non-humorous clip was described as "heavy," and the humorous clips inspired amusement and, apparently, increased interest in the topic. Notably, the quantitative results indicate support for the idea that humorous messages about ACP indeed increase positive affective responses in receivers, which is consistent with humor literature (Eisend, 2009); whether increased positive affective responses have any meaningful effect on death anxiety or communication apprehension about death is less clear and requires further inquiry.

Humor and **Persuasion**

This study found considerable empirical support favoring use of non-humorous, non-profane messages in the context of ACP motivation. Indeed, in comparison to clean and profane humorous messages, non-humorous messages showed significantly improved ratings of perceived speaker effectiveness, perceived message effectiveness, and positive expectancy violation. Further, the profane humorous messages were rated significantly more offensive than both clean humorous and non-humorous messages about ACP. Moreover, as discussed above, there were no differences between any message type for attitudes or intention towards ACP. As has been discussed, humor has both advantages and disadvantages as a persuasive strategy. Indeed, this study supports findings from Eisend (2009) that humor decreases perceived source credibility. Further, other scholars posit that humor can decrease perceptions of issue severity, thereby undercutting persuasive efficacy (Petty & Cacioppo, 1979; Moyer-Guse et al., 2011) Additionally, this study supports the integrative affective-cognitive model of humor insofar as humorous messages influenced both cognitions (e.g., perceptions of speaker/message effectiveness) and affective responses (Eisend, 2011).

Expectancy Violations Theory

The present study also expands the range of expectancy violations theory, and indeed, found that humor and profanity, most often, yield decreased positive expectancy violation in the context of ACP. While some studies have found that humor results in positive expectancy violations in the contexts of political commentary (Walter-Martin, 2015) and classroom management (Sideliner, 2014) another study found that humor

resulted in negative expectancy violation, decreased perceptions of credibility, and decreased voter support for a political candidate (Bullock & Hubner, 2020). Further, another study found that profanity use led to negative expectancy violation in the workplace, suggesting the idea that valence of expectancy violation is related to norms about formality of the given context (Johnson & Lewis, 2010). This finding, in particular, may help explain the current study's results indicating that humor, especially profane humor, results in decreased positive expectancy violation in a sensitive context like EOL communication.

Practical Implications for the Death Positive Movement and Campaign Designers

Beyond its contribution to the social science literature, this study offers important findings to guide the DPM and others who strive to find ways of helping people approach communicating important EOL topics. Specifically, this study's findings suggest that the DPM should make more efforts to use communication strategies that appeal to people who are religious, people who don't use strong language, and people from older populations. It is clear from their mission that organizations within the DPM, such as The Order of the Good Death, are altruistic, successful in reaching many people, and have changed the world for the better; however, the DPM should use studies like this to guide their communication practices to ensure messages are effective in motivating as many people as possible to engage in healthy EOL communication.

In general, this study mostly supports the idea that humor is a risky strategy in the context of EOL communication and should be used only for populations likely to be receptive to that approach. First, this study suggests that religiosity is not a significant

factor in predicting persuasiveness of clean humor, but profane humor should be avoided if the receiver population is religious. Further, this study found that humorous approaches, both clean and profane, are more likely to be received well by Millennials and Generation Z in comparison to older generations. Finally, participants who use profanity are more likely to be receptive to humorous messages, especially profane humorous messages, in comparison to participants who use little profanity.

When deciding whether to implement humor, campaign designers must consider the potential advantages and disadvantages associated with this message feature. This study, for example, underlines the ability of humorous messages to increase positive affective responses, yet also points to humor's unfavorable effects on perceptions of speakers and messages. Campaign designers should be especially careful using profane humor, as it seems only participants who use a great deal of profanity themselves are receptive to that communication strategy. ACP is a vital communication behavior to mitigate devastating future consequences. This three-phase study and the Death Message Processing Model may inform future interventions intended to promote and motivate difficult conversations about matters related to end-of-life decision making.

Conclusion

This three-phase, mixed-methods study has uncovered more questions than answers about the persuasive value of humor and profanity for motivating ACP. Indeed, findings from this study conflict with both social scientific and lay theories from the DPM. Moreover, findings between phases of this study were inconsistent with one another. In general, findings indicate that humor has value as a persuasive mechanism

insofar as increasing positive affective responses, but in general, non-humorous messages resulted in greater positive expectancy violation and perceptions of speaker/message effectiveness. Profane humorous messages, especially, seem to offer no persuasive advantage over non-humorous or clean humorous messages. Further, this study found support for DPM lay theories regarding the importance of specific receiver characteristics (i.e., age, religiosity, profanity use) on message reception, though DPM lay theories about humor and profanity resulting in positive expectancy violation were unsupported. In general, this study can guide the DPM and other similar groups by cautioning careful and intentional use of humor to motivate societal change in the direction of healthier and more open EOL communication. The DPM is an altruistic community with noble goals, but this study indicates need for the DPM to carefully consider the extent to which their persuasive approaches achieve their stated goal of helping as many people as possible attain a healthier relationship with death. Health communication scholars should examine and interrogate the Death Message Processing Model in future research examining ACP motivation.

REFERENCES

- Abney, L., Burks, A., Pitman, W., Taylor, J., Obert, L., & Kern, N. (2014). Effective communication regarding advanced care planning and end-of-life care options.

 Women's Health Care, 2, 30–34.
- Aillaud, M., & Piolat, A. (2012). Influence of gender on judgement of dark and nondark humor. *Individual Differences Research*, 10(4), 211–222.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T
- Alabastro, A., Beleva, Y., & Crano, W. D. (2012, January). Why sarcasm works:

 Comparing sarcastic versus direct anti-drug messages [Poster presentation]. Society for Personality and Social Psychology, San Diego, CA.
- Allen, M., & Bourhis, J. (1996). The relationship of communication apprehension to communication behavior: A meta-analysis. *Communication Quarterly*, 44(2), 214-226. https://doi.org/10.1080/01463379609370011
- Allsop, J. (2020, June 9). *Have we normalized the COVID-19 death toll?* Columbia Journalism Review.
 - https://www.cjr.org/the_media_today/coronavirus_death_count_normalize.php
- Anderson, C. (2010). Presenting and evaluating qualitative research. *American Journal of Pharmaceutical Education*, 74(8), 141. https://doi.org/10.5688/aj7408141

- Baldwin, P. (2017). Death cafés: Death doulas and family communication. *Behavioral Sciences*, 7(4), 26. https://doi.org/10.3390/bs7020026
- Beck, R. (2009). Profanity: The gnostic affront of the seven words you can never say on television. *Journal of Psychology and Theology*, *37*(4), 294–303. https://doi.org/10.1177/009164710903700405
- Beck, E.-R., McIlfatrick, S., Hasson, F., & Leavey, G. (2017). Nursing home manager's knowledge, attitudes and beliefs about advance care planning for people with dementia in long-term care settings: A cross-sectional survey. *Journal of Clinical Nursing*, 26(17–18), 2633–2645. https://doi.org/10.1111/jocn.13690
- Becker, E. (1973). The denial of death. Free Press.
- Beckman, H., Regier, N., & Young, J. (2007). Effect of workplace laughter groups on personal efficacy beliefs. *The Journal of Primary Prevention*, 28(2), 167–182. https://doi.org/10.1007/s10935-007-0082-z
- Booth-Butterfield, S., & Booth-Butterfield, M. (1991). Individual differences in the communication of humorous messages. *Southern Communication Journal*, *56*(3), 205–218. https://doi.org/10.1080/10417949109372831
- Brehm, S. S., & Brehm, J. W. (1981). *Psychological reactance: A theory of freedom and control* (1st ed.). Academic Press.
- Brewer, M. B. (2007). The social psychology of intergroup relations: Social categorization, ingroup bias, and outgroup prejudice. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (p. 695–715). The Guilford Press.

- Brophy, N.S., Seiter, C. R., & Zhao, X. (2021, April). The advance care planning benefits and barriers scales: Measuring HBM constructs in the context of end-of-life communication [Poster presentation]. D.C. Health Communication Conference, Fairfax, VA.
- Brophy, N. S., Seiter, C. R., & Zhao, X. (2021) Relationship between COVID-19 risk perceptions and intentions to engage in familial advance care planning: The mediating role of death anxiety [Manuscript submitted for publication]. Department of Communication, George Mason University.
- Bullock, O. M. & Hubner, A. Y. (2020) Candidates' use of informal communication on social media reduces credibility and support: Examining the consequences of expectancy violations. *Communication Research Reports*, *37*(3), 87-98. https://doi.org/10.1080/08824096.2020.1767047
- Burgoon, J. K., & Hale, J. L. (1988). Nonverbal expectancy violations theory: Model elaboration and application to immediacy behaviors. *Communication Monographs*, 55(1), 58–79. https://doi.org/10.1080/03637758809376158
- Burgoon, J. K., & Walther, J. B. (1990). Nonverbal expectancies and the evaluative consequences of violations. *Human Communication Research*, *17*(2), 232–265. https://doi.org/10.1111/j.1468-2958.1990.tb00232.x

- Burgoon, J. K., Newton, D. A., Walther, J. B., & Baesler, E. J. (1989). Nonverbal expectancy violations and conversational involvement. *Journal of Nonverbal Behavior*, *13*(2), 97–119. https://doi.org/10.1007/BF00990793
- Burke, B. L., Martens, A., & Faucher, E. H. (2010). Two decades of terror management theory: A meta-analysis of mortality salience research. *Personality and Social Psychology Review*, *14*(2), 155–195. https://doi.org/10.1177/1088868309352321
- Butler, M., Ratner, E., McCreedy, E., Shippee, N., & Kane, R. L. (2014). Decision aids for advance care planning: An overview of the state of the science. *Annals of Internal Medicine*, *161*(6), 408–418. https://doi.org/10.7326/M14-0644
- Cacioppo, J. T., & Petty, R. E. (1984). The need for cognition: Relationship to attitudinal processes. In R. P. McGlyyn, J. E. Maddux, C. D., Stoltenberg, & J. H. Harvey (Eds.), *Social Perception in Clinical and Counseling Psychology* (pp. 91–119). Texas Tech University Press.
- Carmack, H. J., & DeGroot, J. M. (2016). Development and validation of the communication apprehension about death scale. *OMEGA Journal of Death and Dying*, 74(2), 239–259. https://doi.org/10.1177/0030222815598440
- Carmack, H. J., & DeGroot, J. M. (2020). Communication apprehension about death, religious group affiliation, and religiosity: Predictors of organ and body donation decisions. *OMEGA Journal of Death and Dying*, 81(4), 627–647. https://doi.org/10.1177/0030222818793294

- Cavazza, N., & Guidetti, M. (2014). Swearing in political discourse: Why vulgarity works. *Journal of Language and Social Psychology*, *33*(5), 537–547. https://doi.org/10.1177/0261927X14533198
- Conway, M., & Dubé, L. (2002). Humor in persuasion on threatening topics:

 Effectiveness is a function of audience sex role orientation. *Personality and Social Psychology Bulletin*, 28(7), 863–873. https://doi.org/10.1177/014616720202800701
- Cox, C. R., Goldenberg, J. L., Arndt, J., & Pyszczynski, T. (2007). Mother's milk: An existential perspective on negative reactions to breastfeeding. *Personality and Social Psychology Bulletin*, 33, 110–122. https://doi.org/10.1177/0146167206294202
- Davis, K. C., Nonnemaker, J., Duke, J., & Farrelly, M. C. (2013). Perceived effectiveness of cessation advertisements: The importance of audience reactions and practical implications for media campaign planning. *Health Communication*, 28(5), 461–472. https://doi.org/10.1080/10410236.2012.696535
- Dillard, J. P., & Shen, L. (2005). On the nature of reactance and its role in persuasive health communication. *Communication Monographs*, 72(2), 144 –169. https://doi.org/10.1080/03637750500111815
- Dimock, M. (2019, January 17). Defining generations: Where millennials end and generation z begins. Pew Research Center. https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/
- Doughty, C. M. (2019, May 9). Get your sh*t together! [Audio podcast episode]. *Death In the Afternoon*. https://www.podbean.com/media/share/dir-t52js-

- 61d0798?utm_campaign = w_share_ep&utm_medium = dlink&utm_source = w_share
- Douglas, M. (1975). Implicit meanings: Selected essays in anthropology. Routledge.
- Duyx, B., Urlings, M. J. E., Swaen, G. M. H., Bouter, L. M., Zeegers, M. P. (2017).
 Scientific citations favor positive results: A systematic review and meta-analysis.
 Journal of Clinical Epidemiology. 88, 92-101.
 https://doi.org/10.1016/j.jclinepi.2017.06.002
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41(10), 1040–1048. https://doi.org/10.1037/0003-066X.41.10.1040
- Dweck, C. S. (1999). Caution—praise can be dangerous. *American Educator*, 23(1), 4–9.
- Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt Brace Jovanovich.
- Eisend, M. (2009). A meta-analysis of humor in advertising. *Journal of the Academy of Marketing Science*, 37(2), 191–203. https://doi.org/10.1007/s11747-008-0096-y
- Eisend, M. (2011). How humor in advertising works: A meta-analytic test of alternative models. *Marketing Letters*, 22(2), 115–132. https://doi.org/10.1007/s11002-010-9116-z
- Esralew, S. E. (2012) Beating others to the punch: Exploring the influence of selfdeprecating humor on source perceptions through expectancy violations theory.

 [Master's thesis, The Ohio State]

- University]. https://etd.ohiolink.edu/apexprod/rws_etd/send_file/send?accession = osu1337713268&disposition = inline
- Evans, R. B. (1988). *Production and creativity in advertising*. Pitman.
- Feeley, T. H., & Moon, S.-I. (2009). A meta-analytic review of communication campaigns to promote organ donation. *Communication Reports*, 22(2), 63–73. https://doi.org/10.1080/08934210903258852
- Feldman, G., Lian, H., Kosinski, M., & Stillwell, D. (2017). Frankly, we do give a damn:

 The relationship between profanity and honesty. *Social Psychological and*Personality Science, 8(7), 816–826. https://doi.org/10.1177/1948550616681055
- Fishbein, M., & Ajzen, I. (2009). Appendix: Constructing a reasoned action questionnaire. In *Predicting and Changing Behavior: The Reasoned Action Approach* (pp. 449–463). Taylor & Francis.
- Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, *51*(4), 327-358.
- Freud, S. (1960). *Jokes and their relation to the unconscious* (J. Strachey, Trans.). W. W. Norton.
- Godin, G., & Kok, G. (1996). The theory of planned behavior: A review of its applications to health-related behaviors. *American Journal of Health Promotion*, 11(2), 87–98. https://doi.org/10.4278/0890-1171-11.2.87
- Goldenberg, J. L., & Arndt, J. (2008). The implications of death for health: A terror management health model for behavioral health promotion. *Psychological Review*, 115(4), 1032–1053. https://doi.org/10.1037/a0013326

- Grippe, J. (2020, May 23). The project behind a front page full of names. *The New York Times*. https://www.nytimes.com/2020/05/23/reader-center/coronavirus-new-york-times-front-page.html
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data Saturation and variability. *Field Methods*, *18*(1), 59–82. https://doi.org/10.1177/1525822X05279903
- Hardeman, W., Johnston, M., Johnston, D., Bonetti, D., Wareham, N., & Kinmonth, A.
 L. (2002). Application of the theory of planned behaviour in behaviour change interventions: A systematic review. *Psychology & Health*, 17(2), 123–158.
 https://doi.org/10.1080/08870440290013644a
- Harms, P. D., & DeSimone, J. A. (2015). Caution! MTurk workers ahead—fines doubled. *Industrial and Organizational Psychology*, 8(2), 183–190.
 https://doi.org/10.1017/iop.2015.23
- Hirschberger, G., Pyszczynski, T., & Ein-Dor, T. (2009). Vulnerability and vigilance:

 Threat awareness and perceived adversary intent moderate the impact of mortality salience on intergroup violence. *Personality and Social Psychology Bulletin*, *35*(5), 597-607. https://doi.org/10.1177/0146167208331093
- Houben, C. H. M., Spruit, M. A., Groenen, M. T. J., Wouters, E. F. M., & Janssen, D. J.
 A. (2014). Efficacy of advance care planning: A systematic review and meta-analysis. *Journal of the American Medical Directors Association*, 15(7), 477–489.
 https://doi.org/10.1016/j.jamda.2014.01.008

- Hunt, J. M., Smith, M. F., & Kernan, J. B. (1989). Processing effects of expectancy-discrepant persuasive messages. *Psychological Reports*, 65(3_suppl2), 1359–1376. https://doi.org/10.2466/pr0.1989.65.3f.1359
- Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field Methods*, *18*(1), 3–20. https://doi.org/10.1177/1525822X05282260
- Joeckel, S. (2008). Funny as hell: Christianity and humor reconsidered. *Humor International Journal of Humor Research*, 21(4). https://doi.org/10.1515/HUMR.2008.020
- Johnson, D. I., & Lewis, N. (2010). Perceptions of swearing in the work setting: An expectancy violations theory perspective. *Communication Reports*, 23(2), 106–118. https://doi.org/10.1080/08934215.2010.511401
- Kaye, B. K., & Sapolsky, B. S. (2009). Taboo or not taboo? That is the question:
 Offensive language on prime-time broadcast and cable programming. *Journal of Broadcasting & Electronic Media*, 53(1), 22–37.
 https://doi.org/10.1080/08838150802643522
- Kleinhesselink, R. R., & Edwards, R. E. (1975). Seeking and avoiding belief-discrepant information as a function of its perceived refutability. *Journal of Personality and Social Psychology*, 31(5), 787–790. https://doi.org/10.1037/h0076702
- Kottke, J. L., & MacLeod, C. D. (1989). Use of profanity in the counseling interview. Psychological Reports, 65(2), 627–634. https://doi.org/10.2466/pr0.1989.65.2.627

- Kreps, G.L. (2017). The critical incident technique. In J. P. Matthes, C. S. Davis, & R. F. Potter (Eds.), *The international encyclopedia of communication research methods*. Wiley-Blackwell.
- Krishnan, H. S., & Chakravarti, D. (2003). A process analysis of the effects of humorous advertising executions on brand claims memory. *Journal of Consumer Psychology*, 13(3), 230–245. https://doi.org/10.1207/S15327663JCP1303_05
- Lee, J. Y., Slater, M. D., & Tchernev, J. (2015). Self-deprecating humor versus other-deprecating humor in health messages. *Journal of Health Communication*, 20(10), 1185–1195. https://doi.org/10.1080/10810730.2015.1018591
- Lee, M. J. (2010). The effects of self-efficacy statements in humorous anti-alcohol abuse messages targeting college students: Who is in charge? *Health Communication*, 25(8), 638–646. https://doi.org/10.1080/10410236.2010.521908
- Lim, Y. J., & Lemanski, J. (2020). A generational war is launched with the birth of ok boomer in the digital age. *The Journal of Society and Media*, 4(1), 1–15. https://doi.org/10.26740/jsm.v4n1.p1-15
- Lincoln, Y. S., and Guba, E. G. (1985). *Naturalistic inquiry*. Sage.
- Lynch, O. H. (2002). Humorous communication: Finding a place for humor in communication research. *Communication Theory*, *12*(4), 423–445.

 https://doi.org/10.1111/j.1468-2885.2002.tb00277.x
- Markiewicz, D. (1974). Effects of Humor on Persuasion. *Sociometry*, *37*(3), 407–422. https://doi.org/10.2307/2786391

- Martin, R. A. (2010). *The psychology of humor: An integrative approach* (1st ed.). Academic Press.
- McCombs, M. E., & Shaw, D. I. (1993) The evolution of agenda-setting research:

 Twenty-five years in the marketplace of ideas. *Journal of Communication*, 43 58-67.

 https://doi.org/ 10.1111/J.1460-2466.1993.TB01262.X
- McCroskey, J. C., & Jenson, T. A. (1975). Image of mass media news sources. *Journal of Broadcasting*, 19(2), 169–180. https://doi.org/10.1080/08838157509363777
- McEachan, R. R. C., Conner, M., Taylor, N. J., & Lawton, R. J. (2011). Prospective prediction of health-related behaviours with the theory of planned behaviour: A meta-analysis. *Health Psychology Review*, *5*(2), 97–144. https://doi.org/10.1080/17437199.2010.521684
- McGuire, W. J. (1968). Personality and attitude change: An information processing theory. In A. G. Greenwald, T. C. Brock, & T. M. Ostrom (Eds.), *Psychological foundations of attitudes* (pp. 171–196). Academic Press.
- McGuire, W. J. (1976). Some internal psychological factors influencing consumer choice. *Journal of Consumer Research*, *2*(4), 302–319. https://doi.org/10.1086/208643
- McGuire, W. J. (1978). An information processing model of advertising effectiveness. In H. L. Davis & A. J. Silk (Eds.), *Behavioral and management science in marketing* (pp. 156–180). Wiley.

- McLeod, J., & Reeves, B. (1980). On the nature of mass media effects. In S. Withey & R. Abeles (Eds.), *Television and social behavior: Beyond violence and children* (pp. 17–54). Erlbaum.
- Mlinarić, A., Horvat, M., & Šupak Smolčić, V. (2017). Dealing with the positive publication bias: Why you should really publish your negative results. *Biochemia Medica*, 27(3), 030201. https://doi.org/10.11613/BM.2017.030201
- Mortensen, C. R., & Cialdini, R. B. (2010). Full-cycle social psychology for theory and application. *Social and Personality Psychology Compass*, 4(1), 53–63. https://doi.org/10.1111/j.1751-9004.2009.00239.x
- Mortensen, K., & Hughes, T. L. (2018). Comparing amazon's Mechanical Turk platform to conventional data collection methods in the health and medical research literature.

 Journal of General Internal Medicine, 33(4), 533–538.*

 https://doi.org/10.1007/s11606-017-4246-0
- Moss, D. S. (Host). 2016, December 9). Death positive (1.11) [Audio podcast episode].

 In *The Adventures of Memento Mori: A Skeptic's Guide for Learning to Live by Remembering to Die*. The Jones Story Company.

 https://www.remembertodie.com/episode-11
- Moustakas, C. (1994). *Phenomenological research methods*. Sage. https://dx.doi.org/10.4135/9781412995658
- Moyer-Guse', E., Mahood, C., & Brookes, S. (2011). Entertainment-education in the context of humor: Effects on safer sex intentions and risk perceptions. *Health Communication*, 26(8), 765–774. https://doi.org/10.1080/10410236.2011.566832

- Nabi, R. L., Moyer-Gusé, E., & Byrne, S. (2007). All joking aside: A serious investigation into the persuasive effect of funny social issue messages.

 Communication Monographs, 74(1), 29–54.

 https://doi.org/10.1080/03637750701196896
- Ogata Jones, K., Denham, B. E., & Springston, J. K. (2006). Effects of mass and interpersonal communication on breast cancer screening: Advancing agenda-setting theory in health. *Journal of Applied Communication Research*, *34*(1), 94–113. https://doi.org/10.1080/00909880500420242
- Paek, H.-J., Hove, T., & Jeon, J. (2013). Social media for message testing: A multilevel approach to linking favorable viewer responses with message, producer, and viewer influence on YouTube. *Health Communication*, 28(3), 226–236. https://doi.org/10.1080/10410236.2012.672912
- Paolacci, G., Chandler, J., & Ipeirotis, P. (2010). Running experiments on Amazon Mechanical Turk. *Judgment and Decision Making*, *5*(5), 411–419. https://doi.org/10.2139/ssrn.1626226.
- Petty, R. E., & Cacioppo (1979). Issue involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses. *Journal of Personality and Social Psychology*, 37 (10), 1915–26.
- Pew Research Center. (2019). October 17, 2019 In U.S., Decline of Christianity

 Continues at Rapid Pace. [Report]. https://www.pewforum.org/wpcontent/uploads/sites/7/2019/10/Trends-in-Religious-Identity-and-Attendance-FORWEB-1.pdf

- Plessner, H. (1970). Laughing and crying: A study on the limits of human behavior (J. S. Churchill & M. Grene, Trans.). Northwestern University Press.
- Podnar, D. J. (2013). Friendly Antagonism in Humorous Interactions: Explorations of Prosocial Teasing [Doctoral dissertation, The University of Western Ontario]. https://ir.lib.uwo.ca/etd/1336/
- Rao, J. K., Anderson, L. A., Lin, F.-C., & Laux, J. P. (2014). Completion of advance directives among U.S. consumers. *American Journal of Preventive Medicine*, 46(1), 65–70. https://doi.org/10.1016/j.amepre. 2013.09.008
- Rassin, E., & Muris, P. (2005). Why do women swear? An exploration of reasons for and perceived efficacy of swearing in Dutch female students. *Personality and Individual Differences*, 38(7), 1669–1674. https://doi.org/10.1016/j.paid.2004.09.022
- Rattan, A., Savani, K., Komarraju, M., Morrison, M. M., Boggs, C., & Ambady, N. (2018). Meta-lay theories of scientific potential drive underrepresented students' sense of belonging to science, technology, engineering, and mathematics (STEM). Journal of Personality and Social Psychology, 115(1), 54–75. https://doi.org/10.1037/pspi0000130
- Reynolds, C. (2019). What matters most: The get your sh*t together guide to wills, money, insurance, and life's "what-ifs." Harper Wave.
- Rich, A., Brandes, K., Mullan, B., & Hagger, M. S. (2015). Theory of planned behavior and adherence in chronic illness: A meta-analysis. *Journal of Behavioral Medicine*, 38(4), 673–688. https://doi.org/10.1007/s10865-015-9644-3

- Robbins, M. L., Focella, E. S., Kasle, S., Loʻpez, A. M., Weihs, K. L., & Mehl, M. R. (2011). Naturalistically observed swearing, emotional support, and depressive symptoms in women coping with illness. *Health Psychology*, 30, 789–792. https://doi.org/10.1037/a0023431
- Roberts, R. C. & The Society of Christian Philosophers. (1990). Sense of humor as a christian virtue. *Faith and Philosophy*, 7(2), 177–192. https://doi.org/10.5840/faithphil1990728
- Saroglou, V., & Anciaux, L. (2004). Liking sick humor: Coping styles and religion as predictors. *Humor*, *17*(3), 257-277.
- Saroglou, V. (2002). Religion and sense of humor: An a priori incompatibility?

 Theoretical considerations from a psychological perspective. *Humor: International Journal of Humor Research*. *15*(2), 191–214.
- Scherrens, A.-L., Beernaert, K., Robijn, L., Deliens, L., Pauwels, N. S., Cohen, J., & Deforche, B. (2018). The use of behavioural theories in end-of-life care research: A systematic review. *Palliative Medicine*, 32(6), 1055–1077.

 https://doi.org/10.1177/0269216318758212
- Seiter C. R. (2020). Benefit, barrier, and self-efficacy messages in advance care planning education materials. *Health communication*, 1–8. Advance online publication. https://doi.org/10.1080/10410236.2020.1754601
- Seiter, C. R., & Brophy, N. S. (2020). Worry as a mechanism to motivate information seeking about protective end-of-life communication behaviors. *Journal of Health Communication*, 25(5), 353–360. https://doi.org/10.1080/10810730.2020.1765222

- Sidelinger, J. R. (2014) Using relevant humor to moderate inappropriate conversations: Maintaining student communication satisfaction in the classroom. *Communication Research Reports*, 31(3), 292-301. https://doi.org/10.1080/08824096.2014.924339
- Siegal, J. T., & Burgoon, J. K. (2002). Expectancy theory approaches to prevention:

 Violating adolescent expectations to increase the effectiveness of public service announcements. In W. D. Crano & M. Burgoon (Ed.), *Mass media and drug prevention: Classic and contemporary theories and research* (pp. 163–186).

 Erlbaum.
- Slater, M. D., & Gleason, L. S. (2012). Contributing to theory and knowledge in quantitative communication science. *Communication Methods and Measures*, 6(4), 215–236. https://doi.org/10.1080/19312458.2012.732626
- Snyder, L. B., Hamilton, M. A., Mitchell, E. W., Kiwanuka-Tondo, J., Fleming-Milici, F., & Proctor, D. (2004). A meta-analysis of the effect of mediated health communication campaigns on behavior change in the United States. *Journal of Health Communication*, *9*(sup1), 71–96.

 https://doi.org/10.1080/10810730490271548
- Solomon, S., Greenberg, J., & Pyszczynski, T. (1991). A terror management theory of social behavior: The psychological functions of self- esteem and cultural worldviews. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 24, pp. 93–159). Academic Press.

- Speck, P. S. (1991). The humorous message taxonomy: A framework for the study of humorous ads. *Current Issues and Research in Advertising*, 14(1), 1–44. https://doi.org/ 10.1080/01633392.1991.10504957
- Stelter, K. L., Elliott, B. A., & Bruno, C. A. (1992). Living will completion in older adults. *Archives of Internal Medicine*, 152(5), 954–959. https://doi.org/
- Stiff, J. B. (1994). Persuasive communication. Guilford Press.
- Stone, T. E., McMillan, M., & Hazelton, M. (2015). Back to swear one: A review of English language literature on swearing and cursing in Western health settings.

 **Aggression and Violent Behavior, 25(A), 65–74. https://doi.org/

 :10.1016/j.avb.2015.07.012
- Templer, D. I., Awadalla, A., Al-Fayez, G., Frazee, J., Bassman, L., Connelly, H. J., Arikawa, H., & Abdel-Khalek, A. M. (2006). Construction of a death anxiety scale–extended. *OMEGA Journal of Death and Dying*, *53*(3), 209–226. https://doi.org/10.2190/BQFP-9ULN-NULY-4JDR
- The Order of the Good Death (2021). *Death positive movement*. Order of the Good Death. http://www.orderofthegooddeath.com/resources/death-positive-movement
- Thorson, J. A., & Powell, F. C. (1993). Development and validation of a multidimensional sense of humor scale. *Journal of Clinical Psychology*, 49(1), 13–23. <a href="https://doi.org/10.1002/1097-4679(199301)49:1<13::AID-JCLP2270490103>3.0.CO;2-S">https://doi.org/10.1002/1097-4679(199301)49:1<13::AID-JCLP2270490103>3.0.CO;2-S

- Thorson, J.A. (1985). A funny thing happened on the way to the morgue: Some thoughts on humor and death, and a taxonomy of the humor associated with death. *Death Studies*, 9(3–4), 201–216. https://doi.org/10.1080/07481188508252518
- Tierney, W. M., Dexter, P. R., Gramelspacher, G. P., Perkins, A. J., Zhou, X. H., & Wolinsky, F. D. (2001). The effect of discussions about advance directives on patients' satisfaction with primary care. *Journal of General Internal Medicine*, *16*(1), 32–40. https://doi.org/10.1111/j.1525-1497.2001.00215.x
- Turner-McGrievy, G., Kalyanaraman, S., & Campbell, M. K. (2013). Delivering health information via podcast or web: Media effects on psychosocial and physiological responses. *Health Communication*, 28(2), 101–109. https://doi.org/10.1080/10410236.2011.651709
- Vingerhoets, A., Bylsma, L.M., & Vlam, C.D. (2013). Swearing: A biopsychosocial perspective. *Psychological Topics*, *22*, 287-304.
- Wallace, C. L. (2015). Family communication and decision making at the end of life: A literature review. *Palliative and Supportive Care*, 13(3), 815–825.
 https://doi.org/10.1017/S1478951514000388
- Walter, T. (1991). Modern death: Taboo or not taboo?. *Sociology*, *25*(2), 293–310. https://doi.org/10.1177/0038038591025002009
- Walther-Martin, W. (2015). Media-generated expectancy violations: A study of political humor, race, and source perceptions. *Western Journal of Communication*, 79(4), 492–507. https://doi.org/10.1080/10570314.2015.1072233

- Wang, Z., Walther, J. B., Pingree, S., & Hawkins, R. P. (2008). Health information, credibility, homophily, and influence via the internet: Web sites versus discussion groups. *Health Communication*, 23(4), 358–368.

 https://doi.org/10.1080/10410230802229738
- Weber, K., Martin, M., 401, M. of C., & Corrigan, M. (2006). Creating persuasive messages advocating organ donation. *Communication Quarterly*, *54*(1), 67–87. https://doi.org/10.1080/01463370500270413
- Weinberger, M. G., & Gulas, C. S. (1992). The impact of humor in advertising: A review.

 **Journal of Advertising, 21(4), 35–59.

 https://doi.org/10.1080/00913367.1992.10673384
- Weller, K., & Zorn, T. (1997, November). Friendship and organizational socialization: A study of first-year male medical students [Paper presentation]. National Communication Association, Chicago, IL, United States.
- Wright, A. A., Zhang, B., Ray, A., Mack, J. W., Trice, E., Balboni, T., Mitchell, S. L.,
 Jackson, V. A., Block, S. D., Maciejewski, P. K., & Prigerson, H. G. (2008).
 Associations between end-of-life discussions, patient mental health, medical care near death, and caregiver bereavement adjustment. *JAMA*, 300(14), 1665–1673.
 https://doi.org/10.1001/jama.300.14.1665
- Yadav, K. N., Gabler, N. B., Cooney, E., Kent, S., Kim, J., Herbst, N., Mante, A., Halpern, S. D., & Courtright, K. R. (2017). Approximately one in three US adults completes any type of advance directive for end-of-life care. *Health Affairs (Project Hope)*, 36(7), 1244–1251. https://doi.org/10.1377/hlthaff.2017.0175

- Yang, J., & Stone, G. (2009). The powerful role of interpersonal communication in agenda setting. *Mass Communication and Society*, *6*(1), 57–74. https://doi.org/10.1207/S15327825MCS0601_5
- Yoon, H. J., & Tinkham, S. F. (2013). Humorous threat persuasion in advertising: The effects of humor, threat intensity, and issue involvement. *Journal of Advertising*, 42(1), 30–41. https://doi.org/10.1080/00913367.2012.749082
- Zafaris, J. (2019, May 13). Jerry Seinfeld's 5-step comedy writing process. Writer's Digest. https://www.writersdigest.com/write-better-nonfiction/jerry-seinfelds-5-step-comedy-writing-process
- Zhang, B., Wright, A. A., Huskamp, H. A., Nilsson, M. E., Maciejewski, M. L., Earle, C. C., Block, S. D., Maciejewski, P. K., & Prigerson, H. G. (2009). Health care costs in the last week of life: Associations with end-of-life conversations. *Archives of Internal Medicine*, 169(5), 480–488. https://doi.org/10.1001/archinternmed.2008.587
- Zhao, X., Roditis, M. L., & Alexander, T. N. (2019). Fear and humor appeals in "The Real Cost" campaign: Evidence of potential effective- ness in message pretesting.
 American Journal of Preventive Medicine, 56(2), S31–S39.
 https://doi.org/10.1016/j.amepre.2018.07.033

BIOGRAPHY

Christian R. Seiter earned his Bachelor of Fine Arts in Theatre (Actor Training Program Emphasis) from the University of Utah in 2014. Later, Christian earned his Master of Science in Medical Humanities from the University of Rochester School of Medicine and Dentistry. After earning his Doctor of Philosophy in Communication at George Mason University in 2021, Christian will begin a position as an Assistant Professor of Human Communication Studies at California State University, Fullerton.