Spring 2017

ASSESSMENT OF TIPS FROM FORMER SMOKERS: IMPLICATIONS FOR AN ADVANCE DIRECTIVE COMPLETION CAMPAIGN FOR YOUNG ADULTS

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ASSESSMENT OF *TIPS FROM FORMER SMOKERS ™*: IMPLICATIONS FOR AN ADVANCE DIRECTIVE COMPLETION CAMPAIGN FOR YOUNG ADULTS

An Essay Submitted to the
Office of Graduate Studies
College of Arts & Sciences of
John Carroll University
in Partial Fulfillment of the Requirements
for the Degree of
Master of Arts

By
Kimberly A. Clark
2017

The essay of Kimberly A. Clark is hereby accepted:

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Advisor – Jacqueline J. Schmidt Date

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Author – Kimberly A. Clark Date

Advance care planning (ACP) is the process by which individuals discuss the medical care they want to receive in the event they can no longer competently communicate. Since the mid-1970s, advance health care directives, or advance directives (ADs), have functioned as the main legal tool ensuring that these wishes are formally recorded and followed in the event of a major health crisis. The use of ADs arose following prominent "right-to-die lawsuits" that instilled in the public the fear that physicians could and would subject incompetent or incapacitated patients to unwanted life-sustaining treatments (U.S. Department of Health and Human Services, 2007). Because most individuals wish to control their own medical care, lawmakers expected high rates of AD completion; however, the completion rate has remained disappointingly low (Prendergast, 2001) with approximately 75 percent of American adults currently lacking ADs (Rao, Anderson, Lin, & Laux, 2014).

Concerted effort has been directed at increasing AD completion among older adults and terminally ill populations; however, studies regarding young adult (ages 18-30) AD completion are limited (Kavalieratos, Ernecoff, Keim-Malpass, & Degenholz, 2015), and interventions or campaigns directed at this group remain essentially nonexistent. This is a limitation of the current research as healthy young adults also benefit from ACP and AD completion because they too may experience medical emergencies in which they cannot communicate their wishes (Rauscher & Nacinovich, 2012) and may even be more likely to suffer accidental injuries due to riskier behavior (Kapp, 2000). In addition, while end-of-life decision making for an older or ill individual unquestionably results in physical, mental and emotional distress for the family members (Haley et al., 2002), coping with the unexpected and untimely death of a young person

can be particularly traumatic and long-lasting for loved ones (Cook, White, & Ross-Russell, 2002; Rogers, Floyd, Seltzer, Greenberg, & Hong, 2008). The lack of an AD may also lead to legal battles. For example, in the case of Terri Schiavo, a 27-year-old woman who experienced a sudden cardiac arrest and then entered a persistent vegetative state, the absence of an AD led to a long, bitter and highly public lawsuit between her husband and her parents (Koch, 2005). Therefore, the development and implementation of health communication campaigns that persuade young adults to complete ADs are warranted as they help preserve the autonomy of young adults and alleviate famillies' hardships.

As careful management of the young adult AD completion campaign's message remains critical to its successful design and implementation, the objective of this project is to inform the development of a young adult AD completion campaign by identifying a relevant health campaign to serve as a model. Preliminary steps in this process are to assess the utility of previous public health campaigns and determine a relevant and effective campaign design. With these findings, a completed or ongoing campaign that has successfully influenced health beliefs and behaviors of young adults must be identified and analyzed to ensure its applicability to a young adult AD completion campaign.

Specifically, this project will first demonstrate that a need for a young adult AD completion campaign exists and that the use of fear appeals, which can effectively increase individuals' threat perceptions according to the Extended Parallel Process (EPPM) (Witte, 1992), present as a useful communication management tool for such a campaign. Then an argument for the use of *Tips from Former Smokers™* (*Tips*), a tobacco education

campaign, as a model campaign will be presented followed by recommendations for a future young adult AD completion campaign.

Literature Review

As AD completion becomes increasingly important for individuals nearing death, it is unsurprising that the bulk of AD studies have focused on older adults or terminally ill populations. The literature points to several common barriers and motivations regarding AD completion among these populations. In addition, the findings of multiple experimental studies have suggested the most effective design for interventions aimed at increasing the AD completion rate.

While the focus on increasing AD completion among older and ill adults remains important, little attention has been directed to AD completion among young adults. Young adults in good health may still experience medical emergencies in which they cannot communicate their wishes (Rauscher & Nacinovich, 2012) and may be at a higher risk for accidental injury due to riskier behavior (Kapp, 2000). Furthermore, postponing AD completion until the time when the medical information is needed may lead to added difficulty and stress for the individual (Levi & Green, 2010). However, very few studies have investigated AD-related barriers and motivations in young adults. Furthermore, interventions aimed at increasing AD completion among young adults have not yet been designed and tested.

Barriers: Older and Ill Adults. The lack of patient awareness and education about AD options remains the most cited barrier to AD completion (Morrison, Zaya, Mulvihill, Baskin, & Meier, 1998; Nishimura et al., 2007; Rao et al., 2014; West & Hollis, 2012). The lack of awareness and education largely stems from the fact that

physicians, who often have the task of introducing and discussing ADs with their patients, remain uncomfortable with such discussions (Calam, Far, & Andrew, 2000). Patient willingness to discuss ADs can be a contributing factor as some individuals would rather avoid a conversation about ADs (Morrison et al., 1998; West & Hollis, 2012). However, older and ill individuals have been found to be generally willing to engage in a discussion about ADs (Hays, Galanos, Palmer, McQuoid, & Flint, 2001; Molloy, Russo, Pedlar, & Bedard, 2000; Ratner, Norlander, & McSteen 2001), but feel that physicians have a responsibility to initiate the discussions. Thus, many individuals attribute AD incompletion to physician unwillingness to discuss the topic (Carr & Khodyakov, 2007; Emmanuel, Barry, Stoeckle, Ettleson, & Emanuel, 1991; Pollack, Morhaim, & Williams, 2010). Another reason for the lack of awareness is the absence of effective public education that would inform individuals about ADs and help to normalize the topic. Although the U.S. Department of Health and Human Services (HHS) was required by law to implement a public education campaign that involved developing both national and state-specific educational materials and documents, the HHS has only completed a public information document (U.S. Department of Health and Human Services 2007).

Education level, socioeconomic status and ethnicity have been identified as additional barriers to AD completion. The AD completion rate remains the highest among individuals who are white (Mezey, Leitman, Mitty, Bottrell, & Ramsey, 2000; Morrison et al., 1998; West & Hollis, 2012; Zager & Yancey, 2011), have at least a high school diploma (Mezey et al. 2000; Nishimura et al., 2007) and are of higher income levels (Khosla, Curl, & Washington, 2016; Nishimura et al., 2007). Nonwhite individuals' decisions regarding ADs may be influenced by cultural norms and customs

that perpetuate the perception of ADs as unnecessary (Morrison et al., 1998) or potentially damaging to medical care (Ko & Lee, 2014; Mezey et al. 2000; West & Hollis, 2012). However, being less educated, which is associated with lower socioeconomic standing and nonwhite ethnicities (U.S. Department of Education, 2010), correlates with lower literacy rates and limits an individual's ability to make and disclose medical decisions (Castillo et al., 2011; Freer et al., 2006; Mezey et al., 2000; Nishimura et al., 2007). This issue is exacerbated by the fact that the majority of AD forms and materials not only use legal language, but are also written above a 12th grade level (Ache & Wallace, 2009, Mueller, Reid, & Mueller, 2010) despite the Institute of Medicine's recommendation that health and medical related material be written below a 6th grade level (Castillo et al., 2011). Therefore, low education levels may exert the most influence over AD completion compared to other demographic characteristics (Freer et al. 2006; Mezey et al. 2000; Nishimura et al. 2007). It is important to note, however, that the reported level of association between these characteristics and AD completion varies among the studies. Some studies found little to no association between AD completion and the aforementioned traits (Ko, Lee, & Hong, 2015; Khosla et al., 2016; Morrison et al., 1998; West & Hollis, 2012), thus demonstrating both the limitations of the current literature and the complexity of the topic.

Motivations: Older and Ill Adults. As the decision to complete an AD remains a personal one, a multitude of motivations to complete ADs has been identified. While some individuals have no specific reason for completing ADs (van Wijmen, Pasman, Widdershoven, & Onwuteaka-Philipsen, 2014), older age (Morrison et al., 1998; Nishimura et al., 2007; West & Hollis, 2012), poorer health status (Ko et al., 2015;

Morrison et al., 1998; Nishimura et al., 2007; Sahm, Will, & Hommel, 2005), witnessing an illness of a family member or friend (van Wijmen et al., 2014), previous exposure to ventilator support (Morrison et al., 1998), education about ADs (Landry, Kroenke, Lucas, & Reeder, 1997; Morrison et al. 1998), positive attitude towards ADs and social support (Ko et al., 2015) have been pinpointed as motivations to complete ADs. Among the variables listed, older age and poorer health status are most often identified. This remains unsurprising as the majority of older and ill individuals view ADs the best way to prevent or maintain control over the use of life support and other treatments if dying or permanently unconscious (Levi, Dellasega, Whitehead, & Green, 2010; Nishimura et al., 2007; van Wijmen et al., 2014).

Recommendations for AD Interventions: Older and Ill Adults. Experimental studies and reviews of interventions aimed at increasing AD completion among older or ill adults demonstrate that the most effective interventions involve education in conjunction with interaction between patients and medical professionals (Heiman, Bates, Fairchild, Shaykevich, & Lehman, 2004; Jezewksi, Meeker, Sessanna, & Finnell, 2007; Landry et al., 1997; Schwartz et al., 2002; Tamayo-Velazquez et al., 2010). The increase in AD completion among patients who received passive informational materials was little to none (Jezewski et al., 2007; Tamayo-Velazquez et al., 2010). On the other hand, those who received informational materials and attended an interactive seminar (Landry et al., 1997), received physician reminders (Heiman et al., 2004) or attended counseling or received assistance from a medical professional regarding AD decisions and completion (Jezewksi et al., 2007, Schwartz et al., 2002; Tamayo-Velazquez et al., 2010) were significantly more likely to complete ADs, with post intervention AD completion rates

increasing by 23 to 85 percent (Jezewski et al., 2007; Schwartz et al., 2002). The success of these interventions can be attributed largely to the fact that they addressed the identified barriers involved in AD completion. Educational materials alone provide individuals with information about ADs to help increase awareness about the topic. The interaction with physicians or other medical professionals acknowledges that many patients believe physicians should initiate AD discussions ADs (Carr & Khodyakov, 2007; Emmanuel et al., 1991; Pollack et al., 2010) and that some individuals may need more assistance or explanation (Castillo et al., 2011; Freer et al., 2006; Mezey et al., 2000; Nishimura et al., 2007).

Barriers: Young Adults. Similar to the research on older and ill adults, early qualitative research suggests that a lack of awareness and education about ADs is a major barrier to AD completion among young adults. Findings from focus groups indicate that young adults often feel that they either lack the awareness about the topic or they lack sufficient knowledge to discuss and make their own medical decisions (Kavalieratos et al., 2015; Szalai, 2015). In addition, young adults can have difficulty talking about death and ADs and fear a bad reaction from their families (Szalai, 2015). However, unlike older and ill adults, young adults are more likely to view themselves as invulnerable to a medical situation requiring an AD and thus view ADs as unimportant (Kavileratos et al., 2015; Szalai, 2015). These findings suggest that while there is some alignment between the barriers reported by both young adults and older or ill adults, there may also be some age-related differences that should be explored.

Motivations: Young Adults. Factors that motivate AD completion in healthy young adults remains unexplored in the current literature. Kavalieratos et al. (2015) noted

that the young adults surveyed in their study indicated interest in more information about ADs and suggested the appeal of educational interventions. Additionally, Szalai (2015) found that young adults listed decreased familial burden, reduced conflict and control of medical wishes as potential benefits to AD completion. These views and perceptions may factor into the motivations of young adults; however, further study is required.

Background on Fear Appeals in Health Communication

A fear appeal is a persuasive communication technique that is employed to elicit fear in order to stimulate precautionary motivation and self-protective action (Rogers & Deckner, 1975). Most often used to reduce risky behaviors, intentions or attitudes, fear appeals emphasize the potential danger that individuals will face if they do not follow the recommendations of the message (Tannenbaum et al., 2015). A fear appeal will introduce a threat and advance the perceptions of severity and susceptibility to the target audience (Ruiter, Kessels, Peters, & Kok, 2014). For example, a fear appeal may be used to influence the behaviors of young drivers by presenting life-threatening car crash injuries as a health threat to which the young drivers are susceptible because they drive cars and that is severe as car crash injuries can be deadly (Lennon & Renfro, 2010). The fear appeals may then conclude with information on actions that will help the individuals effectively and, ideally, easily avoid or neutralize the aforementioned threat (Ruiter et al., 2014), such as wearing a seatbelt or not using a cell phone while driving (Lennon & Renfro, 2010).

Within the health communication field, a debate over the effectiveness of fear appeal use in public health messages endures. Although the study of fear appeals as a persuasive strategy to promote the public's engagement in healthy behaviors has

persisted for over 50 years (Maloney, Lapinski, & Witte, 2011), many health communicators focused on informing and influencing individuals regarding health issues and behaviors by promoting positive, fact-based messages, such as the benefits of adhering to healthy behaviors (Fairchild, Bayer, & Colgrove, 2015). Yet, in the past decade, fear-based public health campaigns focused on combating the prevalence of major health issues through the initiation of preventative and healthy behaviors have risen to prominence (Fairchild et al., 2015). This paradigm shift within the health communication field finds reason in the fact that many studies have supported the effectiveness of fear-based public health campaigns (Centers for Disease Control, 2016; Tannenbaum et al., 2015; Witte & Allen, 2000; Xu et al., 2015), especially when the Extended Parallel Process Model (EPPM), a message design theory that predicts individuals' responses to fear appeals based on the constructs of threat and efficacy (Witte, 2002), is followed (Basil, Basil, Deshpande, & Lavack, 2013; Cameron et al., 2009; Carcioppolo et al., 2013; Carey & Sarma, 2016; Emery, Szczypka, Abril, Kim, & Vera, 2014; Ferguson & Phau, 2013; Kotowski, Smith, Johnstone, & Pritt, 2011; Lennon & Renfro, 2010; Li, 2014; Morrison, 2005; Moscato et al., 2001; Roberto et al., 2007; Siu, 2008; Witte, Cameron, Lapinski, & Nzyuko, 1998; Wong & Cappella, 2009).

The Extended Parallel Process Model

The EPPM describes how emotional reactions and rational thought are synthesized to regulate decisions about behavior. In regards to health-related behaviors, the EPPM posits that the degree to which an individual feels threatened by a health matter predicates the individual's motivation to act and that the type of action depends on the individual's belief that he or she can prevent or avoid the threat. Threat and efficacy

variables govern these relationships and interact to determine the type of action (Witte, 1992).

EPPM Threat Variables. The EPPM defines a threat as "[a] danger or harm that exists in the environment whether we know it or not" (Witte, Cameron, McKeon, &, Berkowitz, 1996; p. 320). According to the theory, it is the perception of a threat, rather than the threat itself, that motivates an individual to act (Witte, 1992). Threat perception is made up of two variables that are drawn from the health belief model: perceived severity and perceived susceptibility (Becker, 1974). Perceived severity refers to an individual's belief about how serious the threat and its consequences are while perceived susceptibility refers to an individual's perception of his or her chances of actually experiencing the threat (Witte et al., 1996). Consequently, in order to motivate an individual take action in response to a health issue, the health message must present the health issue as a very serious problem that has a high probability of affecting the individual.

EPPM Efficacy Variables. While threat perception motivates an individual to take action, efficacy, which is defined as "…the effectiveness, feasibility, and ease with which a recommended response impedes or averts a threat" (Witte et al., 1996; p. 320), determines the type of action taken (Witte et al., 1996). Efficacy is comprised of two variables: response efficacy and self-efficacy. Response efficacy refers to an individual's belief that a proposed solution will be effective in dealing with the threat and self-efficacy is an individual's belief that he or she can successfully practice the proposed solution (Witte et al., 1996). Therefore, a health message must convey high levels of both response efficacy and self-efficacy in order instigate action. This can be accomplished by

presenting instructions or suggestions on how to avert or avoid a threat that individuals would feel capable of following (Witte et al., 1996).

Action Types. Depending on individuals' perceptions of the threat and efficacy, they may respond to the threat in one of three ways. A non-response occurs when the individuals do not perceive the threat to be high, so they do not experience fear and are not motivated to take action. However, if the threat is perceived to be high, individuals will be motivated by fear to react with either danger control or fear control responses, depending on an appraisal of efficacy. If the efficacy appraisal leads the individuals to perceive that they have the ability to effectively deter the threat, they will initiate danger control responses, which are changes in beliefs, attitudes, intentions, or behaviors that align with the recommendations of the message. On the other hand, if the individuals feel they do not have enough efficacy to successfully deal with the threat, they will attempt to reduce their fear with fear control responses, such as avoidance, denial and message derogation (Witte et al., 1996).

Assessment of Fear Appeals in Public Health Campaigns

While the use of fear-based messages has become quite common in many types of communication campaigns, the use of fear appeals remains a polarizing issue (Tannenbaum et al., 2015) and especially contentious in the health communication field due to the ethics of persuasive messaging (Strasser & Gallagher, 1994). Some health communication practitioners assert the effectiveness of fear-based health communication campaigns (Centers for Disease Control, 2016; Tannenbaum et al., 2015; Witte & Allen, 2000; Xu et al., 2015); however, others contend that the use of fear appeals can be ineffective (de Hoog, Stroebe, & de Wit, 2007) and may even lead harmful results (Drug

Free Alliance, 2013; Peters, Ruiter, & Kok, 2013; Ruiter et al., 2014). This review finds that while there are variables that can reduce the strength of fear-based health messages and potential drawbacks to the use of fear appeals, the majority of the research points to the effectiveness of fear appeals in public health messages targeting young adults, especially with the proper application of the EPPM.

Effectiveness of Fear Appeals and the EPPM. Fear-based public health messages targeting young adults have been applied to a wide range of health-related behaviors, including smoking cessation (Centers for Disease Control, 2016; Fairchild et al., 2015; Ferguson & Phau, 2013; Paek, Kim & Hove, 2010; Wong & Cappella, 2009), HIV testing and prevention (Fairchild et al., 2015; Lennon & Renfro, 2010; Roberto et al., 2007), drug abuse (Kim, Sheffield, & Almutairi, 2014; Lennon & Renfro, 2010), alcohol use (Lee & Shin, 2011; Moscato et al., 2001), distracted or unsafe driving (Carey & Sarma, 2016; Lennon & Renfro, 2010) and noise-induced hearing loss (Kotowski et al., 2011). Health messages that contain fear appeals but no instructions or suggestions on how to avert the health threat can be effective to an extent. Studies have indicated that compared to factual or humor-based messages, fear-based health messages tend to be far more successful in capturing young adult's attention and interest and in increasing their perceptions of the severity of and susceptibility to the health threat (Kotowski et al., 2011; Lee & Shin, 2011; Leshner, Bolls, & Thomas, 2009; Paek et al., 2010). In addition, the feeling of fear makes it more likely that individuals will recall the content of the fear-based message in the future (Ferguson & Phau, 2013). However, the absence of any efficacy statement, which provides the viewers with the perception that they can successfully combat the health threat, limits the impact of the fear-based messages (Basil

et al., 2013; Cameron et al., 2009; Carcioppolo et al., 2013; Carey & Sarma, 2016; Emery et al., 2014; Ferguson & Phau, 2013; Kotowski et al., 2011; Lennon & Renfro, 2010; Li, 2014; Morrison, 2005; Moscato et al., 2001; Roberto et al., 2007; Siu, 2008; Witte et al., 1998; Wong & Cappella, 2009).

The effectiveness of fear-based health messages is significantly heightened with the application of the EPPM, which posits that a message must increase both threat and efficacy perceptions in order to produce intended effects (Witte et al., 1996). Multiple studies have demonstrated that proper use of the EPPM not only captures young adults' attention, but also can lead to changes in behavior (Carey & Sarma, 2016; Ferguson & Phau, 2013; Kotowski et al., 2011; Lennon & Renfro, 2010; Li, 2014; Moscato et al., 2001). Specifically, health messages must contain fear-based content that evoke threat perceptions, such as the risks associated with unsafe driving of a car (Carey & Sama, 2016), repeated exposure to loud music (Kotowski et al., 2011) and alcohol intoxication (Moscato et al., 2001). However, these fear-based messages have to be presented in conjunction with some type of efficacy statement, such as wearing a seatbelt to avoid injury in a collision (Carey & Sama, 2016), using over-the-ear headphones to reduce noise-induced hearing loss (Kotowski et al., 2011) or drinking responsibility so as to avoid being arrested (Moscato et al., 2001) respectively. Regardless of the strength of the efficacy statements (Tannenbaum et al., 2015), as long as both elements of the message are present, young adults are more likely to engage in and potentially maintain the danger control responses proposed (Carey & Sarma, 2016; Ferguson & Phau, 2013; Kotowski et al., 2011; Lennon & Renfro, 2010; Li, 2014; Moscato et al., 2001).

Moderating Factors. Although fear appeals can successfully influence and encourage the maintenance of health behavior changes in young adults, researchers have identified moderating factors that may diminish or otherwise alter the effectiveness of fear-based messaging among young adults as well as other populations. For the purposes of this review, factors that would be especially pertinent to an AD-completion campaign targeting young adults were included. The factors originate from the attributes of the audience as well as from the message content itself.

The Potential Effect of Gender. Gender-based differences are often cited as a major influence on the effectiveness of fear appeals. While both males and females can be impacted by fear appeals (Lennon & Renfro, 2010), females are often found to be more susceptible to fear-based health messages compared to males (De Vocht, Cauberghe, Sas, & Uyttendaele, 2013; Ferguson & Phau, 2013; Lennon & Renfro, 2010; Quinn, Meenaghan, & Brannick, 1992; Tannenbaum et al., 2015). Males may be less affected or influenced by fear-based health messages due to feelings of invulnerability and lowered perceptions of risk (De Vocht et al., 2013; Quinn et al., 1992; Slovic, 1999). On the other hand, females may be more influenced as they tend to be more afraid of health effects (Smith & Stutts, 2003), more focused on prevention (Kurman & Hui, 2011; Lockwood, Marshall, & Sadler, 2005) and experience increased risk perception and susceptibility (De Vocht et al., 2013; Lennon & Renfro, 2010). However, studies suggest that males can be targeted using graphic visual elements (Lennon & Renfro, 2010) and cosmetic appeals (Smith & Stutts, 2003).

The Potential Effect of Age. Studies suggest that there is an inverse relationship between fear perception and increasing age as adolescents have been found to have a

stronger response to fear-based messages compared to young and older adults (Campo, Askelson, Carter & Losch, 2012; Carpenter & Pechmann, 2011; Farrelly, Davis, Haviland, Messeri, & Healton, 2005; Ferguson & Phau, 2013; Pechmann & Reibling, 2006). This suggests that fear appeals become less effective as a population ages. Some instances of age-related differences in fear responses may be attributed to the message type. For example, health messages can target fears related to health under the guise of social status and acceptance (Ferguson & Phau, 2013). Compared to young and older adults, adolescents may be more susceptible to socially-related health messages, which may be due to a greater apprehension regarding social ostracism (Ferguson & Phau, 2013; Lee, Buchanan-Oliver, & Johnstone, 2003; Schoenbachler & Whittler, 1996), and thus may be more responsive to those types of health messages. However, not all health messages are affected by age as fear-based health messages have effectively targeted multiple age groups (Centers for Disease Control, 2016; Ferguson & Phau, 2013; Lennon & Renfro, 2010).

The Potential Effect of Other Emotions. The impact of a fear-response to a health message can be mediated by other emotions. The effect of disgust on fear appeals have been widely studied as both fear and disgust have been found to capture an audience's attention (Leshner et al., 2009; Morales, Wu, & Fitzsimons, 2012). Adding disgust to fear appeals can considerably enhance the persuasiveness of the message and encourage compliance because, unlike a fear response that can cause an individual to freeze, disgust immediately compels an individual to take action and distance himself or herself from the threat (Morales et al., 2012). However, the addition of disgust to fear-based messages may also result in lower levels of persuasion and compliance due to an

overload of information that can lead to audience disengagement (Leshner et al., 2009). Other emotions, such as anger, empathy and guilt, have not been studied as closely as disgust, but may have implications for fear-based messages. Studies suggest that guilt can be even more motivating than fear (Huhmann & Brotherton, 1997) and that guilt appeals can successfully increase attention to and compliance with persuasive messages (Carcioppolo et al., 2015; Lee-Wingate, Moon & Bose, 2014; O'Keefe, 2002). Similarly, empathy also may increase the effectiveness of a fear appeal by creating a more personal association to the message (Santa & Cochran, 2008); however, the influence of empathy may be moderated by gender (Shen, 2015). On the other hand, anger may dilute the influence of fear appeals as a study on young male drivers demonstrated that anger reduced the impact of driving-related fear appeals even when the perceptions of threat and efficacy were present (Carey & Sarma, 2016).

The Potential Effect of Topic Familiarity. The target audience's acquaintance with the subject of a fear-based health message presents as another potential mediator. As individuals become more familiar with a topic via personal experience or exposure to relevant information, the effectiveness of fear appeals begins to decrease (Kim et al., 2014; De Pelsmacker, Cauberghe, & Dens, 2011; Santa & Cochran, 2008). In fact, when presented with a fear appeal warning against a particular unhealthy behavior, individuals who have previously engaged the behavior are more likely to immediately disregard the message than those who have not (Chan, 1991; Hamilton, Cross, & Resnicow, 2000; Peters et al., 2013; Santa & Cochran, 2008). However, topic familiarity does not entirely negate the effect of a fear appeal. A certain level of familiarity remains important as prior experience and knowledge can help individuals to process and learn new relevant

information (Campbell & Keller, 2003; Kim et al., 2014). In addition, experimental studies suggest that graphic fear appeals are more effective for an unfamiliar topic compared to a familiar one and that a weak fear appeal in conjunction with new information can increased severity perceptions of a familiar topic (De Pelsmacker et al., 2011). Therefore, designing a fear-based message that corresponds to the audience's level of topic familiarity is a strategy that can help ensure the effectiveness of a fear appeal.

Drawbacks of Fear Appeal Use

The current debate over the use of fear appeals in the health communication field indicates that disadvantages of fear appeal use do exist. One major drawback is that fear appeals present an ethical dilemma because they may mislead or manipulate the audience (Bradley, 2011). Additionally, despite the demonstrated utility of fear-based messages in eliciting a fear response and appropriate action in the audience, there is a possibility that the messages will have the opposite effect. Studies have indicated that fear-based messages may actually result in null (Chan, 1991; de Hoog et al., 2007; Hamilton et al., 2000; Peters et al., 2013) or even negative effects (Drug Free Alliance, 2013; Fairchild et al., 2015; Peters et al., 2013; Ruiter et al., 2014). However, proper application of the EPPM may prevent some of these unintended results.

The Ethics of Fear Appeals. As with the use of any persuasive techniques, fear-based messages remain subject to ethical scrutiny as such emotional appeals may manipulate individuals into thinking or acting a certain way, thus interfering with autonomous decision making (Bradley, 2011; Rossi & Yudell, 2012). This issue is of particular importance in the health communication field as scientific and health communities have an obligation to the public to provide information that is as accurate

and complete as possible in order to minimize the likelihood of misinterpretation and misunderstanding (Strasser & Gallagher, 1994). As fear-based health messages have been found to be less truthful more often than other types of health messages (Lee, 2011), some health communication practitioners advocate for the information-only health approach to health communication. This approach centers on the belief that, with a few exceptions, individuals have the right to make their own decisions when it comes to their personal health (Strasser & Gallagher, 1994) and that health information does not require any persuasive techniques in order to influence individuals (Worden & Flynn, 2001).

Null and Negative Effects. Despite their demonstrated utility, the content and design of fear-based messages may stimulate defensive actions, such as risk denial, biased information processing and less attention to health messages (Ruiter et al., 2014). It is important to note that the application of the EPPM, which stresses the importance of providing the audience with the attainable means and confidence to avert the threat (Witte et al., 1996), can successfully reduce the occurrence of these null or negative effects (Peters et al., 2013; Ruiter et al., 2014). However, repeated exposures to a fear message and messages that contain extreme fear appeals may reduce or negate the effectiveness of the EPPM.

One major problem with the use of fear appeals is that the audience experiences a lesser degree of fear with each viewing of the message (Bradley, 2011; Lewis, Watson, White, & Tay, 2007; Zimmerman, 1997), which necessitates the continual development of even more shocking and fear-inducing messages (Hastings, Martine, & Webb, 2004). However, repeated attempts to produce high threat perceptions may lead to messages that denounce the very population the message is designed to help (Bradley, 2011; Fairchild

et al., 2015), thus reducing the credibility of the health agency or organization that promoted the messages and the health message itself as well as resulting in limited adherence to the recommendations (Hastings et al., 2004). For example, the New York City Department of Health's "It's Never Just HIV" advertising campaign, which meant encourage gay men to use condoms, appeared much like a horror film that depicted gay men as horrifying creatures and created much controversy among the gay community and the public as a whole (Fairchild et al., 2015). Credibility of the message is also weakened when the fear appeals do not align with individuals' personal experiences, which can occur especially when the level of fear in the message is quite high (Gordon & MacAlister, 1982). In addition, the increasingly high levels of fear can result in an overload of information that may cause the audience to disengage with the message (Leshner et al., 2009) and increase the likelihood of a boomerang effect, which occurs when individuals immediately avoid the message due to an extremely high level of fear and thus are more likely to continue engaging in the unhealthy behavior (Chan, 1991; Hamilton et al., 2000; Kim et al., 2014; Peters et al., 2013).

Implications for an Advance Directive Completion Campaign

As demonstrated by the literature, AD completion remains especially low among young adults, despite the fact that they are vulnerable to a serious medical problem (Kapp, 2000; Rauscher & Nacinovich, 2012) and that ADs can help them avoid unwanted medical treatments, reduce familial conflict and prevent lawsuits (U.S. Department of Health and Human Services, 2007). While young adults have the legal capacity to complete an AD, a major barrier preventing them from doing so is that they perceive themselves as invulnerable to a serious medical situation that would require an AD

(Kavalieratos et al., 2015; Szalai, 2015). Thus, a successful young adult AD completion campaign must promote the message that AD completion is a personal responsibility of a young adult and that the failure to complete an AD results in severe repercussions for the young adult and for his or her family or caretakers. The campaign requires a fear-based message in accordance with the EPPM that increases young adult threat perceptions regarding AD noncompletion and provides simple instructions on how to avoid the threat.

The next step in planning this campaign is to identify a completed or ongoing campaign that can serve as guide for a young adult AD completion campaign. While no campaign will align with this AD campaign completely, a good model will be a health campaign that employed the EPPM to successfully instill a perception of high risk and personal responsibility regarding a health-related behavior and promoted action in a target audience that includes young adults. Therefore, the ideal model campaign should meet the following criteria:

1. The campaign's message design applies the EPPM.
2. The objective of the campaign is to motivate young adults, ages 18-30, (solely or among other age groups) to take a proposed health-related action.
3. The campaign messages were accepted and the proposed health-related action was taken by many members of the target audience despite major barriers that may inhibit action.
4. The campaign's underlying message must align with the personal responsibility reasoning for AD completion.

Considering these criteria, an argument for the use of *Tips from Former Smokers™* (*Tips*), an educational anti-smoking campaign, as a model campaign will be made.

Tips from Former Smokers™

The Centers for Disease Control and Prevention launched *Tips* in March 2012. The *Tips* campaign features stories and graphic images of former smokers who are living with serious smoking-related diseases and disabilities as well as nonsmokers who have experienced life-threatening health conditions due to secondhand smoke exposure. The campaign aims to build public awareness of the damaging effects that smoking can have on health and to encourage smokers not to smoke around others and, ultimately, to quit (Centers for Disease Control, 2016).

While smoking and AD completion may not appear comparable on the surface, analysis of the *Tips* campaign demonstrates that the design of the campaign's anti-smoking messages fulfills the four criteria of a model campaign. Thus, *Tips* could effectively serve as a guide for the design and management of messages for a future young adult AD completion campaign.

Background for *Tips*

On January 11, 1964, Surgeon General Dr. Luther Terry released the first Surgeon General's Report on Smoking and Health (U.S. Department of Health and Human Services, n.d.). This landmark document is the first federal government report that linked cigarette smoking to various health problems. Detailing the findings from an expert committee that conducted a comprehensive review of the literature on smoking, the report demonstrates that smoking was responsible for a 70 percent increase in the mortality rate of smokers compared to nonsmokers and highlighted the relationships between smoking and diseases, including lung cancer, heart disease and chronic bronchitis (U.S. Public Health Service, 1964).

The report significantly changed American's perceptions of smoking and laid the foundation for tobacco control efforts in the United States. As a result of the report's findings, in 1965, Congress passed a law requiring health warnings on all cigarette packages, and, in 1969, cigarette advertisements were banned from television and radio (U.S. National Library of Medicine, n.d.). However, despite these and subsequent tobacco control efforts and legislation, tobacco use was, and continues to be, the leading cause of preventable disease and death in the United States. In 2012, an estimated 42.1 million American adults were current cigarette smokers, more than 1,200 American adults were dying every day because of smoking and more than 8 million American adults were living with a smoking-related illness (Centers for Disease Control, 2014c). While the smoking rates have decreased since (Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, 2016), cigarette smoking currently causes more than 480,000 deaths every year, and for every individual who dies because of smoking, at least 30 individuals live with a smoking-related illness. In addition, smoking costs more than $300 billion a year, which is comprised of nearly $170 billion in direct medical care for adults and more than $156 billion in lost productivity (Centers for Disease Control, 2016).

Tips Implementation

Funded through the Prevention and Public Health Fund of the Patient Protection and Affordable Care Act (2010), *Tips* is the first ever paid national tobacco education campaign. The campaign, which will continue to run through 2017, was developed to counter the efforts made by the tobacco industry to make cigarettes more appealing and available to consumers by motivating current smokers to quit and deterring young adults

from starting to smoke. The primary target audiences were adult smokers ages 18 through 54 with family members, health care providers and faith communities as secondary audiences. The campaign sought to instill the message that smoking causes immediate harm to the body that can lead to death or serious illness and to provide free assistance for quitting to current smokers (Centers for Disease Control, 2016).

Tips consists of television, radio, print, outdoor (billboards and others), theater and digital media ads that feature stories of 31 former smokers who are living with diseases and disabilities caused by smoking as well as 4 individuals who were affected by secondhand smoke exposure. Based on their experiences with smoking and the subsequent health consequences, each of the individuals share his or her story and a tip that current smokers should remember to follow if they do not stop smoking. The advertisements also provide viewers with a toll-free tip line and a website that they can access if they want quit-assistance (Centers for Disease Control, 2016).

Tips Impact

The *Tips* campaign stands as a "best buy" in public health. To date, the campaign has motivated more than 5 million smokers to attempt quitting since the first year of the campaign, and of those attempts, about 400,000 were permanent (Centers for Disease Control, 2016). The 2012 campaign cost approximately $48 million and prevented at least 17,000 premature deaths while helping to gain about 179,000 healthy life years. Based on these results, *Tips* spent about $480 per smoker who quit, $2,819 per premature death prevented, $393 per year of life saved and $268 per year of healthy life gained (Xu et al., 2015). As the benchmark for a cost-effective campaign is $50,000 per year of life

saved (Centers for Disease Control, 2016), *Tips* demonstrates an exceptional return on investment.

Criterion 1: Application of the Extended Parallel Process Model in *Tips*

The first criterion that must be met by a model campaign is the employment of the Extended Parallel Process Model (EPPM). According the EPPM, individuals' attitudes and behaviors can be persuaded to change through the employment of fear appeals, which work best when individuals feel concern about issue at hand and believe they can effectively address it (Witte, 1992). Therefore, a campaign following the EPPM must first prove to the target audience that a threat exists (threat perception) and that the threat is both severe (threat severity) and likely to be experienced by the individuals (threat susceptibility). Then, the campaign must supply the audience with some suggestions on how to cope with the threat (response efficacy) that can be successfully undertaken by each individual (self-efficacy) (Witte et al., 1996). The *Tips* campaign accomplishes these steps through the design and format of the campaign's fear-based audiovisual and print ads. Certain ads also include an appeal to the emotion of guilt.

Former Smokers Audiovisual Ads. The campaign maintained a consistent design and format for the ads that were shown on television, in theaters and online. Each ad begins with no audio and shows a black screen and white text of "A tip from a former smoker." The former smoker is then shown sitting in what appears to be his or her own home with his or her name, age and home city shown at the bottom of the screen, which reinforces the authenticity of the individual and the story. The former smoker is only person who speaks and begins by introducing himself or herself before launching into his or her story and tip (Centers for Disease Control, 2016).

Tips fulfills the first step of the EPPM with the ads' displays of the physical manifestations of smoking-related diseases and disabilities. For example, one woman demonstrates how she gets ready every morning now that she is bald, toothless and has a stoma following a battle with throat cancer (Centers for Disease Control, 2012). Similarly, a man is shown putting on his prosthetics after losing his legs due to diabetic complications that were exacerbated by smoking (Centers for Disease Control, 2013) while another pulls out his dentures to show how a serious gum disease affected his mouth (Centers for Disease Control, 2014b). In addition, the monologue and camera angle in the majority of the ads give the impression that the former smoker is speaking directly to the viewer and the tip is usually phrased as a warning of what is definitely to come. The tone of the former smokers, which borders on unemotional as if their stories are ordinary (Centers for Disease Control, 2012; Centers for Disease Control, 2013; Centers for Disease Control, 2014b), also contributes to the perception that such diseases and disabilities are normal for any smoker to anticipate. Therefore, not only do the commercials graphically display the severe health consequences of smoking, they give the impression that such consequences are inevitable if the smoking continues.

The second step of the EPPM is accomplished at the end of the ads when a Centers for Disease Control smoking help website and the words "You can quit" are shown (Centers for Disease Control, 2012; Centers for Disease Control, 2013; Centers for Disease Control, 2014b). The website provides individuals with a free support hotline and a free guide to quitting that includes help for learning about nicotine replacement therapy, building a support system and managing the quitting process and any repercussion like

depression and stress. In addition, the guide provides information on the benefits a former smoker will reap (Centers for Disease Control, 2016).

Former Smokers Print Ads. Similar to the audiovisual ads, the print ads reinforce the risks of smoking-related diseases and disabilities and picture the former smokers, whose names, ages and states are included, sitting in their homes with any physical manifestations of their disability or disease on full display. In order to augment the perception that the former smokers are talking directly to the viewer, the former smokers often appear to be staring directly at the viewer (Centers for Disease Control, 2016). Their tips are featured in bold large lettering so that the tip and the image of the former smoker share the focal point of the advertisement. These tips are slightly different than those in audiovisual ads as they have to function more as a summary of the individual's experience; however, they too read like a warning. For example, one tip says "If you smoke with diabetes, plan for amputation, kidney failure, heart surgery…or all three" (Centers for Disease Control, 2013b). Therefore, the print ads also give the impression of inevitability of serious health consequences for smokers. At the bottom of the ad, the words "You can quit" and the free support hotline number are shown, directing viewers to an easily accomplished course of action (Centers for Disease Control, 2013b).

Secondhand Smoke Ads. While the majority of the *Tips* ads focus on former smokers, a small number of ads give a tip about secondhand smoke exposure, which effectively incorporates a guilt appeal into the overall fear-based message. Both the audiovisual and the print secondhand smoke ads share similar formats with their former smoker counterparts. For example, one audiovisual ad features a high school student who

describes his experience with a life-threatening asthma attack that was brought on by exposure to secondhand smoke. His story is followed by the same screen that shows the Centers for Disease Control smoking help website and the words "You can quit" (Centers for Disease Control, 2013c). His print ad shows him in a hospital bed as he struggles to breathe through an oxygen mask with the hotline number below. The tip reads, "Secondhand smoke triggers severe asthma attacks" (Centers for Disease Control, 2013d). Thus, the secondhand smoke tip ads not only illustrate the frightening consequences of exposure to secondhand smoke, they also promote a feeling a guilt in current smokers who smoke around other people. Such an appeal has been demonstrated to increase the impact of fear appeals (Carcioppolo et al., 2015; Lee-Wingate, Moon & Bose, 2014; O'Keefe, 2002) and may be especially important for the ads that do not focus on the harm done directly to the smoker.

Criterion 2: Campaign Objective

In order to ensure applicability to a young adult AD completion campaign, the model campaign's objective must be to motivate a change in a health-related behavior among a target audience that include young adults. The primary target audience is adult cigarette smokers ages 18 through 54 (Centers for Disease Control, 2016). However, as young adults have the highest rate of adult tobacco use (Substance Abuse and Mental Health Services Administration, 2013), young adults were the major focus of the *Tips* campaign.

The objective of the *Tips* campaign is to motivate adult smokers to quit smoking by educating them about smoking-related health risks and facilitating the quit process

with free assistance. Specifically, as stated on the *Tips* campaign website, the goals of the campaign are as follows:

- Build public awareness of the immediate health damage caused by smoking and exposure to secondhand smoke;
- Encourage smokers to quit and make free help available;
- Encourage smokers not to smoke around others and nonsmokers to protect themselves and their families from exposure to secondhand smoke (Centers for Disease Control, 2016).

Criterion 3 Message Acceptance

The model campaign must have successfully motivated a change in behavior among the target audience despite major barriers that could deter adherence to the message. As a major barrier to young adult completion of ADs is a low risk perception regarding AD noncompletion (Kavalieratos et al., 2015; Szalai, 2015), *Tips* serves as an ideal model due to young adult smokers' low risk perception regarding smoking. In general, smokers often have unrealistic optimism about their chances of developing smoking-related diseases, such as lung cancer, compared to their smoking peers (Murphy-Hoefer, Alder, & Higbee, 2004; Weinstein, Marcus, & Moser, 2005), and young adults are more likely to have lowered risk perceptions regarding health compared to older adults (Bonem, Ellsworth, & Gonalez, 2015). Therefore, young adult smokers unsurprisingly are more likely to perceive smoking and other tobacco use as much less risky compared to older smokers (Latimer, Batanova, & Loukas, 2014; Wackowski & Delnevo, 2016). Thus, *Tips* addresses the same barrier that a young adult AD campaign would face.

Tips' success in undertaking the barrier of low risk perception is evidenced by the high numbers of quit attempts and permanent quits made by the *Tips*' target audience. The 2012 *Tips* campaign alone prompted approximately 1.64 million Americans to make quit attempts with 100,000 of those individuals quitting smoking permanently. In addition, approximately six million nonsmokers spoke with family and friends about the dangers of smoking, and an additional 4.7 million nonsmokers recommended smoking cessation services to their family and friends (McAfee, Davis, Alexander, Pechacek, & Bunnell, 2013). Since 2012, it is estimated that *Tips* has led to more than five million quit attempts and approximately 400,000 permanent quits (Centers for Disease Control, 2016).

While the data on quit attempts and permanent quits alone indicate a high level of message reach and acceptance, studies on *Tips* and young adult populations demonstrate that the campaign effectively targeted and impacted this group. Zhao and Cai (2016) found that *Tips* had reached the majority of the young adult population and that the level of exposure was highest among current smokers. In addition, the *Tips* ads were recalled and rated as believable for the most part by undergraduate and graduate students (Ickes et al., 2016). Furthermore, an analysis of *Tips*-related tweets found that the majority of the tweets indicated message acceptance, thus suggesting that the *Tips* campaigns influenced young adults as Twitter is used disproportionately by that population (Emery et al., 2014).

Criterion 4: Underlying Message and Barriers

As the legal responsibility to complete an AD falls on the individual (U.S. Department of Health and Human Services, 2007), a model campaign must also promote

a personal responsibility to act in accordance to the campaign's message. While the primary message of *Tips* is the dangers of smoking and necessity of smoking cessation, the campaign also appears as a both a reflection and reinforcement of the view of health as a personal responsibility.

Despite being funded and developed by a government agency, *Tips* frames cigarette smoking solely as a personal failing by only focusing how smoking led to health issues for particular individuals who would not quit. The ads reinforce individual responsibility and personal choice as the only person featured is the former smoker, who speaks directly to the viewer and names his or her failure to quit smoking as the sole cause of the disease or disability. This portrays the former smoker's health issues as direct result of a personal choice to irresponsibly continue to smoke. The campaign does not address any social problems associated with smoking prevalence that these individuals may have been facing, such as lack of education, poverty or unemployment, that could be considered failures of the government (Galvin, 2002). Similarly, there is no mention of contributing internal factors, such as genetics, that likely were not chosen or influenced by levels of responsibility. In addition, the campaign's tagline, "You can quit," supports the view of smoking cessation as a simple choice that any person can make if he or she feels like it, regardless of economic, social or genetic status, and the suggestions for how to quit smoking require individual initiative and follow-through in order to be successful.

Recommendations for a Young Adult AD Completion Campaign

Having demonstrated that *Tips* satisfies the four criteria required for a model campaign, *Tips*-based recommendations for a young adult AD completion campaign may

be made. Specifically, a young adult AD completion campaign can draw inspiration from the *Tips* campaign objectives, message design, which addressed threat perceptions and personal responsibility, and measurements of success.

Campaign Objectives

In regards to campaign objectives, the young adult AD completion campaign should have multiple goals similar to the *Tips* campaign. While primary objective is to increase the number of young adults who successfully complete ADs, the campaign should also focus on building young adults' awareness of the dangers associated with AD noncompletion, such as unwanted medical treatments, family bereavement and legal battles (U.S. Department of Health and Human Services, 2007). This objective is especially important as lack of education about ADs is a barrier to young adult completion (Szalai, 2015). In addition, the campaign should make free assistance available. Options for this free help include a website and hotline like *Tips* or informational programs developed for young adults, their families and physicians.

Message Design

The message design of the young adult AD completion campaign should employ the EPPM framework to induce fear regarding AD noncompletion in the target population and provide them with information on how to combat the threat. In order to induce this fear, the campaign must demonstrate young adults' susceptibility to situations in which an AD would be necessary. This objective can be achieved by beginning the campaign ads with statistics that demonstrate that young adults are more likely to experience an unexpected medical crisis compared to other age groups. For example, unintentional injuries, which are most often caused by accidental falls, car accidents and

poisonings (Centers for Disease Control, 2014a), are the leading causes of death among individuals ages 18-30 (Centers for Disease Control, 2014d).

With the susceptibility of the threat established, the campaigns ads should heighten young adult threat perceptions by depicting the negative consequences of AD noncompletion in a medical crisis. As individuals in vegetative states, minimally conscious states and comas can feel pain (Boly et al., 2008; Markl et al., 2013), one type of ad could focus on the personal pain and suffering a young adult may experience when undergoing medical treatments against their will. These ads could draw from studies on anesthesia awareness, a complication that occurs when a patient regains consciousness during general anesthesia. Individuals who experience anesthesia awareness are often unable to communicate their awareness to their physicians and report a range of sensations, including pain, choking and paralysis (Pandit et al., 2014). A second type of campaign ad could emulate the *Tips* guilt-based secondhand smoke ads by focusing on the emotional, mental and physical suffering that bereaved families and other loved ones will experience as they attempt to navigate the young adult's medical decisions (Cook, White, & Ross-Russell, 2002; Rogers, Floyd, Seltzer, Greenberg, & Hong, 2008).

The campaign ads should then address the concept of personal responsibility in order to motivate the young adults to take action. Both types of ads should contain a reminder that only the young adults themselves have the legal power to complete an AD to mitigate these consequences and that their choice to remain inactive in regards to AD completion could lead to serious ramifications for themselves and their loved ones. With this motivation to act instilled, the ads should provide information about the free assistance and support that is available to young adults who need to complete ADs

Measurements of Success

While the ultimate measurement of message acceptance would be statistics on AD completion rates among young adults, the young adult AD completion campaign can also track message acceptance through visits to the free assistant websites, calls to the hotline and attendance at informational sessions. While these measurements do not necessarily indicate that the AD completion rate among young adults is increasing, they do demonstrate that the topic captured individuals' attention and that conversations regarding young adult AD completion are likely occurring. In addition, surveys and focus groups could explore the recall and believability of the ads among the target group. Furthermore, the campaign could turn to social media platforms, such as Twitter and Facebook, to investigate if the campaign ads are being viewed, discussed and believed by young adults.

Limitations

While *Tips* meets the four criteria of a model campaign, three main limitations regarding its use as a guide for a young adult AD completion campaign exist. Despite these limitations, the use of *Tips* as model campaign remains warranted. The first limitation is that cigarette smoking and AD completion are different topics, which means complete alignment between the two campaigns is impossible. However, as the campaigns do share similar objectives and underlying messages and address the same barrier, *Tips* does provide a useful framework for the young adult AD completion campaign. The second limitation is that research on young adult AD completion remains underdeveloped, which means that the campaign developers could be unaware of other major motivations or barriers. Nonetheless, the current research does indicate barriers

that can be addressed currently and the campaign itself may even spur future AD-related studies. The third limitation is that while assessment studies on *Tips* indicate the success of the campaign, they do not address acceptance among specific age groups. However, it does remain likely that young adults did respond to the Tips campaign based on the fact that young adults have the highest rate of adult tobacco use (Substance Abuse and Mental Health Services Administration, 2013) and thus were the main subgroup of the targeted population.

Conclusion

Despite the benefits derived from an AD, the majority of individuals have yet to complete one (Rao et al., 2014), and research and interventions have primarily focused on AD completion among older adults and terminally ill populations. This is highly problematic as young adults are a large subsection of the population who also benefit from AD completion (Rauscher & Nacinovich, 2012); however, they are often unaware and unconcerned with the threat of AD noncompletion (Kavalieratos et al., 2015; Szalai, 2015). Therefore, the development of campaign that aims to increase young adult AD completion is warranted.

This project informs the development and management of a young adult AD completion campaign by identifying a relevant communication theory and health campaign that provide a guiding framework for the future campaign. First it is demonstrated that the EPPM has been shown to effectively increase individuals' motivations to follow a recommended health-related action by using fear appeals and efficacy statements (Witte, 1992), making the theory a useful communication management tool for health campaigns. Then the project presents an argument for the use

of *Tips* as a model campaign based on its fulfillment of four criteria, which were developed to ensure applicability to a young adult AD completion campaign. Specifically, the *Tips* campaign is proven to employ the EPPM theory to successfully instill a perception of high risk and personal responsibility regarding a health-related behavior and to promote action in a target audience that includes young adults. Finally, the project provides recommendations for the design and assessment of a young adult AD completion campaign.

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