Existential Fear and the Drive to Donate:
A Terror Management Theory Perspective on Advertising Appeals of Nonprofits

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DEDICATION

This thesis is dedicated in its entirety to my mother, Dr. Robin Steed, whose unwavering support and guidance inspired and propelled me throughout this difficult process. She has assisted me in every aspect of this journey. Without her knowledge, experience and motherly devotion this thesis would not have been possible.

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CHAPTER 1: INTRODUCTION

As the news story ended, a number flashed on the TV screen: "Call now to donate to the victims," the tagline read. Without thinking William Davis grabbed his phone and began to dial. It was September 12, 2001, and Will had spent the day feverishly watching the details of 9/11's tragedy unfold on the news.

Why did Will choose to donate to the victims of the 9/11 terrorist attacks? Was it because he simply felt sorry for the victims and wanted to help or, was there a deeper subconscious motivation driving Will's willingness to donate that he was completely oblivious to? Although one can only speculate about the true motivations behind each action a person takes, Terror Management Theory (TMT) provides some unexpected possibilities for the ultimate cause for human behavior.

Ernest Becker, whose work inspired TMT, explained "The real world is simply too terrible to admit; it tells man that he is a small trembling animal who will someday decay and die. Illusion changes all of this, makes man seem important, vital to the universe, immortal in some ways" (Becker, 1973, p.133). By *illusion,* Becker was referring to the picture of reality created by a person's culture and societal environment. In essence, Becker was saying that the existential fear of the eventuality of death drives humanity to seek meaning and a sense of importance in order to attain a type of metaphorical immortality. The content and context of that meaning is derived from a person's cultural view of reality. Terror Management Theory seeks to explain not only why existential fear drives humanity but the consequences and types of behavior it elicits. The theory also provides evidence that the fear of death is more accessible and therefore more of an influence on behavior when a person is exposed to environmental death reminders.

Take the previous scenario with William Davis as an example. Will spent the day watching story after story detailing horrific scenes of death and carnage caused by the 9/11 attacks. According to TMT, these stories reminded Will that one day he too would die. Involuntarily, his subconscious mind began processing this fear and looking for ways to subdue it. By donating to the victims, Will was engaging in a type of culturally supported prosocial behavior. This action more closely aligned Will with his culturally derived values, thus he was able to see himself as an important part of society, thus metaphorically defeating death.

The TMT concept of culture provides answers to philosophical questions such as "Why am I here?" and "What is my role in life?" but it can also provide researchers and advertisers with concrete information about prosocial and consumer behavior (Jonas et al., 2008). Armed with the knowledge of their viewer's true underlying motivations nonprofit advertisers can develop strategies to better communicate with their target audience and successfully obtain volunteers and donations for their organization or cause.

Although the majority of terror management research centers on the theory's more negative consequences, i.e. materialism, racism and religious intolerance (Jonas, Greenberg, Pyszczynski, 2002), recent studies have shed light on its implications for prosocial behavior. Debated for centuries by philosophers and scientists, the nature of prosocial behavior and the existence of pure altruism is still being studied and examined today. Though neutral in this existential argument, TMT researchers have provided evidence that the fear of death can positively affect prosocial behavior, specifically donating to charity (Hirschberger, 2010; Hirschberger, Ein-Dor & Almakias, 2008; Joireman, & Duell, 2005, 2007; Jonas et al. 2002)

Nonprofits have become increasingly important in the United States with an

estimated 2.3 million organizations operating in the US in 2012 (Roeger, Blackwood, & Pettijohn, 2012). Organizations such as the American Red Cross, St. Jude Children's Research Hospital, Habitat for Humanity and others, play a vital role in society, providing desperately needed services and relief to millions. Nonprofits not only provide critical aid to those in need, they also contribute to the economy. In 2010, nonprofits made up 5.5 percent of the United States GDP, a figure that has been increasing over the past 60 years (Roeger et al., 2012, p.9). With their growing importance both socially and economically, it is imperative that these organizations have the recourses and knowledge needed to successfully solicit donors. In a modern era of overcrowded media channels, marketing clutter and stiff advertising competition, nonprofits need every advantage available in order to use their often-limited advertising dollars effectively.

Most nonprofits rely heavily on volunteers and donations to function and advertising plays a key role securing them. In the last ten years, TMT researchers have made several important discoveries about the motivation to donate or volunteer to a charity and the effects of mortality salience on donor behavior. However, very little research has been done on mortality salience's relationship to a nonprofit's advertising appeal and a person's willingness to donate. Within the current body of TMT research a disconnect exists between mortality salience's effect on willingness to donate and the type of appeal used in nonprofit advertisements. The purpose of this thesis is to link the previously established findings about TMT and donor behavior with the consumer behavior findings on advertising and TMT. By linking mortality salience, willingness to donate, and advertising appeal (specifically type of call to donate) this thesis seeks to provide research that can be used to develop more persuasive and effective advertising solutions for nonprofits. Specifically, this thesis predicts

that mortality salience in combination with the type of call to donate used in a charity's ad has an effect on willingness to donate.

This thesis not only reviews the existential and psychological implications of TMT found in the literature, but also the practical real world solutions it can provide. The majority of advertisements are based on a consumer's surface level desires and are not developed with the target audience's true underlying motivations: a subconscious fear of death. As an exceedingly abstract and existential concept, the fear of mortality, on the surface, seems to bare little relevance to practical real-world problems such as how to advertise. However, through the lens of TMT a simple act, such as donating to a charity, can be seen as an anxiety-subverting subconscious attempt to attain a sense of immortality.

From its official conception (Greenberg et al., 1986), Terror Management Theory was a highly intricate model, which attempted to explain a complicated cause and effect progression that provided answers to humanity's ultimate existential questions. Although TMT's main tenets have remained unchanged, present and ongoing research in the field has further contributed to the theory's complexity and validity, allowing for applications in a variety of settings and industries. In order to explain the current multilayered theory and its implications for procuring non-profit donations, this thesis explores the chronological progression of TMT, beginning with the theory's **e**nduring rudimentary principles and the ideas that influenced TMT's evolution. Next, the thesis's focus narrows to TMT's conceptualization of consumer behavior and finally prosocial behavior such as donating to a charity. In order to fully appreciate and apply the modern Theory of Terror Management, its conceptual evolution must first be understood. At the conclusion of this thesis all the various facets and extensions of TMT come together not only to illuminate the theory's existential

explanations, but also the more tangible and practical applications for nonprofit advertisers. A clear comprehension of TMT and all its processes is absolutely necessary to explain the effects of specific types of advertising appeals on pro-social behavior in a TMT context.

CHAPTER 2: LITERATURE REVIEW

Overview of TMT

Definition of terms. There are several terms and concepts involved in TMT that are constant throughout its history and remain unchanged in the field's current research. Most studies researching TMT do not explicitly define terms and concepts already established in social and cognitive sciences. This short overview serves as a supplement to clarify and define TMT's basic terminology and outline its main principles.

Terror management refers to the way human beings cope with the unsettling knowledge of their own individual impermanence. "The main tenet of TMT is that the desire to transcend the fragility of human existence by construing oneself as a valuable contributor to a meaningful universe lies at the root of a diverse array of otherwise distinct human motives" (Kesebir & Pyszczynski, 2011, p.34). In other words, basic human behavior is actually caused by the fear stemming from the awareness of death. In TMT, the fear of death does not refer to the fear of imminent physical death (as might be felt by a terminal cancer patient) nor does it refer to the fear felt while actually dying. In a TMT context, the fear of death refers to the fear or trepidation of eventuality no longer existing in the world. A fear such as this is not found mostly among the elderly or those fatally ill, who may have learned to accept their fate, but lurking in subconscious minds of the young and healthy. To buffer this fear, humans subscribe to their chosen perception of reality in order to explain the meaning of life and attempt to gain value within that perception. TMT uses the term *mortality salience* to describe this awareness of death, the term, *cultural worldview* to describe a person's perception of reality and the term *self-esteem* to describe value within that reality.

In TMT mortality salience (MS) is defined as an individual's awareness of his or her own inevitable death (Burke, Martens, & Faucher, 2010). If a person becomes mortality salient, they have become cognizant of the impermanent nature of their own existence. Within TMT, MS deals with both the conscious and subconscious fear of death, but with a focus on the latter. Subconscious fears or thoughts are feelings a person is not actively aware of, as they are below the level of perception. Along with MS, the term *cultural worldview* is an ever-present component of TMT. Cultural worldview refers to the perception of reality through cultural or societal conceptions and values. Arndt, Solomon, Kasser and Sheldon (2004a) explain "Cultural worldviews provide answers to basic and universal cosmological questions (e.g., How did I get here?; What do I do while I'm here?; What happens after I die?) and structure human perceptions in ways that imbue the universe with meaning, order, and permanence" (Arndt, Solomon, Kasser & Sheldon, 2004a, p.199). This means a cultural worldview buffers the effects of MS by providing an individual's life with meaning and a method to attain value during their life, hence symbolically conquering death. TMT suggests that the development of an individual's cultural worldview "is a consequence of the socialization process and is heavily influenced by the various agents of the culture with which the individual has contact (e.g., parents, teachers, religious leaders, and peers)" (Greenberg, Pyszczynski, Solomon, Rosenblatt, Veeder, Kirkland, & Lyon, 1990, p.309). This explains that while people may be a part of the same culture: American, European etc., their individual cultural worldviews will differ based off their social experiences. The term *self-esteem*, in a TMT context, refers to a person's feeling of value according to their worldview. This self-esteem is achieved by fulfilling and upholding the goals and ideals outlined in an individual's cultural worldview (Greenberg et al., 1986).

Origins. Death, and the emotions and behaviors associated with it, have been studied and theorized about for countless decades. Theory of Terror Management (Greenberg et al., 1986) was built primarily from insights gleaned from three books written by a cultural anthropologist (Becker, 1962, 1973, 1975) whose work centered on human motivation. Becker combined and expanded on extensive research from multiple scientific fields and disciplines and integrated it into three comprehensive texts. Becker (1962) writes in great detail about human motivations and self-esteem, two central components of TMT. Becker's second book, (1973) was awarded the Pulitzer Prize for General Non-Fiction. The book's foreword encapsulates the essence of Becker's message: "The basic motivation for human behavior is our biological need to control our basic anxiety, to deny the terror of death. Human beings are naturally anxious because we are ultimately helpless and abandoned in a world where we are fated to die" (Becker, 1973, p.xii). Becker's assertion that the principal motivation of humanity is the subconscious anxiety of inevitable death has become the key component in modern TMT. Becker (1975) continues to synthesize the psychological and scientific perceptions of man and mortality in his last volume. In this work, Becker argues, "man's innate and all-encompassing fear of death drives him to attempt to transcend death through culturally standardized hero systems and symbols"(Becker, 1975, xvii). Becker emphasizes the importance of a cultural identity and conformity to culturally generated values to alleviate the anxiety an individual feels about his or her mortality. Becker's concept of *culturally standardized hero systems and symbols* provides the basis for another of one TMT's key components, the concept of a cultural worldview. Becker's research was aimed at comprehending an individual's deepest motivations and the ultimate reason for behavior. His groundbreaking work led the way for the development of TMT.

Chronological history. Greenberg, Pyszczynski and Solomon (1986) gave Becker (1962, 1973, 1975) credit as their inspiration for Terror Management Theory when it was first introduced. Their theory has, in the present day, given rise to a plethora of articles and research studies that have been applied to everything from food insecurities (Allen & Wilson, 2005) to cultural racism (Greenberg et al., 1990). However, the first decade of TMT research sought solely to explain human social behavior and only in the late 1990's did it became the bases for a variety of other applications. Greenberg and his colleagues (1986) stated that TMT's original intent was to explain "what self-esteem is, why we need it, and how the need for self-esteem affects social behavior" (Greenberg, 1986 p.206). Greenberg et al. suggested that in order to combat a subconscious fear of death, individuals need to feel that their life has meaning; that they are important and valuable to society. If this can be accomplished, death no longer causes anxiety. Self-esteem represents a person's evaluation of his or her life's value. Along with self-esteem, death anxiety engenders a need to belong to something, to be part of a group and to be respected within that group. A person that feels a connection to a social or cultural group feels that life has meaning and therefore the prospect of death is less terrifying. Self-esteem within the context of that culturally created value system not only provides that person with a feeling of belonging and value but, as a self-assured member of a lager enduring culture, the person feels immortalized beyond a human being's infinite existence. Although the explanation of self-esteem was the theory's original intent, TMT is now known for its explanation of how the fear of death affects almost every aspect of human behavior and how it guides humanity's eternal quest for meaning (Burke et al., 2010). In the most simplistic terms the basic premise of TMT is that aligning one's self with a cultural worldview (i.e. perceiving reality through cultural or societal invented conceptions) can

buffer or lessen the conscious or unconscious anxiety and fear associated with thought of death (Greenberg et al., 1986). In order to accomplish this, an individual must attain a sense of self-esteem or value within their cultural world to shield themselves from their death anxiety. A cultural worldview and self-esteem within that worldview represent the main coping behavior for existential fear proposed by the theory. The actual behavior that a person exhibits to align his or her self with a cultural worldview and acquire self-esteem based on this view is dependent on the specific values held by a person's chosen culture.

Greenberg, Pyszczynski and Solomon (1986) claimed a cultural anxiety-buffer necessitates frequent reinforcement and social validation from within a cultural framework. The authors also asserted that a cultural worldview is in essence a social construct or societal perception of reality. This means people will attempt to surround themselves with others that share their particular cultural worldview and reinforce their cultural anxiety-buffer. Views that run counter to an individual's societal perception threaten his or her defenses and prompt a negative reaction. People are continually bombarded by reminders of their mortality through various forms of media, life events, and other stimuli. Television, newspapers and online news are filled with graphic scenes of death and disasters. Stories about terrorism, war, and even a simple car accident can trigger unconscious thoughts of one's own inevitable death, precipitating the need for a shield. Much of Greenberg, Pyszczynski, and Solomon's early work with TMT focuses on social behaviors and interactions as a coping behavior for death anxiety, while later studies evolved to include applications to consumer and prosocial behavior.

Greenberg, Pyszczynski, and Solomon along with several new contributors expanded on the original TMT three years after its conception (Rosenblatt, Greenberg, Solomon,

Pyszczynski, & Lyon, 1989). This study focused on the tendency for people to respond negatively toward those who do not share their worldview. The researchers induced mortality salience (the state of awareness of one's death) in their subjects to test whether death anxiety affected their responses to a person who endorsed or violated their cultural values (Rosenblatt et al., 1989). The mortality-salience manipulation consisted of two open ended questions that asked the participants: "(a) What will happen to them as they physically die, and (b) the emotions that the thought of their own death arouses in them" (Rosenblatt et al., 1989, p.682). Though MS can be induced by various other methods, Rosenblatt et al.'s method is utilized by this thesis and the bulk of TMT research: (Greenberg et al., 1990; Hirschberger, Ein-Dor, & Almakias, 2008; Jonas, Schimel, Greenberg, & Pyszczynski, 2002; Norenzayan, Dar-Nimrod, Hansen, & Proulx, 2009; Rosenblatt et al., 1989). The results of Greenberg et al.'s multiple experiments discovered that mortality salient individuals responded significantly more positive toward a person who supported cultural values than their non-salient counter parts. Respectively, morality salient subjects felt significantly more negative toward a person who violated their cultural values. The presence of death anxiety greatly affected a person's social interactions and decision-making processes. An experiment in this study that illustrated this effect showed that judges who were mortality salient set a higher bond for people accused of prostitution, a culturally immoral act (Rosenblatt et al., 1989). The study also presented what is now called the mortality salience (MS) hypothesis, which states that subconscious MS, i.e. the unconscious awareness of one's eventual death, will increase a person's need for a cultural worldview and self-esteem. While the term MS can refer either to the conscious or subconscious awareness of death, the MS hypothesis deals only with the subconscious awareness of death. According to TMT, the subconscious

presence of death anxiety in the judges' minds caused them to align themselves more closely with their cultural worldview to buffer that anxiety. Recommending a harsher punishment represented the judges' attempt to associate themselves with their cultural group thus alleviating the judges' existential insecurities (Rosenblatt et al., 1989). Although this research primarily discussed the effects that fear of death has on social interactions, it also provides a plausible basis for the idea that death anxiety and the subsequent need to align one's self with a cultural worldview could also effect prosocial behavior.

Greenberg, Pyszczynski, and Solomon continued to expand their ideas with their third related work (Greenberg et al., 1990). Greenberg et al. discussed in detail the concept of a worldview and the influence culture has on it. "From a terror management perspective, one very important function of culture (although surely not the only one) is to provide a means of conceptualizing reality that allows for the possibility of equanimity in the face of human vulnerability and mortality" (Greenberg et al., 1990, p.308). Still focusing on social relationships, and using the same MS manipulation method as Rosenblatt et al. (1989) this study analyzed how mortality salience positively affects the way people view others from the same religious groups as themselves. It was also found that the constant consensual validation needed to support an individual's anxiety buffer accounted for the way a person views people of a different religion more negatively than those of their own faith. It was discovered that mortality salience increased the negative response evoked by criticism of a person's worldview as well as increased the positive response evoked by praise of a person's worldview. Even though different cultures and societies can have vastly diverse values and ideals, the worldviews held by them still provide the same sense of meaning, direction and value to its members.

That same year (1990) the theory's creators and colleagues also published an analysis of the effect of self-awareness on death anxiety (Pyszczynski, Greenberg, Solomon & Hamilton, 1990). The study reiterated the previously outlined concept that self-esteem is comprised of the recognition of a cultural conception of reality and the degree to which an individual ascribes their behavioral congruence with the ideals of that concept. According to the researchers, the process of developing self-awareness causes individuals to evaluate and compare themselves with their cultural worldview. As people become aware of personal behavior that is inconsistent with their value system, psychological conflict can surface. Self-awareness, therefore, has the ability to cause existential anxiety and perpetuate a cycle of self-protective behaviors inherent in terror management.

Pyszczynski et al.'s study on self-awareness lead to the 1994 study that researched the awareness and accessibility of death related thoughts (Greenberg, Pyszczynski, Solomon, Simon, & Breus, 1994). Greenberg et al.'s study produced groundbreaking findings that changed the way MS would be tested and induced. The study found that the effects of mortality salience were higher when death related thoughts were more accessible. While still unconscious, thoughts of death can still be highly accessible to the subconscious mind and therefore more likely to affect a person's behavior. After inducing mortality salience, researchers used a word-search puzzle to distract participants before testing their level of death thought accessiblity. They discovered that these thoughts were most accessible after this short period of distraction. Pyszczynski et al. also developed a new method to test death thought accessibility and MS with a word-fragment completion task. The word-fragment completion task (now called the word stem completion task) was comprised of 20 word fragments that subjects were asked to complete with the first word that came to their mind.

Sixteen of the fragments could be completed by neutral words, while four could be completed by either neutral or death-related words. The more death-related words completed the more accessible the subject's death-related thoughts. The word stem completion task and the use of a puzzle for distraction has been repeatedly validated and is used in this thesis as well as the majority of modern TMT research (Arndt, Greenberg, Pyszczynski, & Solomon, 1997a, 1997b; Hirschberger, 2010; Hirschberger, Ein-Dor, & Almakias, 2008; Shehryar & Hunt, 2005; Norenzayan, Dar-Nimrod, Hansen, & Proulx, 2009; Pyszczynski, Greenberg, & Solomon, 1997,1999)

Greenberg, Pyszczynski and Solomon, along with various others, continued to expand and develop Terror Management Theory, writing numerous articles. By 1999 over 75 individual experiments had been conducted internationally offering support for TMT (Pyszczynski et al., 1999). A number of papers are rarely cited by authors outside of the theory's original founders (Simon, Greenberg, Arndt, Pyszczynski, Clement & Solomon, 1997; Greenberg, Simon, Solomon, Pyszczynski, & Chatel, 1992), while others, although more heavily referenced, consist mainly of slight variations of previously written articles (Arndt, Greenberg, Solomon, Pyszczynski & Simon, 1997; Arndt, Greenberg, Pyszczynski, & Solomon, 1997; Greenberg, Pyszczynski, & Solomon, 1991; Harmon-Jones, Simon, Greenberg, Pyszczynski, Solomon, & McGregor, 1991; Greenberg, Solomon, & Pyszczynski, 1997; Greenberg, Solomon, Pyszczynski, Rosenblatt, Burling, Lyon, Simon, 1992). These articles concentrate predominantly on the key concepts of TMT: a cultural worldview, self-esteem within that worldview and existential anxiety. The research also indicates that strengthening self-esteem could decrease death anxiety while weakening it has the opposite effect. Much of the research overlaps, but the large quantity of correlating

studies and experiments executed by these researchers provide a sizeable amount of support for the theory's main propositions.

Pyszczynski, Greenberg and Solomon (1997) published a new addition to the theory of Terror Management. The authors discussed the natural fundamental instinct for self-preservation that all living things share (Pyszczynski, Greenberg, & Solomon, 1997). Humans however, have the unique knowledge that even if their basic needs are met for the moment, death will ultimately win in the end. As TMT explains, this unique knowledge drives humanity to strive for more than the basic needs of food and shelter, and to reach for some kind of meaning in order to combat the foreknowledge of impermanence. The study claimed, " the pursuit of meaning and value is just as surely linked to self-perseveration as are hunting and gathering food" (Pyszczynski et al., 1997, p.5). Pyszczynski et al. outlined a motivational hierarchy that was divided into three main systems: *direct*, *symbolic*, and *self-expansive*. Direct motives represent the most basic biological processes that work to keep a person living and improve the prospect of gene continuation. Direct motives or the "direct means of self-preservation" include both, "internal homeostatic processes and innate behavioral proclivities" (Pyszczynski et al., 1997, p.6). Examples include the desire for food, the instinctual fear of fire or the body's automatic intake of oxygen. These motives lead to behaviors such as acquiring food or avoiding pain.

Conversely, symbolic motives result when an organism with natural self-preserving desires gain awareness of its eventual death (Pyszczynski et al., 1997). This awareness leads to the pursuit of meaning, and according to TMT, faith in a cultural belief structure. The study suggested that, "although they (symbolic means of self-preservation) do not keep the individual alive in any direct biological sense, they function to control the terror that results

from the knowledge of the inevitability of death." (Pyszczynski et al., 1997, p.6). Even though symbolic motives, often unconscious, seem unrelated to individuals' biological needs, these motives direct or influence how those biological needs are carried out, such as what kind of food to eat or what kind of clothing to wear.

Unlike direct and symbolic motives, self-expansive motives do not stem from fear or physical discomfort (Pyszczynski et al., 1997). Self-expansive motives represent an organism's desire to "explore, assimilate new information, and integrate that information with its existing conception of the world, because survival depends on the development of an adequate understanding of the environment and a complex set of skills for interacting with that environment" (Pyszczynski et al., 1997, p.6). All three types of motives, although markedly different from one another, serve to enable survival in one way or another. The authors suggested that these motives and subsequent goals could be organized in a hierarchical model with concrete actions at the base of the model and abstract objectives at the top. Moving up this model one can analyze a simple concrete action of going to the store and end up with the abstract goal of coping with existential fear. For instance, when traveling up the hierarchy the action of going to the store can be thought of as being motivated by the goal of buying a pair of shoes, completing an outfit for a party, being looked upon by others at the party as attractive, acquiring self-esteem within a cultural worldview, finding meaning in life and thus alleviating one's fear of death. The knowledge of the true underlying motivations for one's behavior is personally beneficial, but may be useful as well to others such as counselors, social scientists and advertisers. A person's self-discovery and awareness of their subconscious motivations for simple actions provides them with a kind of freedom and the ability to make more conscious, thought-out decisions to attain meaning in life. As

discussed later, the commercial value of TMT's discovery allows businesses, non-profits and even political candidates to affect their audience, not on the basis of their outward actions, but by the internal motivations that drive their audience (Arndt, 2004a, 2004b). Through the lens of TMT, concepts such as societal interactions, buying habits and pro-social behavior are all illuminated as unconscious coping mechanisms triggered by the ultimate existential questions: Who am I?; Why am I here?; and What is the meaning of life? It is the view of this paper that without death and the fear it incurs these questions would not be so urgent and human behavior would be less motivated by the search for meaning and connection. TMT not only provides a hierarchical model to link a person's seemingly unconnected, inconsequential actions to their subconscious, abstract, existential fears but also, as will be demonstrated, terror management theorists identify the actual mental progression a person goes through during each step in the process.

In 1999, the original three founders of TMT came together again to introduce a brand new theory: The Dual-Process Theory of Proximal and Distal Defense, as an extension of TMT (Pyszczynski, Greenberg, & Solomon, 1999). The authors reflected on TMT's dispersion and it's expanded applications since the theory's 1986 inception. At that point in TMT research the theory had:

> Demonstrated that concerns about human mortality affect a broad range of socially significant behaviors that are unrelated to the problem of death in any superficial, semantic, or logical way, including interpersonal evaluations, judgments of moral transgressors, stereotyping, in-group bias, aggression, social consensus estimates, and conformity to personal and cultural standards. (Pyszczynski et al., 1999 p.835)

The Dual-Process Theory of Proximal and Distal Defense attempted to explain "why" and "how" the terror of inevitable death produces such seemingly unrelated actions and behaviors. The theory alleges that there are two independent defensive systems that are triggered to guard against accessible contemplations of death: thoughts that are in current focal awareness and conversely, thoughts of mortality that are not in current conscious awareness. This means that the fear of death can be felt both on a conscious level, as well as an unconscious level. The fear of death felt on a conscious level is shielded by what the theory labeled proximal defenses. Proximal defenses either suppress the thoughts that created the fear or, seek out a distraction and push the thoughts aside. The fear of death on an unconscious level is shielded by distal defenses. The authors catalogued the differences between proximal and distal modes of defense and plotted the defensive progressions triggered by unconscious and conscious thoughts of mortality. Defensive processes can be activated by conscious and unconscious mortality-related thoughts.

Distal defenses "on the surface, bear no rational or logical relationship to the problem of death but defend against death by enabling the individual to construe himself or herself as a valuable participant in a meaningful universe"(Pyszczynski et al., 1999, p.836). For instance, receiving the news of possibly incurring a serious illness causes a person to contemplate their mortality; this in turn, will cause the process of one or both forms of defenses. If the person copes by reasoning the diagnosis is highly improbable or by distracting themselves and pushing the news away they would be engaging in a proximal defense of a conscious thought. This defense relates directly to the conscious fear felt by a person and their subsequent actions appear to be almost logical. If, however, the person deals with the death-anxiety causing news by donating money to a charity, thus enabling them to

perceive themselves as a valuable person in "an eternal world of meaning" (Pyszczynski et al., 1999, p.841) then they are engaging in a subconscious distal defense caused by a subconscious thought. By donating to a charity they are fulfilling a culturally important value, hence they become valuable members of an infinite cultural reality, hence death is thwarted and personal anxiety is eased.

Behavior as the result of proximal defenses can seem completely unconnected and their true source is entirely unknown to the individual engaged in them (Pyszczynski et al., 1999). The dual-process theory explains how something as seemingly inconsequential as buying a product or having an affinity for a particular brand can be traced to a deep psychological cause: fear of one's own termination.

Applications of TMT

A decade after Terror Management Theory was conceived, its influence and popularity only increased. The theory had been used in multiple fields and applied to a plethora of different topics. One such topic was consumer behavior. TMT gave insight into consumer motivations and values such as materialism and in later research prosocial behavior such as donating to charity. The theory can also explain motivations for product choice and brand connections, as described below. Once researchers discovered that TMT could help advertisers understand their target audience better, those same ideas and studies were applied to pro-social behavior and the motivations behind a person's intent to donate.

Consumer behavior. In a study in 2000, Kasser and Sheldon endorsed the notion that the feelings of anxiety and trepidation towards mortality were related to materialism (Kasser & Sheldon, 2000). They applied TMT to consumer behavior and linked the consumer value of materialism to the fear of death. They discussed the prevailing dogma of

consumption in American culture and suggested that in order to feel like valued members, many Americans participate in materialistic buying behaviors and status consumption. Not only do individuals buy products that more closely align them with their culture, but in a capitalistic society, the act of acquiring also serves to align individuals with their culture. Kasser and Sheldon's research linked materialism to death anxiety and established a causal relationship between the two. They asserted that individuals with a materialistic world-view would, "after experiencing a mortality-salience induction, . . . increase in their materialistic pursuits as a way of bolstering this worldview and their belief that they are worthy people within this ideological framework" (Kasser & Sheldon, 2000, p.348). This study was one of many that began to research the link between TMT and consumer behavior.

Four years later, Sheldon and Kasser along with Arndt and Solomon (one of the three original authors of TMT) laid out the cognitive architecture of the TMT process outlined by the Dual-Process Theory of Proximal and Distal Defense created by Pyszczynski et al. in 1999 and incorporated its consumer behavior implications (Arndt et al. 2004a and b). Arndt et al. illustrated the psychological process involved when mortality salience is induced and how modern media and consumerism play a part in this process calling the model "the Cognitive Architecture of Terror Management in a Consumer Behavior Context," (see Figure 1 below).

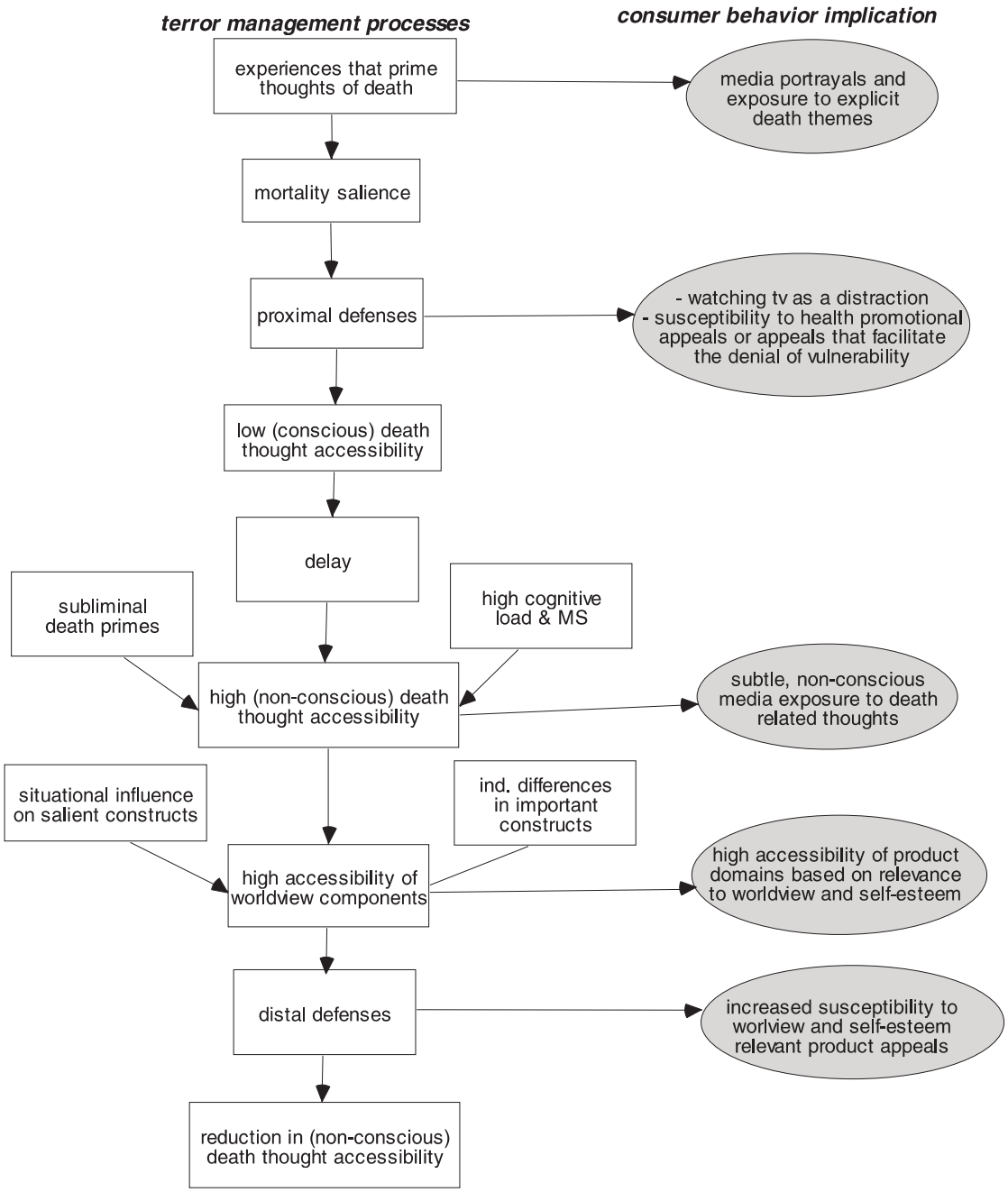


Figure 1. The Cognitive Architecture of Terror Management in a Consumer Behavior Context (Arndt, Solomon, Kasser, & Sheldon, 2004b, p.202)

Though the study focused on materialism and consumption, the process they laid out can also apply to pro-social behavior and donations. According the model, certain experiences or events cause a person to think about death. In Arndt et al.'s 2004 model, the

media is the vehicle for this experience and it can be anything from a graphic news story or a death themed show or movie. This "experience" causes a state of mortality salience or death awareness. Death awareness then causes proximal defenses to engage in order to help the conscious mind push away these thoughts. From a consumer behavior point of view, proximal defenses could manifest as watching TV or going shopping. After this distraction, the conscious thoughts of death become less accessible and after some delay they become completely subconscious.

These subconscious thoughts of death can also occur without the previous steps involving proximal defenses and can be triggered by more subtle influences such as a commercial about life insurance (Fransen, Fennis, Pruyn, & Das, 2008). However this non-conscious mortality salience is reached, The Dual-Process Theory of Proximal and Distal Defense then predicts the high accessibility of worldview constituents such as thoughts of culturally valued, status-enhancing products. At this point in the process a person's distal defenses unknowingly begin to react to the subconscious thoughts the person is unaware of having. In a consumer behavior context these distal defenses could manifest as purchasing products that more closely align a person with their worldview (Arndt et al. 2004) In the end, this process alleviates death anxiety both conscious and subconscious and gives a person a sense of immortality.

Along with further developing and expanding the Dual-Process Theory, Arndt et al. focused on how "the virtues of materialistic consumption are deeply woven into the very fabric of American culture" (Arndt et al., 2004b, p.199). They pointed to events such as 9/11 and the consequential 6% increase in consumption it caused, as an example of the link between fear of death and materialism. This is in line with TMT's premise that the awareness

of death motivates people to seek meaning and engage in coping activities that boost self-esteem and social belonging. The horrifying events of 9/11 caused a jarring awareness in American citizens of their mortality and inevitable death. Not only did 9/11 cause many Americans to become mortality salient, but it also constituted a threat on their worldview and therefore a threat on their cultural anxiety buffer (Arndt et al., 2004b). For these reasons, many assumed materialistic behaviors to more closely align themselves with their American worldview. Cars, homes, electronics, and other items were purchased in abundance in the months following the attacks. A rise in American-made products and patriotic items was also seen (Arndt et al., 2004b). Terror Management Theory predicts these behaviors and explains the deepest most central motivation driving them: fear of death. The authors concluded that this increasing phenomenon in American and other western cultures is detrimental to both individuals and society as a whole. They submitted that materialism as the result of existential anxiety is a problem that must be dealt with. They recommended a stronger emphasis on intrinsic values such as community and interpersonal relationships.

In response to Arndt et al., 2004b, Rindfleisch and Burroughs in their 2004 article emphasized the importance for continued research on TMT and consumer behavior. Although they generally agreed with Arndt et al.'s views on TMT, materialism and its effect on well being, they did offer some contrasting viewpoints. The authors pointed to a change in the way materialistic consumption is viewed. The out-of-date conceptualization of materialism purely as the status-oriented consumption of luxury products no longer represented postmodern America (Rindfleisch, & Burroughs, 2004). The postmodern view offered by Rindfleisch and Burroughs, still based on TMT, conveyed the redeeming and expressive qualities of consumption and its ability to form communal experiences. "For

example, marketing scholars and practitioners have recently documented how groups of customers form highly integrated and emotionally supportive communities based on their shared consumption of a branded product such as a Jeep automobile or an Apple computer" (Rindfleisch & Burroughs, 2004, p.222). By providing structure and meaning brand connections can give their consumer's a sense of secular immortality (Rindfleisch, Burroughsand & Wong, 2009). As discussed later, like buying behavior and brand attachment, prosocial behavior and alignment with a charity can also serve as a buffer for existential fear.

In 2005, researchers Shehryar and Hunt came out with a unique study investigating the classic fear appeal from the fresh perspective of TMT (Shehryar & Hunt, 2005). Researchers have studied the effects of fear appeals on consumers in great detail. Studies have shown that the level of fear induced by theses appeals can greatly affect the extent to which a viewer is persuaded. In two experiments, Shehryar and Hunt, 2005, showed that the type of consequence threatened in the fear-appeal advertisement moderated responses to the message in the advertisement. Studying college students, the researchers tested two fear appeal advertisements warning about the dangers of drunk driving, one containing a message and imagery of the consequence of death and the other of arrest. Shehryar and Hunt hypothesized that the death-consequence ad would induce mortality salience and therefore cause participants to reject the ad. In order to ensure that the death-consequence ad would induce MS and the arrest-consequence ad would not, two groups of participants were shown an ad for 20 seconds, asked their opinion of it, and then asked to fill out a word-stem completion task (based on the tasked used by Greenberg et al. 1994) to measure their death-related thought accessibility or MS. Based on the positive results of Shehryar and Hunt's

study this thesis will implement a similar method to test the MS inducing property's of an ad's call to donate. Shehryar and Hunt's research showed that when an ad reminds a viewer of death the viewer is less likely to be persuaded by it.

Discovering consumers' fundamental motivations for buying a product or response to an ad can be invaluable for marketers and advertisers. Knowledge of only superficial motivations that don't represent the root cause of a consumer's behavior does not address the consumer's true provocations. The Theory of Terror Management is the key to understanding subconscious motivations that consumers may not even be aware of themselves. Armed with a buyer's true desires and needs, marketers can create products and advertisements that actually address their target market's genuine wants.

Advertisers with this information can create campaigns that appeal to a person's deepest needs instead of focusing on the surface level appeals. Understanding why a person seeks self-esteem or belonging can enhance brand appeal and help create stronger brand connections. Advertisers that realize materialistic people are more likely to form brand connections when mortality salience is induced may try placing their ads near a death-related inducement. Clearly the Theory of Terror Management can aid commercial advertisers, especially in a materialistic culture such as the United States, but what has been less defined is the theory's implications for advertisers of non-profit businesses where prosocial over materialistic behavior is sought. The next section will define prosocial behavior and briefly discuss the age-old controversy surrounding it, followed by TMT's effects and implications.

Prosocial Behavior.

Prosocial vs. altruism. Prosocial behavior or helping behavior, as its sometimes called, has been defined as "voluntary behavior intended to benefit another, such as helping,

sharing, and comforting others" (Siegler, DeLoache, & Eisenberg, 2010, p.552). The term prosocial behavior is often mistakenly used interchangeably with the term altruism or altruistic behavior. Prosocial behavior differences from the term altruistic behavior in that it does not specify a person's true motives for engaging in a helpful act; it simply states the type of behavior. Altruism refers to purely selfless motivations, with no expectation of reciprocation or reward (Piliavin, 2009). Truly altruistic behavior would therefore constitute a prosocial act without a selfish motive, whether it is a tangible reward or a subconscious desire for self-esteem. The existence of pure altruism has long been debated, from ancient philosophers to modern psychologists. The debate includes stanch proponents from both sides of the argument and will continue to form one of humanity's unanswered quandaries (Piliavin, 2009). This prolific debate and the difference between prosocial and altruistic motivates is in important to note when studying prosocial behavior in a TMT context. Although some in the TMT field have taken sides on the question of altruism, citing the fear of death as the ultimate cause for prosocial behavior, others along with this thesis choose a neutral ground. Based on the current TMT research, it is the premise of this thesis that TMT does indeed account for some prosocial behavior; however it does not confirm or deny that *all* prosocial behavior stems from a fear of death. Therefore, the argument of the existence of altruism although relevant, does not necessarily have to have a bearing on the validity on the effects of TMT on prosocial behavior.

Prosocial behavior and TMT. The majority of TMT research concentrates on the negative effects the TMT process has on humanity (Jonas, Greenberg, Pyszczynski, 2002) such as materialism (Arndt et al., 2004b), racism (Greenberg et al., 1990), religious intolerance (Greenberg et al., 1990) and other forms of self-serving behavior. Although

comparably less, several valuable studies have recently been conducted on TMT's more benevolent effects, like prosocial behavior.

In 2002, several researchers, including two of TMT's founders, Greenberg and Pyszczynski, supported the hypothesis that mortality salience increases the desire to participate in culturally approved prosocial behavior (Jonas et al., 2002). More specifically they determined that MS caused people to donate more money to charity, labeling this the *Scrooge effect.* Like Ebenezer Scrooge in Charles Dickens's *A Christmas Carol,* the study predicted that, faced with the inevitability of their own death a person will cultivate a desire to help others in order to avoid a lonely and inconsequential end. According to TMT, people participate in prosocial behavior for the same reasons they participate in materialistic behavior. The subconscious fear of death causes a person to seek meaning and because prosocial behavior provides this meaning and a feeling of importance it has the ability to inhibit death anxiety. Although materialistic values and an affluent self-image are a large part of American culture, prosocial values and a noble or virtuous self-image are also considered culturally important (Jonas et al., 2002). The researchers found: "When interviewed in front of a funeral home, and thereby reminded of mortality, people showed a more favorable attitude toward charitable causes than when interviewed three blocks from the mortuary" (Jonas, E. et al., 2002, p.1345)

As discussed earlier, adhering to cultural values and gaining self-esteem within an individual's chosen cultural framework eases mortality based trepidation by giving a person an immortalizing sense of belonging, importance and permanence. Jonas et al. pointed out that because people subscribe to their own individual worldview, made up of a variety of experiences and cultural influences, the outcomes of mortality salience for each person is

contingent on the content of that individual's unique worldview. This means that prosocial behavior that fits within a person's cultural framework will be the most effective at combating existential fear. One experiment in Jonas et al.'s study tested the assumption that only when the charity is culturally endorsed would a donation alleviate existential anxiety. Jonas et al. found that MS increased donations to an American charity but did not affect donations to an international charity, providing evidence once again for the central worldview component central to TMT. Based on Jonas et al.'s findings this study will use a well-known American charity.

Several studies sprung from Jonas et al.'s *Scrooge effect*, testing its relationship with different personal values and attributes (Joireman & Duell, 2005, 2007), but in 2008, Hirschberger, Ein-Dor, and Almakias tested the relationship between the *Scrooge effect* and a charity's cause. Hirschberger et al. found that subjects who were mortality salient were less likely to participate in prosocial behavior if the prosocial cause was organ donation. Multiple studies were conducted that showed MS only amplified prosocial behavior when the cause promoted terror management processes (Hirschberger et al., 2008). Terror management processes refer to the progression a person goes through to alleviate the fear of death once they have become mortality salient. Hirschberger et al. used an organ donation charity to disrupt the process and a charity for the poor was used to prompt the process. To insure that the charity's cause would disrupt terror management processes a pretest was done using a word stem completion task (based on Rosenblatt et al.'s 1989 study and others) to assess levels of death-thought accessibility. A charity that caused high levels of death-thought accessibility was considered a disruption to terror management processes. Willingness to donate was tested by asking five questions about the participant's interest in donating, time,

money or goods to the charity using a 7-point Likert scale ranging from 1 (not *at all interested)* to 7 (very *interested).* The total score was calculated by averaging the participants' five responses (Cronbach's alpha = .89). The measurement used in this thesis to test willingness to donate is based on this method.

As discussed earlier, Pyszczynski et al.'s Dual-Process Theory and Arndt et al.'s consumer behavior adaption (see figure 3) detailed the terror management process. These studies outlined the two TMT defenses in response to existential fear: distal, which involves adherence to one's cultural worldview and allows a symbolic form of immortality, and proximal which involves distraction and avoidance and allows thoughts of death to be pushed away. In Hirschberger et al.'s study the terror management process was disrupted, forcing the subject to rely solely on their proximal defenses to alleviate their existential fear. Hirschberger et al.'s first experiment, for example, found MS increased motivation to donate to a charity of the poor, but significantly decreased motivation to donate to a charity for organ donation. In this case, after mortality salience was induced subjects were given a puzzle to distract them and then some were asked about their willingness to donate to an organ donation and others to a charity for the poor. In each group, the puzzle acted as a proximal defense that distracted from thoughts of death and pushed them deeper into the subconscious. The group questioned about the charity for the poor was given a chance to affirm their willingness to donate. Vocalizing this affirmation served as a distal defense against fear and promoted the individual's terror management processes by allowing them to view themselves as a benevolent and valuable person, therefore completing the process and alleviating their fear. However, subjects questioned about the organ donation charity were, due to the nature of the cause, reminded of their own eventual death and were left again with

only their proximal defenses, resulting in a lower willingness to donate. The researchers concluded, if a prosocial cause or charity reawakened a person's awareness of death, their terror management process would be disrupted and their subsequent prosocial behavior decreased.

Summary

Terror Management Theory research has advanced considerably since its 1986 inception. The first decade of TMT research sought primarily to provide additional evidence and a deeper understanding of the interaction between the theory's main components of a central worldview, self esteem within that worldview and the existential fear of ones own death. With the complex details of the terror management process mapped out and the compounding findings of over 75 different studies, the breath of TMT research began to widen to include applications in consumer behavior. Although these early TMT/consumer behavior studies warned of the detrimental effects materialistic consumption could have on society, they also gave advertisers a valuable glimpse of their audiences' true motivations. After over a decade of research on TMT's dark side (social intolerance, racism and materialism), Jonas et al. illuminated the theory's more beneficial outcomes in 2002 with its implications for prosocial behavior (Jonas et al., 2002). Debated by philosophers and scientists alike, the nature of prosocial behavior and humanity's capacity for true altruism has been studied and questioned for centuries. Though silently neutral in this existential argument, Jonas et al. provided evidence that the fear of death can positively affect prosocial behavior, specifically donating to charity. However, in 2008, Hirschberger et al. found that if the charity's cause reminded mortality salient individuals of their own death it would negatively affect prosocial behavior and result in a lower willingness to donate (Hirschberger

et al., 2008).

These studies provide critical insights for charitable organizations and prosocial causes concerning donor motivations, but a gap in the research has been over looked. On the consumer behavior side of TMT, Shehryar and Hunt found that ads are less persuasive when they warn of death consequences, reminding the viewer of their death. In the field of prosocial behavior Hirschberger et al. 2008 showed that a charity's cause that reminded participants of their own death adversely effects a MS participant's willingness to donate. Studies such as these provide ammunition for a previously unexplored question: Will a charity's call to donate that reminds viewers of their own death adversely affect willingness to donate? Further explanation is also needed in order to establish if the effect of such an ad on a mortality salient viewer may also adversely affect willingness to donate. Armed with such knowledge nonprofits and charitable organizations could better adapt their advertising and donor recruitment methods, maximizing their effectiveness in a highly competitive modern age.

The findings from Jonas et al.'s *Scrooge Effect* also provide evidence supporting the questions examined in this thesis. According to the *Scrooge Effect* mortality salient participants are more willing to donate to charity than non-mortality salient participants. The act of vocalizing their willingness to donate gave Jonas et al.'s mortality salient participants a chance to see themselves as valuable members of society serving as a distal defense and promoting their terror management processes (Jonas et al., 2008). Based on these results this thesis predicts that a neutral call to donate to a charity will promote the terror management process, therefore eliciting a high willingness to donate by allowing participants to engage in distal defenses and complete the process.

TMT research in the field of consumer behavior has revealed two conclusions. First, that certain types of media messages can cause death related thoughts, inducing mortality salience. And second that America's media users are exposed to a barrage of MS inducing content everyday (Arndt et al. 2004a & b). Research has also shown that even something as seemly innocuous as exposure to an insurance brand can cause MS (Fransen, 2008). Hirschberger et al.'s findings that an organization's cause can induce MS along with Shehryar and Hunt's study that a persuasive ad threating death-consequences can similarly induce MS, provide support for the supposition made by this thesis that an ad's call to donate that reminds the viewer of death will also cause MS. Hirschberger et al. stated that a charity's cause that induces MS disrupts the terror management process while a cause that did not induce MS promoted the terror management process. They found that an MS inducing cause elicited a significantly lower willingness to donate in MS participants than a charity's cause that did not induce MS. Hirschberger et al.'s finding supports this thesis's proposition that a charity's call to donate that induces MS will also elicit a significantly lower willingness to donate in MS participants compared to a charity's call to donate that does not induce MS.

Based on the findings and the gaps created by previous TMT studies this thesis proposes the following hypotheses:

H_1: The type of call to donate in combination with mortality salience will have an effect on willingness to donate.

H_{1a}: MS participants who view a call to donate that disrupts the terror management process will have a significantly lower willingness to donate compared to all other participants.

H_{1b}: MS participants who view a call to donate that promotes the terror management

process will have a significantly higher willingness to donate compared to all other participants.

H_2: Non MS participants who view a call to donate that disrupts the terror management process will have a significantly lower willingness to donate than Non MS participants who view a call to donate that promotes terror management process.

Table 1 (shown below) is a model that illustrates the previously outlined hypotheses that will be tested in this thesis.

Table 1

Hypotheses Model

	Level of Willingness to Donate	
Advertisement	Mortality Salience (MS)	Mortality Salience (Non MS)
Ad A: Call to donate that disrupts the terror management processes	**Group 1** 	**Group 2** 
Ad B: Call to donate that promotes the terror management processes	**Group 3** 	**Group 4** 

CHAPTER 3: METHODOLOGY

Study Design

Pilot study. The purpose of the pilot study was to insure the ads used in the main experiment produced their intended effect. Ad A was intended to remind a person of his or her mortality, consequently inducing MS. Ad B was intended to be a neutral ad that did not remind a person of mortality and did not induce MS. In order to determine if each ad produced mortality salience or a neutral response, the participants' level of death thought accessibility was tested. In order for the ads to be considered successful and used in the main experiment Ad A had to generate a high level of death thought accessibility and Ad B had to generate a low level of death thought accessibility. When Ad A in the first pilot study, Pilot Study 1, failed to produce the required level of death thought accessibility and thus did not induce MS in participants, a second pilot study, Pilot Study 2, was conducted with a new set of ads. Both pilot studies were conducted following the same study design only featuring two separate sets of corresponding ads. Each set of ads contained one ad with a call to donate that reminded a person of death (Ad A) and one with a call to donate that did not remind a person of death (Ad B). In each pilot study participants were broken up into two groups. Each group was tested on one of the two ads. Table 2 shows the pilot study's design model.

Table 2

Pilot Study Design Model

Level of Death Thought Accessibility	
Ad A: Call to donate that disrupts the terror management processes	Group 1
Ad B: Call to donate that promotes the terror management processes	Group 2

Main experiment. The hypotheses in this thesis were tested using a 2 (call to donate that disrupts the terror management process vs. call to donate that promotes the terror management process) x 2 (MS vs. Non MS) factorial design. Participants were randomly assigned to one of the four groups. Below, Table 3 shows the experiment's design model.

Table 3

Experimental Design Model

	Level of Willingness to Donate	
Advertisement	Mortality Salience (MS)	Non Mortality Salience (Non MS)
Ad A: Call to donate that disrupts the terror management processes	Group 1	Group 2
Ad B: Call to donate that promotes the terror management processes	Group 3	Group 4

Participants

Pilot study 1. The participants were drawn from a convenience sample of undergraduate students at the University of Louisiana at Lafayette. The sample of 81 participants was selected from students enrolled in CMCN 100 classes. This course was chosen because it is required for all majors and allowed for a more heterogeneous sample. Participants were recruited through their teaching assistants.

Pilot study 2. Because both pilot studies were conducted within the same semester it was necessary to sample from a different course for Pilot Study 2**.** In order to avoid possible overlap and cross-contamination between pilot study participants the participants in Pilot Study 2 were drawn from a convenience sample of graduate students at Louisiana State University in Shreveport. The sample was selected from students enrolled in the course Research Methods.

Main experiment. The sample of participants for the main experiment was drawn from undergraduate students at the University of Louisiana at Lafayette. The sample consisted of 379 participants selected from students enrolled in the CMCN 100 course. Conducted one semester after Pilot Study 1, the main experiment sampled a new set of CMCN 100 students who had not been exposed to the pilot study. This course was chosen for the heterogeneous sample of majors as well as the large sample size it provided. Participants were recruited through their instructor.

Stimuli and Materials

Advertisements. The charity represented in all of the ads tested was the American Red Cross, chosen for this study for several reasons. Since the study was testing American college students it was necessary to choose an American based charity that focuses on

helping American people. As discussed earlier, Jonas et al. (2002) found that MS had no effect when coupled with a foreign charity because it did not promote the American participans' cultural worldview, a key component in defending against the fear of death. Not only is the American Red Cross an American based charity, it is also widely known and easily recognized. According to topnonprofits.com the American Red Cross was number four in the Top 100 Nonprofits on the Web in spring 2012, based on Alexa Rank, Compete Visitors, Google PageRank, Facebook Likes, Twitter Followers, and Charity Navigator Rating (Top Nonprofits Inc., 2012). Along with notoriety, the American Red Cross was chosen because of the feasibility of creating an advertisement that reminds participants of their own death. For example, a charity such as the Humane Society, benefiting animals would not be conducive to a death reminder. Another advantage of the American Red Cross is that willingness to donate can be assessed in multiple forms: money, time, goods, or blood. For these reasons, the Red Cross has been used by several other studies researching willingness to donate (Zuckerman, Siegelbaum & Williams, 1977; Pentecost & Andrews, 2007; Devine et al. 2007).

Pilot study 1 to pretest the ads. The two advertisements tested in Pilot Study 1 were printed on plain letter size paper (see Figure 2 below). Both ads were designed to be as similar as possible so that differences in their appearance and layout would not bias participant's willingness to donate when used in the main experiment. For this reason both ads contained the same image and typographical treatment, only differing in the type of call to donate. The ad meant to intentionally remind a person of death contained a call to donate message that stated "One day it could be your life on the line" (see Ad A in Figure 2 below). The ad not meant to remind a person of death contained a neutral call to donate message, "Be

a hero. Save a life." (see Ad B in Figure 2 below). The underlying assumption of these ads was that a tagline alone would induce mortality salience. The image of the bandaged arm served as a common neutral element, however it was hoped that in combination with a tagline the image in each ad would take on a different meaning. Although it is not known what caused these ads to fail in Pilot Study 1, it was speculated that under these conditions a tagline alone would not be enough to induce mortality salience (see the data analysis section for a detailed explanation of the pilot study's findings). Based on these results a second set of ads was developed, as described in the next section.

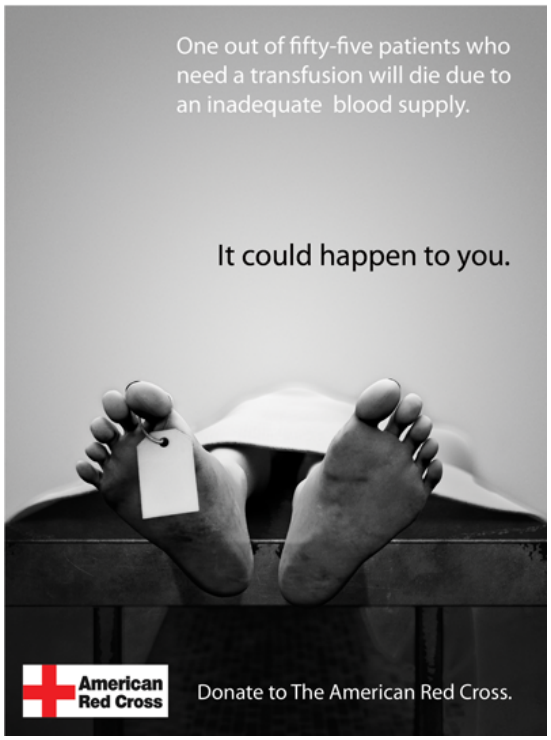
Ad A *Ad B*

Figure 2. Advertisements used in Pilot Study 1

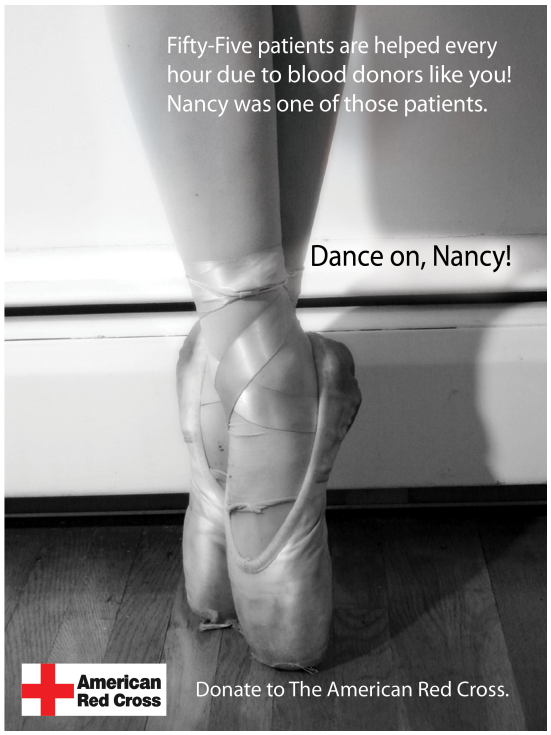
Pilot study 2 to pretest the ads. As previously outlined, the first set of ads tested, Ad A, did not induce mortality salience, measured by the level of death-thought accessibility. To formulate a successful set of ads, the differences between the ineffective ads and effective stimuli used by previous TMT studies were analyzed. Based on technics, such interviewing a

participant in visual range of a graveyard (Jonas et al., 2002) and exposing a person to an ad with death imagery (Shehryar & Hunt, 2005), it was concluded that a highly death-related image might have been the missed piece of Pilot Study 1's Ad A. In accordance with that conclusion the image of a deceased person in a morgue was chosen for Pilot Study 2's Ad A (see Ad A in Figure 3 below). Although it was determined each ad in Pilot Study 2 would feature a different image, a similar goal of consistency in order to avoid viewer bias was maintained. For this reason both ads contained an image of feet, identical typographical treatments and a statistic about blood donation. In an attempt to obscure race, both images were designed in black and white excluding any facial features. This was done to make the images as relatable as possible to participants of all races. The black and white images also help to eliminate the chance that differences in the color of the ads would bias participant's level of willingness to donate in the main experiment.

Like Pilot Study 1, Ad A was meant to intentionally remind a person of death, however, the ad in Pilot Study 2 states, "1 out of 55 patients who need a transfusion will die due to an inadequate blood supply" (see Ad A in Figure 3 below). To remind the viewer of his or her own death, Ad A's call to donate message warns, "It could happen to you." Congruent with Pilot Study 1, Ad B was not meant to remind a person of death and contained a neutral call to donate. (see Ad B in Figure 3 below). However, Pilot Study 2 's Ad B contains the statement: "Fifty-five patients are helped every hour due to blood donors like you! Nancy was one of those patients." Also death-neutral, the tagline states, "Dance on, Nancy!" accompanied by an image of a girl in ballerina slippers.



Ad A



Ad B

Figure 3: Advertisements used in Pilot Study 2

Main Experiment. The main experiment used the ads tested in Pilot Study 2 (seen in Figure 3 above).

Ad Engagement Questionnaire. The Ad Engagement Questionnaire, used in both pilot studies, as well as the main experiment asked participants to describe the ad they were given (see Appendix A). This questionnaire, adapted from Shehryar and Hunt's 2005 study, was simply used to engage the participant in the ad and insure they had been fully exposed to its message (Shehryar & Hunt, 2005). The version used in this study, titled "Advertising Appeals Survey" for testing purposes, featured one open-ended question that asked participants: " Briefly describe the ad you just viewed."

Distraction puzzle. A word search puzzle was also used in both pilot studies and the main experiment (see Appendix B). This puzzle was used to distract participants after they

viewed their assigned ad and completed the Ad Engagement Questionnaire. According to the Dual-Process Theory of Proximal and Distal Defenses (as previously discussed in the literature review) after a person is exposed to a MS inducing stimulus (in this study Ad A was meant to induce MS) they engage in proximal defenses (Pyszczynski et al., 1999). Proximal defenses attempt to distract or push aside the conscious thoughts of death a person feels directly after MS. The distraction puzzle in this study provided the participants the time and opportunity to engage their proximal defenses. According to the theory, once proximal defenses take place the conscious thoughts of death are pushed back into the subconscious mind. Though subconscious, these mortality-related thoughts are highly accessible. Distal defenses create a higher level of death-thought accessibility and a stronger behavior-motivating drive than proximal defenses; hence they are the primary focus of most TMT research (Arndt et al., 2004b, Pyszczynski et al., 1999). Also focusing on distal defenses, this thesis employed a word search puzzle to allow participants to reach the highest level of death thought accessibility. This word search puzzle is considered the standard method in TMT research to distract participants after MS has been induced and has been used in multiple studies (Arndt et al., 1997a, 1997b; Cox & Arndt, 2006; Hirschberger, 2010; Hirschberger et al., 2008; Shehryar & Hunt, 2005; Norenzayan et al., 2009; Pyszczynski, Greenberg, & Solomon, 1997,1999). The version used in this study was created and provided by Cox & Arndt, 2006.

Demographic questionnaire. The demographic questionnaire (See Appendix C) was utilized in the pilot studies and main experiment to determine whether a participant's responses were included in the study. This thesis only tested American citizens, ages 18 to 40. Any data collected from participants who did not meet those requirements as indicated by

their answers to the demographic questionnaire was taken out of the results.

MS Inducing Questionnaire. The MS Inducing Questionnaire, exclusively employed in the main experiment, was used to induce mortality salience (see Appendix D). It consisted of two open ended questions that asked the participants to describe their emotions about their own eventual death and to describe what they think will happen to them when they die and after they are dead. First introduced by Rosenblatt et al., 1989, this method of inducing MS, was chosen due to its extensive and repeated use by the majority of TMT researchers (Cox & Arndt, 2006; Greenberg et al., 1990; Hirschberger et al., 2008; Jonas et al., 2002; Norenzayan et al., 2009; Rosenblatt et al., 1989). Cox & Arndt, 2006, created the exact questionnaire used in this study.

Non MS Inducing Questionnaire (MS control). Like the MS Inducing Questionnaire, the Non MS Inducing Questionnaire was created by Rosenblatt et al.'s 1989 study and exclusively used in the main experiment (see Appendix E). The Non MS Inducing Questionnaire was used as a control for MS because it has been shown not to cause MS in participants (Rosenblatt et al.1989). This questionnaire was chosen because it was designed to be a complement to the MS Inducing Questionnaire. Also, like its counterpart, the Non MS Inducing Questionnaire has been used repeatedly throughout TMT research (Cox & Arndt, 2006; Greenberg et al., 1990; Hirschberger et al., 2008; Jonas et al., 2002; Norenzayan et al., 2009; Rosenblatt et al., 1989). The questionnaire consisted of two open-ended questions that asked participants to describe their thoughts and emotions about dental pain and the process involved in getting a root canal at the dentist. Rosenblatt et al. showed that questions asking participants about dental pain made them *pain salient* but not mortality salient allowing it to act as a control for MS.

Variables and Measures

Pilot studies. The pilot studies tested the level of death thought accessibility each ad's call to donate produced in participants. The independent variable was the type of call to donate: a call that intentionally reminds the viewer of death vs. a neutral call that does not, represented by Ads A and B respectively (see Ad A and Ad B and their descriptions above under *Stimuli*). The dependent variable was the level of death thought accessibility, which was measured using the Word Stem Completion Task (WSCT) (see Appendix F).

The WSCT was chosen due to its previous validation and frequent use in multiple reputable TMT studies (Arndt et al., 1997a, 1997b; Cox & Arndt, 2006; Hirschberger, 2010; Hirschberger et al., 2008; Shehryar & Hunt, 2005; Norenzayan et al., 2009; Pyszczynski, Greenberg, & Solomon, 1997,1999). As discussed in the literature review the WSCT is comprised of 20 word fragments that subjects were asked to complete with the first word that comes to their mind. Some of the fragments can be completed with a death-related word such as "grave" or "skull," while others can only be completed by neutral words. This study used a six stem version of the WSCT in order to improve the power of the test to return a valid response as proposed and provided by Cox & Arndt, 2006. The version in this study contains 14 word fragments that can be completed by neutral words, while six can be completed by either neutral or death-related words. The more death-related words completed the more accessible the participant's death-related thoughts.

Main experiment. The first set of hypotheses, (H_{1a} and H_{1b}) proposed that the type of call to donate in combination with mortality salience would have an effect on willingness to donate. The type of call to donate (a call that disrupts or a call that promotes the terror management processes) is an independent variable in both H_{1a} and H_{1b}. Type of call to

donate, was manipulated in Ad A (a call that disrupts terror management processes) and Ad B (a call that promotes the terror management processes). The presence of mortality salience (MS or Not MS) is also an independent variable for H_{1a} and H_{1b}. Half of the treatment groups completed a questionnaire that induced MS (the MS Inducing Questionnaire) while the other half completed a questionnaire that controlled for MS (The Non MS Inducing Questionnaire). The dependent variable was willingness to donate which was measured by the Willingness to Donate Questionnaire (see Appendix G) developed by Hirschberger et al., 2008. This questionnaire asked five questions about the participant's interest in donating time, money goods or clothes to the charity using a 7-point Likert scale ranging from 1 (not *at all interested)* to 7 (very *interested).* The total score was calculated by averaging the participants' five responses. This measurement was chosen because of its reported reliability (Cronbach's alpha = .89) and its use in a highly cited study (Hirschberger et al., 2008).

H_2 proposed that Non MS participants who viewed a call to donate that disrupted the terror management process would have a significantly lower willingness to donate than Non MS participants who viewed a call to donate that promoted the terror management process. The independent variable in H_2 is the type of call to donate (a call that disrupts or a call that promotes the terror management processes). Like H_1, Hirschberger et al.'s 2008 Willingness to Donate Questionnaire measured H_2's dependent variable, willingness to donate.

Procedure

Pilot studies. The procedure for both pilot studies was identical. First, the researcher gained permission to approach the classes to be tested through the course's instructor. Students were given an informed consent form and told their participation was completely voluntary and confidential. Students who agreed to participate were randomly assigned to

one of two groups. To do this the researcher randomly shuffled together two stacks of paper, each containing one of the two ads. From this randomized stack, ads were passed out to the students without the researcher having any control over which student received which ad. Each ad was be marked by its corresponding letter (A or B).

After receiving the ad, participants were asked to observe it for one minute before answering the Ad Engagement Questionnaire. This procedure was adapted from Shehryar and Hunt's 2005 study. The Ad Engagement Questionnaire titled "Advertising Appeals Questionnaire" asked participants to briefly describe their opinion of the ad to insure they fully absorbed and processed the ad. Next all students were given the same distraction puzzle for two minutes.

Finally all the participants filled out the WSCT questionnaire to assess their level of death thought accessibility. Each WSCT questionnaire was marked with the letter A or B. Participants who received Ad A filled out the questionnaire marked with A and participants who received Ad B filled out the questionnaire marked with B. This was done so the results for each ad could be scored correctly. No personal identification information was recorded for participants in order to protect their confidentiality.

After Ad A in Pilot Study 1 was found not to produce a high level of death thought accessibility as required, a new set of ads was developed for Pilot Study 2. Using the new set of ads, Pilot Study 2 was conducted using the same procedure as its predecessor (described above). Once the ads in Pilot Study 2 proved to produce the required results, they were used in the main experiment (as described below).

Main experiment. The researcher gained permission to approach Communication 100 classes through the course instructor. Students were given a consent form and told their

participation was completely voluntary and confidential. Students who agreed to participate were randomly assigned to one of the four groups by receiving one of four cards each marked with 1, 2, 3, or 4, and randomly shuffled prior to distribution. After being randomly placed in a group, all participants received one of the two MS manipulation questionnaires. Participants in Groups 1 and 3 were exposed to the MS Inducing Questionnaire, while participants in Groups 2 and 4 were exposed the Non MS Inducing Questionnaire about dental pain. After the questionnaire, Groups 1 and 2 viewed Ad A and Groups 3 and 4 viewed Ad B. All participants were asked to observe their ad for one minute before answering the Ad Engagement Questionnaire. Next all participants received the Distraction Puzzle. This puzzle was used to give participants in Groups 1 and 3, who had become mortality salient, the time and opportunity to engage their proximal defenses. Once proximal defenses take place, conscious thoughts of death will be pushed back into the subconscious mind. Though subconscious, this thesis predicted that those thoughts would affect participants' willingness to donate. Following the Distraction Puzzle, all participants received the Willingness to Donate Questionnaire and finally the Demographic Questionnaire. Below is a table of what each group received listed in the order they received it.

Table 4

Items Received by Test Groups (listed in the order they were *distributed)*

Group 1	**Group 2**
Informed Consent Form	Informed Consent Form
MS Inducing Questionnaire	Non MS Inducing Questionnaire (MS control)
Ad A (disrupts the terror management processes)	Ad A (disrupts the terror management processes)
Ad Engagement Questionnaire	Ad Engagement Questionnaire
Distraction Puzzle	Distraction Puzzle
Willingness to Donate Questionnaire	Willingness to Donate Questionnaire
Demographic Questionnaire	Demographic Questionnaire

Group 3	**Group 4**
Informed Consent Form	Informed Consent Form
MS Inducing Questionnaire	Non MS Inducing Questionnaire (MS control)
Ad B (promotes the terror management processes)	Ad B (promotes the terror management processes)
Ad Engagement Questionnaire	Ad Engagement Questionnaire
Distraction Puzzle	Distraction Puzzle
Willingness to Donate Questionnaire	Willingness to Donate Questionnaire
Demographic Questionnaire	Demographic Questionnaire

CHAPTER 4: RESULTS

Data Analysis

Pilot Study 1. The results for this study consisted of the quantitative data derived from the Word Stem Completion Task (WSCT) (Cox & Arndt, 2006). This section will describe the participants and present the data collected and process for analysis.

Sample Profile. A total of 81 undergraduate students participated in this between groups experiment with 44 females (54%) and 37 (46%) males. All students self-identified as United States citizens. The age of participants ranged from 18 years old to 36 years old.

The point of the pilot study was to discover whether Group 1 (exposed to Ad A) would produce a significantly higher death thoughts accessibility score than that of Group 2 (exposed to Ad B). To test this, a one-tailed t-test was computed which demonstrated that there was no statistically significant difference between the two experimental groups (t (79) = 1.3448, $p = ns$) (See Table 5)

Table 5

One-tailed t-test for Between Groups Scores on the WSCT (Pilot Study 1)

Group	*n*	*mean*	*SD*
1	42	3.60	2.10
2	39	4.2	1.90

As a practical result of these findings the stimulus ads were re-designed to enhance their mortality salience potential. Specifically, where the ads in the first pilot test used only a headline to manipulate MS, the ads in the second pilot used different headlines and different visuals to accomplish the same purpose.

Pilot study 2. As in the first pilot study, the results for this study consisted of the quantitative data derived from the Word Stem Completion Task (WSCT) (Cox & Arndt, 2006). This section will describe the participants and present the data collected and process for analysis.

Sample Profile. A total of 55 graduate students participated in this between groups experiment with 33 females (60%) and 22 (40%) males. All students self-identified as United States citizens. The age of participants ranged from 21 to 35 years old.

This thesis predicted that Group 1 (exposed to Ad A) would produce a significantly higher score than that of Group 2 (exposed to Ad B). To test this prediction, a one-tailed t-test was computed. The t-test demonstrated that there was a significant difference between the two experimental groups and that Group 1 produced a significantly higher score that Group 2 (t (53) = 1.89, p = .032). (See Table 6).

Table 6

One-tailed t-test for Between Groups Scores on the WSCT (Pilot Study 2)

Group	*n*	*mean*	*SD*
1	30	3.33	1.24
2	25	2.68	1.31

Main Experiment. The results for this study consisted of the quantitative data derived from the Willingness to Donate Questionnaire (Hirschberger et al., 2008). The next section will describe the participants and present the data collected and method for analysis.

Sample Profile. A total of 379 undergraduate students participated in this between groups experiment with 220 females (58%) and 159 (42%) males (see Table 7). A binomial

test indicated a significant difference between the number of men and women in the sample (p<.05), not unexpected given the typical college population (Goldin, C., Katz, L. F., & Kuziemko, I., 2006). All students self-identified as United States citizens. The age of participants ranged from 18 to 40 years old (M= 20, SD = 2.91). Age was non-normally distributed (see Figure 4), with skewness of 4 (SE = 0.13) and kurtosis of 19.65 (SE = 0.25).

Table 7

Descriptives of Experimental Groups

		Gender		
Group	*n*	Male	Female	Age Range (mean)
1	96	39	57	18-34 (18.82)
2	91	41	50	18-39 (20.32)
3	96	45	51	18-38 (19.81)
4	96	34	62	18-40 (20.20)

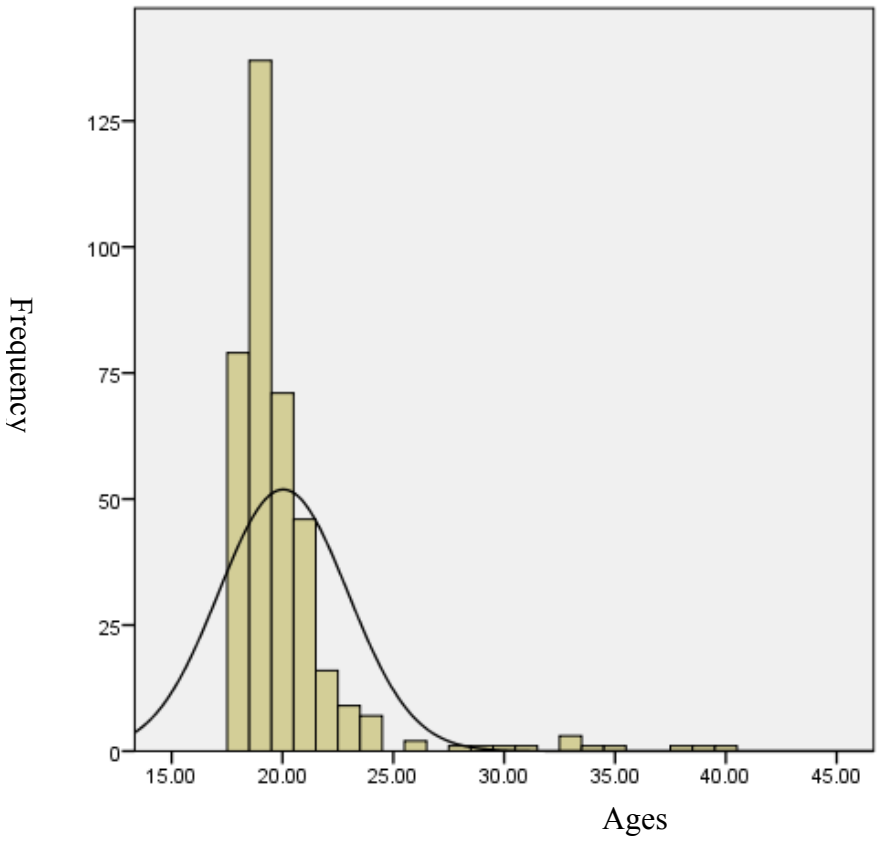


Figure 4. Histogram representing the frequency distribution of all study participants' ages

Test of Hypotheses. This study was designed to test two hypotheses as follows:

H_1: The type of call to donate in combination with mortality salience will have an effect on willingness to donate.

H_{1a}: MS participants who view a call to donate that disrupts the terror management process will have a significantly lower willingness to donate compared to all other participants.

H_{1b}: MS participants who view a call to donate that promotes the terror management process will have a significantly higher willingness to donate compared to all other participants.

H_2: Non MS participants who view a call to donate that disrupts the terror management process will have a significantly lower willingness to donate than Non MS participants who

view a call to donate that promotes terror management process.

Taken together the hypotheses predicted that there would be significant differences between all four experimental group scores on the Willingness to Donate Questionnaire. To test this overarching premise, a Kruskal-Wallis ANOVA was computed in SPSS ($p = ns$) that indicated that the null hypothesis should be retained. The Kruskal-Wallis demonstrated that there was no significant difference between the four experimental groups (See Table 8). The decision to use a non-parametric test of the hypotheses was made on the basis of several tests of normality. The Kruskal-Wallis "is a powerful alternative to the *F*-test when variance and normality assumptions for parametric tests are not met" (Portney &Watkins, 2009, p.509). This test is also less sensitive to outliers since the median, rather than the mean is used to compare groups.

Table 8

Kruskal-Wallis ANOVA for between groups scores on Willingness to Donate Questionnaire

Group	*n*	*mean*	*SD*
1	96	20.26	7.811
2	91	21.53	7.357
3	96	21.49	8.646
4	96	22.01	7.048

All hypotheses in this study were based on the prediction that the four experimental groups would produce significantly different levels of willingness to donate among participants. As the results of the study show, this prediction was unsupported by the data, therefore all hypotheses are unsupported and the null must be retained. Below, Table 9 compares the original hypothesis model (bolded words) with the study's actual findings previously

discussed (numbers in parentheses). For the original hypothesis model see Table 1 on page 32.

Table 9

Hypotheses Model vs. Actual Findings

	Level of Willingness to Donate **Hypotheses Model** *(actual group means)*	
Advertisement	Mortality Salience (MS)	Mortality Salience (Non MS)
Ad A: Call to donate that disrupts the terror management processes	Group 1 **Lowest** (*20.26*)	Group 2 **3rd Highest** *(21.53)*
Ad B: Call to donate that promotes the terror management processes	Group 3 **Highest** *(21.49)*	Group 4 **2nd Highest** *(22.01)*

Tests of Assumptions and data transformation. Scores on the Willingness to Donate Questionnaire for all participants (Figure 5) ranged from 5 to 35 (M = 21.32, SD = 7.74). These scores were non-normally distributed as indicated by the Kolmogorov-Smirnov (D (379) = 0.262, p < .001), negative skewness of 0.369 (SE = 0.125) and negative kurtosis of .585 (SE = 0.25). A Levene Test of Homogeneity of Variances indicated that the assumption of equal variances for parametric testing was also violated (p = .025). In order to determine the effect of outliers on the distribution of participants' age, a square root transformation of participants' ages was computed to correct for non-normality resulting in a distribution of age with skewness at 3.54 (SE = 0.13) and kurtosis at 15.8 (SE = 0.25). Using a Box Plot analysis, 25 outliers were identified and removed (see Figure 6).

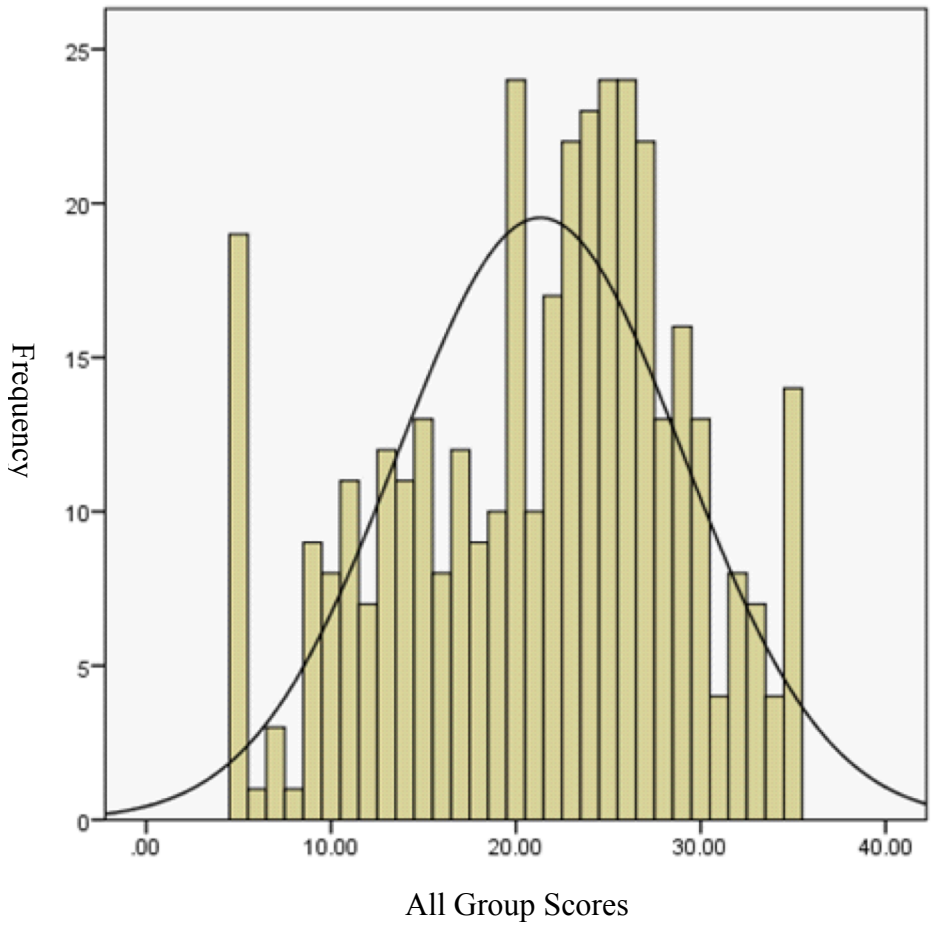


Figure 5. Histogram of distribution of all scores prior to transformation

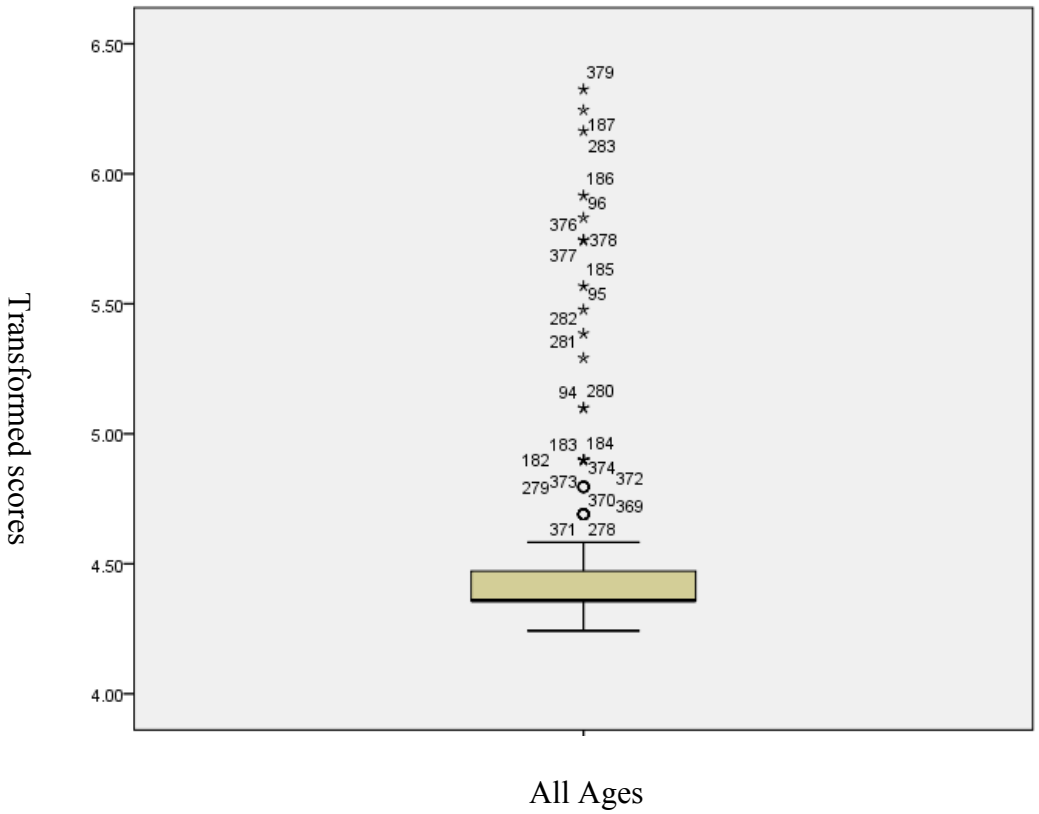


Figure 6. Box plot of participants' ages transformed by square root transformation identifying outliers

The remaining cases (*n*=354) were examined for outliers in scores using the same method. Since the distribution of scores was negatively skewed the data was first reversed scored by subtracting each score from the highest score possible (35) plus one (36). The reversed score data were now positively skewed and could undergo a square root transformation to adjust for non-normality. Next, a simple box plot of the transformed scores was constructed, which did not reveal any outliers. The transformed data distribution of scores was negatively slightly skewed at 0.378 (SE = 0.13) with a slight negative kurtosis of 0.092 (SE = 0.259) (see Figure 7). However, a one-sample Kolmogorov-Smirnov Test indicated that the resulting distribution was normal (D (354) = 1.129, *p*= .156).

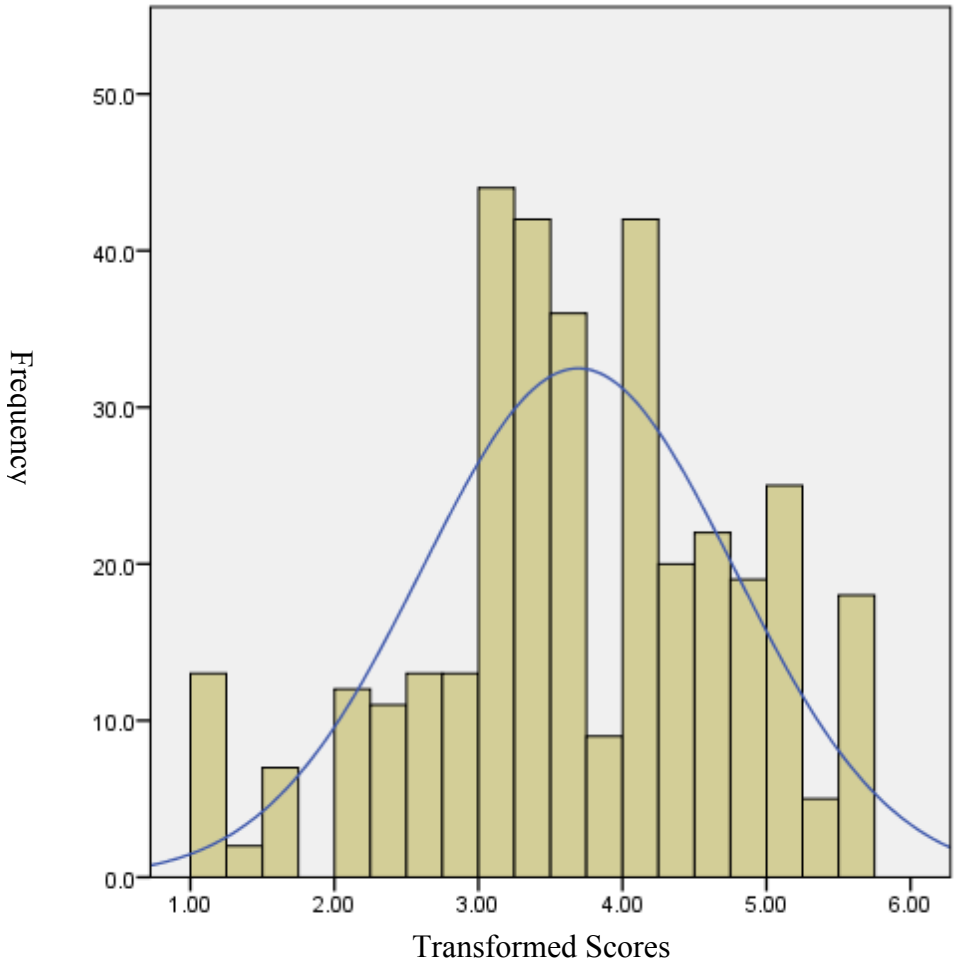


Figure 7. Distribution of scores after reverse scoring and square root transformation

Test of Hypothesis with transformed data. Since the one-sample Kolmogorov-Smirnov Test indicated that the transformed data was normally distributed, a one-way ANOVA was used to test the null hypothesis that all groups were not significantly different in the transformed scores (See Figure 7). The results of the ANOVA ($F\ (3, 350) = .93$, $p = ns$) indicated that the null should be retained. In other words, there was no statistically significant difference between any two of the four experimental groups. This result indicates that the presence of outliers in participants' ages did not affect the overall results of the study. Since the removal of outliers had no effect on the results of the study, all further tests of the hypotheses are done using the original data.

Other Findings.

Gender. In order to determine if willingness to donate differed between men and women, a Mann-Whitney U Test was computed, which indicated that women scored higher overall than men on the Willingness to Donate Questionnaire ($p<.001$). An analysis of only female scores between groups yielded no significant differences across groups using an Independent Samples Kruskal-Wallis Test (p = ns). This indicates that women in general donate more regardless of being mortality salient or not. In addition, an Independent Samples Kruskal-Wallis indicated that the higher percentage of female participants as compared to men did not affect the final outcome (p = ns).

Age. To determine if there was a relationship between participants' age and their score, a Spearman's rho correlation test was computed (r_s= -.022, p = ns), which indicated that a participant's age was not a significant predictor of score.

Summary. The data was not normally distributed among scores and ages. A number of data transformations were taken to identify outliers however, even with outliers removed an ANOVA revealed no significant difference between groups. Other variables were analyzed such as differences between men and women, which indicated that women tended to have a higher willingness to donate regardless of mortality salience or ad exposure. All hypotheses were unsupported and the nulls were retained.

CHAPTER 5: DISCUSSION

Premise of the Study

The purpose of this thesis was to provide data that could help nonprofits develop more persuasive and effective advertising solutions. To do this, this thesis attempted to connect the previously established findings about TMT and donor behavior with the consumer behavior findings on advertising and TMT. The study was conducted to test whether a relationship existed between mortality salience, willingness to donate, and advertising appeal. Although the data did not support such a relationship, it did uncover several important insights and questions for nonprofit organizations.

Findings

First, the literature suggested the prediction (H_{1a}) that mortality salience in combination with exposure to an ad using a call to donate that disrupts the terror management process (Group 1) would produce the lowest level of willingness to donate compared to all other combinations of mortality salience and ad appeals. However, the results showed that was not the case. Compared to the other groups, Group 1 did not exhibit a statistically significantly different level of willingness to donate.

H_{1b} is also unsupported by the results. It predicted the conditions of Group 3, mortality salience combined with the ad that did promote the terror management process (Ad B) would produce the highest level of willingness to donate. However, the study found that participants in Group 3 did not produce the highest level of willingness to donate, indicating that H_{1b}: MS participants who view a call to donate that promotes the terror management process will have a significantly higher willingness to donate compared to all other participants, is not supported and the null hypothesis must be retained. With both H_{1b} and H_{1a}

unsupported the null hypothesis for H_1: The type of call to donate in combination with mortality salience will have an effect on willingness to donate, must also be retained. The final hypothesis, H_2: Non MS participants who view a call to donate that disrupts the terror management process will have a significantly lower willingness to donate than Non MS participants who view a call to donate that promotes the terror management process, predicted that Group 2 would produce a significantly lower willingness to donate than Group 4. Although Group 2 did produce a slightly lower willingness to donate than, Group 4 the scores were not statically significantly different. Therefore, Like H1, H2 must also be rejected and the null hypothesis retained.

Overall the results indicate that mortality salience, in general, had no effect on participants' willingness to donate in this study. This conclusion is particularly surprising given the amount of research to the contrary (Hirschberger et al. 2008, Jonas et al., 2002, Jonas et al., 2008). According to TMT research, particularly Jonas et al. (2002), mortality salience increases the desire to participate in culturally approved prosocial behavior, or more specifically, MS causes people to donate more money to charity. Contrary to Jonas et al.'s research, this thesis indicated that MS participants and Non MS participants showed no statistical difference in level of willingness to donate, and that mortality salience did not increase the participants' desire to engage in prosocial behavior, i.e. willingness to donate to the American Red Cross.

The second important finding is that within this study the type of call to donate did not affect willingness to donate. This finding also contradicted current TMT research, which suggested that ads are less persuasive when they remind the viewer of their death (Shehryar & Hunt, 2005, Hirschberger et al. 2008). As seen in Figure 5 (page 54), Ad A clearly warns

the viewer about the possibility of his or her own death. In accordance with Shehryar and Hunt's study, Ad A should have been less persuasive with its death-laden appeal to donate than Ad B, its death-neutral counter part. In reality, Ad A and Ad B did not elicit any statistical difference in level of willingness to donate in any of the four experimental groups.

This study also found that the type of call to donate in combination with MS did not affect willingness to donate. In Hirschberger et al.'s study a charity's cause that reminded participants of their own death was shown to adversely affect an MS participant's willingness to donate (Hirschberger et al. 2008). In line with Hirschberger et al.'s findings, Ad A, which reminded participants of their own death, was predicted to adversely affect MS participant's level of willingness to donate (the conditions found in Group 4). With the results indicating that the level of willingness to donate was not statistically different between any of the groups, at face value this study contradicts Hirschberger et al.'s 2008 study.

Although the study's specific hypotheses were not supported, the overall purpose of this thesis was still accomplished. The original purpose of the pilot studies was to simply ensure that the created ads induced the desired levels of death-thought accessibility. Though unintended, the results of both pilot studies led to several new insights in addition to raising some previously unexplored questions. First, Pilot Study 2 provided evidence that an ad with a call to donate laden with death content and imagery can induce mortality salience in participants. Unlike the results of the main experiment, Pilot Study 2's results support mainstream TMT research. Pilot Study 2 demonstrated that simply being exposed to an ad with death content could raise a person's level of death thought accessibility. Although researchers Shehryar and Hunt (2005) showed that an ad warning of the deadly consequences of drunk driving could induce MS, the ads tested by this thesis in Pilot Study 2, represent the

only known research on the ability of an ad with a nonprofit's call to donate to induce MS. This provides valuable insights for nonprofits that would employ a similar ad and the effect that ad could have on potential donors. Second, Pilot Study 1 also offers insight, suggesting that a tagline warning of death-consequences is not enough to induce mortality salience. Third, a comparison of the results of Pilot Study 1 and Pilot Study 2 reveal the possibility of another theoretical principle. The main difference in the ads in Pilot Study 1 and Pilot Study 2 is the use of death-imagery in Ad A. Pilot Study 1's Ad A contained a neutral image, while Pilot Study 2's Ad A contained death imagery. Although Ad A in both pilot studies warned of death consequences, only Pilot Study 2's Ad A successfully induced MS. This suggests that imagery may be more effective in inducing MS than written information.

The main experiment also generated valuable data on which to base several conclusions. Throughout the study, fidelity to established TMT research methods was maintained as much as possible within the limitations of student research. Most of the procedures and materials used in this study were similar to that of other TMT studies, however small differences in this study's stimuli and conditions may have caused the uncorroborated results. It is possible that in order for the effects of TMT to occur, very specific conditions must be present. This possibility supports this thesis's overall and final conclusion that the effects described by TMT may not be as far-reaching as previously suggested. Since real-life conditions are filled with distractions and competing stimuli, advertisements that are based on TMT may not be as effective in a real-world environment as previously believed.

Theoretical and Practical Implications

The results of the two pilot studies provide several implications for future research.

Continued study is needed to answer the question: Is imagery more powerful than information in inducing mortality salience? This question warrants further attention since most research has focused on the effects of MS rather than what actually causes MS, specifically in regards to advertising. Future research should explore the types of stimuli that induce MS and the effects of combining imagery with positive and negative messages. The results of these future studies may provide important design heuristics for advertisers.

Another area of recommended study is exploration of the ability of different types of media to induce MS. This current study has shown that a single advertisement on a piece of paper can induce MS, but it is rare that a consumer or donor would view an ad this way. More often advertisements are found in magazines, newspapers or online surrounded by other ads and content. In order to assess the real life implications of this study, future research needs to be conducted using more authentic conditions.

The results of the main experiment have considerable implications for future research as well. It has been shown by previous studies that mortality salience can have a strong effect on willingness to donate, however, the results of this study show that future research will need to be conducted under more realistic conditions if the real-world applications of those effects are to be determined. Not only do advertisers have to consider the environment and type of media in which their messages are received, they must evaluate the effect the content viewed before and after their message will have as well. An ad viewed after an article involving death, such as a terrorist bombing, may have a different effect than if the ad had been viewed on its own. In order for advertisers to make informed decisions on the content and placement of their advertisements, future TMT research must consider the actual conditions in which an ad might be viewed.

Limitations

Several factors in this study limit the generalization of the results to a larger population. This study was primarily limited by its sampling method. The sample in this study was a non-random convenience sample taken from students at the University of Louisiana at Lafayette. Although the sample provided students from various majors, all students attended the same southern Louisiana school. Due to this limitation, this study may not be applicable when generalizing to students of northern universities or those in a community college or trade school. If financial and time restrains had not been a factor, a more favorable sample, randomly collected from several colleges and universities across the nation would have been tested.

The environment in which the experiments were conducted also constituted a limitation for this study. Students were tested in their classrooms surrounded by their peers. Not only did this provide a variety of distractions, but participants might have also felt self-conscious or embarrassed when answering their questionnaires. This variable may have especially affected students who were given the MS inducing questionnaire due to the personal nature of questions such as: "Please briefly describe the emotions that your own death arouses in you." If a participant was worried a classmate might see their answer or was too distracted to fully respond to the question, the MS inducing questionnaire might not be effective in inducing MS. This study did not pretest the MS inducing questionnaire because it had been widely used and shown to be effective in a number of similar TMT studies, (Cox & Arndt, 2006; Greenberg et al., 1990; Hirschberger et al., 2008; Jonas et al., 2002; Norenzayan et al., 2009; Rosenblatt et al., 1989). However, without pretesting the questionnaire it cannot be known if it was fully effective in this specific environment and

demographic sample. Mortality salience was a key variable in this study and if the MS inducing questionnaire was ineffective it could account for the unexpected results. Without the limitations of time and money it would have been possible and desirable to conduct a pretest of the questionnaire on a similar sample with experimental conditions comparable to that of the main experiment.

Another limitation concerns the crucial variable: type of call to donate, a call that reminds a person of death (Ad A) and a call that does not (Ad B). According to the data collected in Pilot Study 2, Ad A did successfully remind participants of death, however, differences between the sample tested in the main experiment and the sample tested in Pilot Study 2 could have influenced the ad's comparable effectiveness across both experiments. Participants in Pilot Study 2 were graduate students while participants in the main experiment were undergraduates. Although unlikely, it is possible that the undergraduate students reacted significantly different to the ads than the graduate students and it still must be considered as a possible influencing factor. It is also important to note that due to individual instructor requirements, participants in the main experiment were tested at the end of class, while participants in Pilot Study 2 were tested at the beginning. This difference is significant because it could have altered the effectiveness of the ads. It is possible that with class ending, participants in the main experiment could have felt rushed, fatigued or unfocused while participants in Pilot Study 2 who were just beginning their class, took their time and were more attentive. More ideal experimental conditions would have included a pilot study and main experiment with more similar conditions.

Conclusion

In American society, nonprofits such as the American Red Cross play a pivotal role, providing urgently-needed services and aid to many. The majority of nonprofits rely greatly on volunteers and donations to function and advertising is an important tool in securing them. It is this thesis's supposition that Terror Management Theory has several applications for advertising by nonprofits. In an attempt to provide a greater understanding between the relationship between advertising, a person's willingness to donate, and mortality salience, this thesis has offered a comprehensive overview of TMT. Beginning with its origins in Becker's (1962) groundbreaking work to the theory's more recent applications for consumer and prosocial behavior, this thesis fleshed out TMT's complexities chronologically one layer at a time. By shifting through the vast wealth of information and data accumulated by TMT scholars, a gap in the research was found. It was discovered that very little research had been done on mortality salience's relationship to a nonprofit's advertising appeal and a person's willingness to donate. In an attempt to fill this gap, an experiment was devised to link the previously established findings about TMT and donor behavior with the consumer behavior findings on advertising and TMT. Previous TMT literature showed that exposing an MS subject to MS-inducing stimuli disrupted the terror management processes. Based on this phenomena and other data from TMT research, two main hypothesis were proposed: H_1: The type of call to donate in combination with mortality salience will have an effect on willingness to donate.

> H_{1a}: MS participants who view a call to donate that disrupts the terror management process will have a significantly lower willingness to donate compared to all other participants.

H_{1b}: MS participants who view a call to donate that promotes the terror management process will have a significantly higher willingness to donate compared to all other participants.

H_2: Non MS participants who view a call to donate that disrupts the terror management process will have a significantly lower willingness to donate than Non MS participants who view a call to donate that promotes terror management process.

In order to conduct a test of these hypotheses a pilot study (Pilot Study 1) was first executed to determine if an ad with a call to donate containing a warning of a death consequence could induce mortality salience (Pilot Study 1's Ad A), thus disrupting the terror management process. This ad was paired with an almost identical ad containing a neutral call to donate (Pilot Study 1's Ad B). The results of this initial study revealed that Ad A did not induce MS as evident by the lack of death thought accessibility by participants. With the first set of ads unable to achieve the results needed to conduct the main experiment a second pilot study (Pilot Study 2) was conducted using an improved set of ads. These ads, one featuring a warning of a death consequence as well as intense death imagery (Pilot Study 2's Ad A), and one featuring neutral content and imagery (Pilot Study 2's Ad A), successfully induced the conditions needed to complete the main experiment. The results of these two pilot studies provided insight into the components necessary for an advertisement to induce MS.

With the success of Pilot Study 2, the main experiment was conducted using the second set of ads. To test this study's hypotheses the main experiment divided participants into four groups: Group 1 receiving an MS inducing questionnaire and Ad A, Group 2 receiving the Non MS inducing questionnaire with Ad A, Group 3 receiving MS

questionnaire with Ad B and Group 4 receiving the Non MS questionnaire with Ad B. Overall the hypotheses predicted that there would be a significant difference in the level of willingness to donate among the four groups, with Group 3 producing the highest level, followed by Group 4 and then Group 2 and finally with Group 1 producing the lowest level. In contrast, the results found that there was no significant difference in the level of willingness to donate across the groups, supporting the null hypothesis.

The purpose of this thesis was to provide advertisers and non-profits with knowledge that could help them better understand a donor's response to a type of call to donate. Although, the study's specific hypotheses were unsupported the overall purpose of this thesis was still accomplished. First, this thesis provided evidence that an ad with a call to donate laden with death content and imagery can induce mortality salience in participants, as evident from the high level of death thought accessibility induced by Pilot Study 2's Ad A. The failure of Pilot Study 1's Ad A to produce a high level of death thought accessibility also provided insight, suggesting that a warning of death-consequences, without death imagery is not enough to induce mortality salience. When compared, the results of the two pilot studies illustrated the need for future research to determine the ability of death-imagery compared to a death warning to induce MS.

The main experiment also generated valuable data and implications for further studies. The discrepancy between the main experiment's results and those of similar TMT studies, suggests that very specific conditions must be present to create the intended effect. This thesis claims that because real-life conditions are filled with distractions and competing stimuli, those conditions are seldom met.

In conclusion, while a wealth of knowledge has been generated by Terror Management Theory research, there is still much that has not been explored. In order for the theory to be successfully applied to real-world advertising situations more research like that of this thesis will have to be conducted.

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Appendix A: Ad Engagement Questionnaire

Advertising Appeals Survey

BRIEFLY DESCRIBE THE AD YOU JUST VIEWED

Appendix B: Distraction Puzzle

Word Search Puzzle

Circle as many words as you can in the puzzle below.

Book	Computer
Desk	Phone
Movie	Train
Paper	School
Grass	Beer
Music	Actor

S	**R**	**E**	**T**	**U**	**P**	**M**	**O**	**C**	**O**
W	**P**	**H**	**O**	**N**	**E**	**R**	**E**	**E**	**B**
A	**M**	**U**	**S**	**I**	**C**	**P**	**Z**	**S**	**N**
B	**T**	**N**	**R**	**O**	**T**	**C**	**A**	**S**	**K**
B	**M**	**R**	**K**	**S**	**E**	**D**	**E**	**A**	**O**
R	**F**	**O**	**A**	**G**	**O**	**L**	**B**	**R**	**O**
E	**L**	**G**	**V**	**I**	**Z**	**B**	**O**	**G**	**B**
P	**A**	**N**	**U**	**I**	**N**	**E**	**L**	**W**	**Q**
A	**G**	**T**	**A**	**B**	**E**	**T**	**G**	**D**	**O**
P	**S**	**C**	**H**	**O**	**O**	**L**	**N**	**I**	**T**

Appendix C: Demographic Questionnaire

The following questions ask for general information about you.

PLEASE CIRCLE THE CORRECT ANSWER

1. Are you between the ages of 18 and 40? YES NO

2. What is your gender? FEMALE MALE

3. Are you an American citizen? YES NO

Appendix D: MS Inducing Questionnaire

On the following page are two open-ended questions, please respond to them with your first, natural response.

We are looking for peoples' gut-level reactions to these questions.

1. Please briefly describe the emotions that the thought of your own death arouses in you.

2. Jot down, as specifically as you can, what you think will happen to you as you physically die and once you are physically dead.

Appendix E: Non MS Inducing Questionnaire

On the following page are two open-ended questions, please respond to them with your first, natural response.

We are looking for peoples' gut-level reactions to these questions.

3. Please briefly describe the emotions that the thought of your own tooth pain arouses in you.

_____

_____

_____

_____

_____

_____

_____

_____

_____

4. Jot down, as specifically as you can, what you think will happen to you during a root canal at the dentist.

_____

_____

_____

_____

_____

_____

_____

_____

_____

Appendix F: Word Stem Completion Task

We are simply pre-testing this questionnaire for future studies. Please complete the following by filling letters in the blanks to create words. Please fill in the blanks with the first word that comes to mind. Write one letter per blank. Some words may be plural. Thank you.

1. BUR ___ ___ D
2. PLA ___ ___
3. ___ ___ OK
4. WAT ___ ___
5. DE ___ ___
6. MU ___ ___
7. ___ ___ NG
8. B ___ T ___LE
9. M___J ___ R
10. P___ ___ TURE
11. FL ___ W ___ R
12. GRA___ ___
13. K ___ ___ GS
14. CHA ___ ___
15. KI ___ ___ ED
16. CL ____ ___ K
17. TAB ___ ___
18. W ___ ___ DOW
19. SK ___ ___ L
20. TR ___ ___
21. P ___ P ___R
22. COFF ___ ___
23. ___ O ___SE
24. POST ___ ___
25. R ___DI___

Appendix G: Willingness to Donate Questionnaire

Please indicate the degree to which interested by circling the corresponding number.

1=Not Interested; 7=Very Interested

1. Would you be interested in donating money to the organization in the ad you viewed?

1 2 3 4 5 6 7

2. Would you be interested in becoming involved with the organization in the ad you viewed?

1 2 3 4 5 6 7

3. Would you be interested in donating goods to the organization in the ad you viewed?

1 2 3 4 5 6 7

4. Would you be interested in volunteering for the organization in the ad you viewed?

1 2 3 4 5 6 7

5. Would you be interested in donating clothing to the organization in the ad you viewed?

1 2 3 4 5 6 7

ABSTRACT

Terror Management Theory has been applied across multiple disciplines and provided scientists with vital insights into the ultimate motivation for human behavior, from religious intolerance to materialism. While extensive, a gap exists in terror management research regarding the relationship between mortality salience, advertising and prosocial behavior, specifically, donating to charity. In an attempt to close this gap in knowledge and provide nonprofits with a better understanding of how types of ads affect a person's willingness to donate, several hypotheses were proposed and tested. The results of two pilot studies informed the design of two ads, one that disrupts terror management processes and one that promotes the process. A four-group experiment tested suppositions that the type of call to donate (a call that disrupts or promotes the terror management process) in combination with mortality salience would have an effect on willingness to donate. Analysis of the results revealed no statistically significant difference between the three variables. The results lead to the possible conclusion that the effects of mortality salience require a specific set of conditions, not often met in real-world situations. The theoretical and practical implications are discussed in depth.

BIOGRAPHICAL SKETCH

Emily Serenity Steed Willson earned her Bachelor of Fine Arts Degree in Communication Design from Louisiana Tech University in 2010. Since then she has worked in the fields of Graphic Design and Advertising for 7 years. Currently, Emily is the Marketing Coordinator at First United Methodist Church in Shreveport, Louisiana. In May of 2014, she will graduate from the University of Louisiana at Lafayette with a Master of Science Degree in Communication. Her concentration in the Communication Program has been Advertising with a specific interesting in marketing and consumer behavior. During her time at the University of Louisiana at Lafayette, Emily has enjoyed teaching the Visual Communication Course.