COLLEGE STUDENTS ATTITUDES ABOUT DEATH: AN 85-YEAR COMPARISON

by

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Participants were 216 college students who attended a large university in the South Eastern United States. The present study replicated a survey first administered by Middleton (1936). Snowball sampling was used to increase sample size and diversity. Data were collected using Qualtrics, an online survey program, and analyzed using the Statistical Package for Social Sciences (SPSS) 27. Results suggest that, as compared to past studies, students enrolled in college in 2021 are thinking about death more, frequently visualizing their own death more, and report high levels or fear about death. Findings were compared to Middleton's original survey (1936), as well as replicated surveys by Lester (1970) and Lester and Becker (1993). Using the life course theory and symbolic interactionism, death attitudes can be explained by previous experiences with death, personal influences about death, historical events which shaped these students lives, and the symbols associated with death. This study modernized the original survey questions by adding additional questions regarding historical events (9/11, school shootings, COVID-19, and wars), social media influences, and influences from the current COVID-19 pandemic.

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This thesis is for my late Father, Bruce Abbott.

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CHAPTER 1: INTRODUCTION

Throughout life, there is nothing that is guaranteed. Each day can bring forth a new set of challenges, experiences, and achievements; however, there is one thing in life that is certain, death. Death is the one thing in life that is inevitable, yet it seems to be the one thing that American culture does not formally discuss. Every individual has their attitudes and expectations about death. These attitudes are manifested throughout people's lifetime and will influence how people choose to live their life. Research about attitudes towards death has shown a variety of findings. These findings show that attitudes can be attributed to religious, gender, racial, and many other differences in a person's life. The need for determining and understanding these differences is necessary for helping people cope with death, as well as lessen extreme fears and anxiety about the dying experience. When fear and anxiety about death are high, it may prevent individuals from living a meaningful life to their fullest potential.

This paper examines different attitudes about death by examining a large body of literature. The literature about death provides a strong base to explore how these attitudes are formed. The factors presented within this paper include age, gender, race, death in the media, religiosity, and spirituality. These main factors will highlight the multiple dimensions that make up an individual's attitude toward death. The following study will examine death through the lenses of the life course theory and symbolic interactionism. These two perspectives will guide the findings into understanding what death means to different people.

CHAPTER 2: LITERATURE REVIEW

This review of the literature includes five main headers related to the following study. These headers include general attitudes about death (including age, gender, race, religiosity, and spirituality), college students' attitudes about death (including media), measurements used in death-related studies, theoretical framework, and the research questions for the subsequent study. The first header provides general information on the extent of attitudes towards death, including specific information about previous age, gender, race, religiosity, and spirituality findings. The second header focuses specifically on college students' attitudes towards death. Within this second header, a subsection of death in the media are discussed. The third header describes the various tools of measurement about death attitudes. The fourth header provides an overview of the conceptual framework that will guide this study. The fifth and final header discusses the research questions and the forthcoming study features.

Attitudes Towards Death and Dying

Attitudes toward death vary among individuals. Some people are naturally accepting of their mortality, known as death acceptance, while others demonstrate a more anxious attitude toward the thought of death, known as death anxiety (Lyke, 2013). Death attitudes are dynamic throughout a person's life. Attitudes are believed to be heavily dependent on the person's definition of death, their meaning of life, and their ability to cope with anxiety (Petty, Hayslip, Caballero, & Jenkins, 2015). Different attitudes towards death can cause a variety of responses and behaviors depending on certain attitudes developed throughout a person's life.

Different attitudes about death can be related to an individual's level of anxiety and their perceived purpose of life. Death anxiety is a collection of attitudes about death that are characterized by fear, threat, unease, and the discomfort of death (Neimeyer, Moser, &

Wittkowski, 2003). In 1973, Blazer uncovered a positive correlation between a feeling of purpose in life and the acceptance of death; however, this finding was challenged by Lyke (2013) in a study consisting of 168 participants between the ages of 18-35. Lyke (2013) concluded that participants who report a purpose in life are more likely to have higher anxieties about their death. These differences in outcomes can be explained by a variety of factors such as age, gender, race, religion, spirituality, and situational contexts. As studies were replicated across time, different outcomes were reported. One common finding that has stayed consistent is that as individuals age, they become less anxious about their death in comparison to younger people (Gesser, Wong, & Reker, 1987; Wittkowski, 2016). When discussing death anxiety, it is important to consider the participant's level of anxiety as well as their age.

Age

Research about death commonly focuses on older adults' (56 years and older) levels of death anxiety as defined in studies by Barnett, Anderson, and Marsden (2018), and Depaola, Griffin, Young, and Neimeyer (2003); however, children also have their attitudes about death. Children's attitudes of death were not understood until the 1930's and 1940's by Schilder and Wechsler (1934), and Nagy (1948). Each of these studies are considered pioneering research about how children think of death. Schilder and Wechsler (1934) studied 76 children between the ages of 5-15 in a psychiatric hospital about their concepts of death through discussions. Results concluded that children deal with death in a very realistic and matter-of-fact manner. This same sample of children were very aware that old people die, but they had no personal cognizance of their own death. Additionally, children were not afraid of death itself, but were afraid of how they might die (in an extreme and painful way) (Schilder & Wechsler, 1934). A second pioneering study about children's attitudes about death was by Nagy (1948). Nagy (1948)

studied 387 Hungarian children ages 3-10. These children were asked to write down anything that comes to mind about death, draw death, and have discussions about death. Results of this study concluded that there were three developmental stages about children's concepts of death. The first stage includes children birth to five years old. During this time, children believe there is no biological association with death. The second stage occurs when children are between the ages of five and nine years old. During this time, children believe that death is an external phenomenon and not an internal reality, and there is a nonvisible spirit that is responsible for all deaths. The third and final stage includes children nine years and older. This stage is when children begin to recognize the biological aspects of death and view death in a realistic manner (Nagy, 1948). These two breakthrough studies changed how death was discussed with children. Before these studies, it was believed that children did not understand death, and even if they did, it was harmful to the child to discuss death with them, even if the child themself was terminally ill (Poltorak & Glazer, 2006). Discussing death with children is positively correlated with their cognitive maturity and chronological age. Having discussions about death could lead to the child's understanding that he/she will die long before he/she can speak (Poltorak & Glazer, 2006).

As mentioned by Schilder and Wechsler (1934), children were afraid of how they would die. This same fear can be carried past childhood, throughout the rest of a person's life. There is no right or wrong way to die. Often, there is no say in when or how an individual dies. It is a common wish to die peacefully, or in a "good" way. But what is a good way to die? In a literature review by Kehl (2006), a good death is cited by the Institute of Medicine in 1997 as "A decent or good death is one that is: free from avoidable distress and suffering for patients, families, and caregivers; in general accord with patients' and families' wishes; and reasonably

consistent with clinical, cultural, and ethical standards". This outdated definition of a good death is very vague and does not accurately define the concepts of "good" and fails to give good direction to end of life care planning to ensure patient comfort and wishes. To update and clarify this definition, Kehl (2006) conducted a systematic review of literature about dying wishes, which concluded that the concept of a good death is highly individual and unfixed throughout a person's life. These findings indicate that death is viewed and experienced with extreme diversity. There is no right or wrong answer about death, there are only factors that contribute to these attitudes. These factors include gender, race, age, situational context, religiosity, and spirituality.

The variation in attitudes about death between different age groups has been attributed to perceptions about the future. According to Gesser, Wong, and Reker (1987), young adults in their 20's scored high on death anxiety because this age group is most likely to brush death off to the side. Young adults understand that they, along with their loved ones, will eventually die but the perception of death is still distant. As people approach middle adulthood around age 40, time commonly becomes addressed as time left to live as opposed to time since birth. Middle age can be accompanied by a loss of career opportunities, appearance alterations, sick friends, and growing children. These events can trigger psychological impacts an individual, causing them to fear the rapid approach of their own mortality. As people reach older adulthood around age 60, death is more thought about, but less feared (Gesser, Wong, & Reker, 1987). During the oldest old period of life, attitudes about death are still formed. Fleming, Farquhar, Brayne, and Barclay (2016) interviewed 42 individuals between the ages of 95 – 101 to explore their attitudes about their death. Results exposed a variety of viewpoints from the oldest old sample. A majority of the sample wondered why they were still alive, and few celebrated their survival. Concerns also

arose such as quality of life, not being a nuisance, and having nothing to live for. Additionally, a majority of this population were reflective on life and were ready to die. During each stage of life, death anxiety comes in waves. Various life events, outlooks, and personalities can impact how death is viewed.

Gender

Gender differences in attitudes about death has contradicting research findings. As multiple research hypotheses have predicted, women have been found to have higher scores on death anxiety (Bassett, McCann & Cate 2008; Dönmez, Yilmaz & Helvaci 2015; Lyke, 2013; Russac, Gatliff, Reece, & Spottswood, 2007; Tang, Chiou, Lin, Wang, & Liand, 2011). Russac et al. (2007) studied 304 women and men between the ages of 18 - 87 years old who completed a two-part study which included filling out the Collett-Lester Fear of Death Scale, and the Templer Death Anxiety Scale. Results discovered that women have higher death anxiety levels than men; however, they additionally discovered that this finding alters with age. When taking the Collett-Lester Fear of Death scale and the Thorson and Powell revision of the Templer Death Anxiety Scale, men and women around 20 years old both scored high on death anxiety, with women scoring higher. Female participants in their early 50s showed a second spike increase in anxiety over death during this time. A final finding indicated that male and female participants in their 60s both had relatively lower levels of death anxiety once this age was reached. When examining age as a factor in attitudes toward death, there is a general understanding that death anxiety is highest in younger and middle-aged adults and will begin to decline when individuals reach older age (Gesser, Wong, & Reker, 1987).

Contrary to the majority of studies which concluded that women have higher death anxiety than men, other studies have found the opposite (Daaleman & Dobbs, 2010; Malliarou et

al., 2011). Malliarou et al. (2011) surveyed 150 Greek nurses using the Death Attitude Profile Revised (DAP-R) scale. This is a 32-item scale consisting of five sub-scales. Results of this survey found that men reported higher scores on the fear of death sub-scale on the DAP-R; however, these men also scored significantly higher in death approach acceptance, meaning they viewed death has a passageway to a blissful afterlife. In another study, over 45% of older men (an average age of 60.37 years) experience high spousal death anxiety with an emphasis on anxiety about their caregiving issues without a spouse (Momtaz, Haron, Ibrahim, & Hamid, 2015). A study by Florian and Har-Even (1983), although dated, provides a good look at what specific differences can be seen between men and women. In a sample of 225 Jewish emerging adults, researchers found that females disclosed more fear of the loss of their identity and fear of self-annihilation after death, while males disclosed more fear in the consequences it would cause for family and friends, as well as punishment in the afterlife (Florian & Har-Even, 1983) These gender differences were explained by the researchers as the cultural responsibilities placed on males in the Jewish community.

While gender difference in death anxiety are reported in the empirical literature, there have been numerous researches proposing there is no significant evidence that gender has any relation to different attitudes about death (Assari & Lankarani, 2016; Harrawood, White & Benshoff 2008; Makgati & Simbayi 2005, Peters et al. 2013). These differences in gender attitudes about death can be a result of cultural expectations, the willingness for women to report honest scores, the different language used between genders to discuss death, and societal gender roles about emotions associated with fears (Assari & Lankarani, 2016). Throughout the process of reviewing this literature about gender, no studies had data inclusive of additional gender identities other than male and female.

Race

As with gender, race has shown to be related to a variety of attitudes about death. When it comes to dying, older Blacks and Latinos are more likely to die in a hospital than White Americans (Romo, Cenzer, Williams, & Smith, 2018), less likely to use hospice, and more likely to be seen in the emergency department (Smith et al., 2012). These factors could be related to how different races form their attitudes about death.

There have been many differences concluded about death attitudes between Black and White individuals. Depaola, Griffin, Young, and Neimeyer (2003) surveyed 189 individuals with a mean age of 69 years old and found that Caucasian participants displayed a high fear regarding the dying process, whereas Black participants scored higher on subscales about a fear of the unknown, fear of conscious death, and a fear of the body after death (Jung, 2018). In addition, a secure attachment to God and higher involvement in religious beliefs serves as a protective factor against death anxiety for Blacks more than Whites (Jung, 2018). In Jung's (2018) study of 936 participants over 65 years of age, Jung attributed this finding to the Black communities' historical battles of discrimination, causing them to be more vulnerable to poor health care, more common loss of family members, and less physical safety than Whites which in turn creates more death anxiety. A sample of 5,979 participants over the age of 65 within the Latino population was used in Romo, Cenzer, Williams, and Smith's study (2018), which concluded the following about the Latino participants: Latinos are more likely to report that death was not expected, death is more likely to happen in a hospital, and discussion about death is seen as taboo. Not only have older Latino populations been studied, but younger populations as well. Latino youth have typically had low suicide rates through the years; however, there has been a drastic increase in distress and suicidality within this population (Kastenbaum & Moreman,

2018). Garcia, Skay, Sieving, Naughton, and Bearinger (2008) collected data to describe the

mental health status in Latino high school students. Data were collected from 3,178 Latino

students who took the Minnesota Student Survey (MSS). The MSS is a statewide survey taken

by 6th, 9th, and 12th grade students in Minnesota every three years. Results concluded an

alarmingly high suicide ideation and attempts. In the ninth-grade female Latina population, 40 %

reported thinking of ending their own life and one in five reported a suicide attempt in the past

year. Suicidality is most likely to be experienced by mixed-race youth, especially in females

during this developmental stage (Kastenbaum & Moreman, 2018).

Religiosity

Religion involves a multitude of various aspects such as beliefs about spirits, beliefs,

practices, and rituals related to the sacred (Koenig, King, & Carson, 2012). In the world, there

are an estimated 4,300 different religions (Juan, 2018). The five most practiced religions are

Buddhism, Christianity, Hinduism, Islam, and Judaism (Juan, 2018). Each religion is unique, but

there is one common ideal that each religion commonly explores: death.

Chaiwutikornwanich (2015) surveyed death anxiety of two religions: Buddhism and

Christianity. Five hundred and seventy-seven Buddhists were surveyed, 45 of which had just

finished a six-month meditation while the other 532 Buddhists had not been meditating but had

been practicing their religion. Results reveled that the meditating Buddhists had a stronger belief

in the afterlife and went to the temple more frequently then nonmeditating Buddhists.

Additionally, there was no significant different between each group when life satisfaction and

death anxiety were explored. Chaiwutikornwanich (2015) conducted the same study with

participants who practiced Christianity. Two hundred and twenty-three Christians participated in

the study, including 48 participants who had intense involvement in religious discipline and had

just finished religious attendance. Results concluded that 48 dedicated Christians had less death anxiety and attended church services more frequently; however, there was no significant difference in life satisfaction. This study gives a brief look into how religiosity can have an impact on death anxiety based on an individual's involvement within their religion.

College students are not only influenced by extrinsic portrayals of death but their internal expectations about death. Specifically, it has been common to discover that college students' attitudes are highly influenced based on their belief in an afterlife (Rose & O'Sullivan, 2002; Tomer & Eliason, 2005). Tomer and Eliason (2005) found that religious belief in the afterlife connected directly to an increase in the acceptance of death; however, there are two types of religiosity, intrinsic and extrinsic. Intrinsic religiosity refers to internal beliefs and thoughts about one's religion, while extrinsic religiosity refers to the external expressions and actions about religious beliefs (Tomer & Eliason, 2005). Regarding intrinsic and extrinsic religion by Tomer and Eliason (2005), individuals who displayed higher intrinsic religiosity were found to have less fear of death and directly increased the acceptance of death. On the contrary, extrinsic religiosity was not found to directly affect fear of death but can decrease the belief in chance which could lead to higher death anxieties. Rose and O'Sullivan (2002) found that students who anticipate a negative afterlife displayed higher levels of death anxiety than students who had positive or neutral expectations of an afterlife. It appears that different levels of religious beliefs may influence how college students construct their beliefs about the afterlife. Even if a student does not consider themselves religious or follows a specific religion, they may still create an idea of what happens after death based on their personal experiences.

Spirituality

Unlike religiosity, there is no commonly accepted definition of spirituality. How a person defines religiosity may vary but overall, it is highly comparable; however, defining spirituality does not have that same overall acceptance. There have been multiple published definitions for spirituality. One definition includes the personal quest for understanding answers to questions about life, meaning, and relationships to the sacred or transcendent (Koenig, McCullough, & Larson, 2000). Another definition of spirituality includes all unobservable mental states (love, beauty, power) and excludes all observable objects (food, water, money) in the materialistic or naturalistic world, while excluding the supernatural world (Baggini, 2008). A final example of a definition of spirituality is the peak experience beyond daily life experiences that occurs when an individual identifies with something more powerful than oneself, an object more beautiful than oneself, or an idea more enlightened than one's own (Cicirelli, 2011).

Although spirituality can be difficult to examine, there have still been studies which investigate how spirituality relates to death attitudes. Taghiabadi, Kavosi, Mirhafez, Keshvari, & Mehrabi (2017) measure spirituality by using the daily spiritual experiences scale (DSES). This scale consists of 16 items using a Likert scoring system. This same study also used the death anxiety scale which consists of 27 items. Taghiabadi et al. (2017) studied an elderly population of 190 participants between the ages of 60 and 93 years old. After completing both scales, results concluded that the elderly typically score higher in spirituality, which was found to correlate with lower death anxiety. It is important to note that spiritual experiences are subjective and dependent on an individual's ideology.

As a person ages, spirituality may increase due to physical changes, role changes, death of loved ones, and an overall coping mechanism (Taghiabadi et al., 2017). Kwak (2020) conducted a survey of 69 older adults (65 and older) from seven nursing homes in Hawai'i. The

mean age of this sample was 79.65 years and consisted of a majority of Asian American and Pacific Islander ethnicity. Participant's death attitudes, spirituality, intrinsic religiosity, depression and anxiety, physical functioning, and social support were measured. Results concluded that spirituality is associated with more positive death attitudes and less fear of death. This may suggest that older individuals have a greater capability of findings purpose in their present lives, which ultimately leads to the high reports of spirituality. Since higher reports of spirituality have been found to relate to lower levels of death anxiety, spirituality could be a coping strategy for some to reduce the fear of death.

For the purpose of the study presented, religiosity and spirituality will be examined independently but it is important to understand the connectedness between the two. There are four main groups when comparing religiosity to spirituality: religious and spiritual, religious but not spiritual, spiritual but not religious, and neither religious or spiritual (Nadal, Hardy, & Barry, 2018). When comparing each of these four groups in terms of positive psychosocial functioning, emerging adults (19-25 years old) displayed higher positive psychosocial functioning if they were religious and spiritual or not religious and not spiritual (Nadal, Hardy, & Barry, 2018). Emerging adults who had discrepancies about religiosity and spirituality displayed less psychosocial functioning. As an emerging adult, being unsure or divided about beliefs may cause distress in life and may not be very adaptive.

College Students Attitudes About Death

Throughout time, the attitudes which encompass death have been changing drastically. These changes can be seen consistently among college students in the United States. Middleton (1936) administered the initial survey on college students' attitudes towards death. This initial study consisted of students from two Midwestern universities, Butler University, and DePauw

University. The total sample size was 825 students, 337 males and 488 females between the ages of 15 - 24 years old. Middleton (1936) did not clarify how students were selected as participants and it is unknown how many students from each university participated in the study. This same survey was replicated by Lester (1970), followed by Lester and Becker (1993). Each of these replicated studies used the same survey from Middleton (1936). Lester's (1970) comparison to Middleton (1936) concluded that students were more preoccupied with thoughts of death, and females respond to death more negatively than males. In Lester and Beckers (1993) comparison to Middleton (1936), they concluded that death was a much greater concern in 1993 than in 1936; students thought about death more, feared death more, and were more depressed and anxious than students in 1936. Since 1993, this survey has not been administered to our knowledge. College students are a vulnerable population who are still impressionable although they are considered young adults. This population is becoming more aware of the world around them and more aware of various aspects of death. Increasing anxiety about death during this age group may be attributed to the death of grandparents and other aging family members. This may be especially difficult for college students because students are away from their family for an extended period of time. During this time, students may feel disconnected to their elders and feel helpless when others are sick. College is also a time of an expansion of overall knowledge and world experiences, being surrounded by different cultures and other students with different experiences can introduce the student to many new worlds.

The number one leading cause of death in college students ages 15 - 19 are accidents/unintentional injury and the second leading cause of death in college students ages 15 - 19 is suicide (CDC, 2018). Both causes of death can be attributed to the high rates of college student anxiety about death. When a peer dies, students may begin to consider their own

mortality and how they perceive dying. Accidents and suicide are both sudden and unanticipated. Students may become more anxious about death after an accident because that accidental event may be something that student also partakes in. Experiencing a peer die is extremely challenging event with which to cope. Coping strategies for college students are challenged during this time. Once a student moves away, they may lose close social ties and social support that they had all their lives. When a student experiences a traumatic event, or even daily stressors, they are once again challenged and forced to manage new stress in a new environment. Coping strategies vary, but commonly involve a form of social support. Social support is very important, but it can be difficult to promote social support during the COVID-19 pandemic. The ongoing COVID-19 pandemic has created challenges and fears for college students all over the country. COVID-19 has caused colleges to send students home early, not allow students back on campus, cancel sporting events and other social activities, and has discouraged students from attending college at all. Student deaths due to COVID-19 could also account for a contemporary increase in college student death anxiety. There have been an estimated 70 - 75 COVID-19 related deaths on United States college campuses (Martelli, 2020). Since the COVID-19 pandemic is still ongoing, there is not enough research to formulate data about how the pandemic has impacted college students, but it has been widely accepted that the pandemic has drastically heightened college student's anxiety (Biber, Melton, & Czech, 2020).

Death in the Media

The media is all around us from birth until death. As children, parents may hide illnesses, end of life decisions, or death of others from their children; however, children are never fully hidden from the reality of death. Even in storybooks about fairy tales, there is commonly an underlying event about death or a subtle message about mortality. As children grow, their minds

begin to fill with scenarios, wonders, concerns, and questions about death, but if the parent does not allow for the decision of death to happen, the child may grow up with preventable fears and anxiety about death. A literature review by King and Hayslip (2002), reported that 57% of television shows portray some type of violence, typically leading to a violent and sudden cause of death for the victim. This may cause viewers to overestimate their chances of being a victim to a violent murder, ultimately raising death fears and anxiety about death. King and Hayslsip (2002) studied the media's influence on death in a sample of 147 college students between the ages of 17 - 52 years old, with an average age of 22 years. Findings indicated that deaths in the media are related to greater death anxiety, specifically mentioning that references about death bring fears related to death into the conscious, but real-life examples of death increase both unconscious and conscious fears. Media exposure is not always incorrect; however, it commonly paints an inaccurate picture of the dying process and can create irrational fears about death.

Ryburn and Festa (2006) measured college students' responses to traumatic death in the media. This survey was given to 113 undergraduate students between the ages of 17 - 42. These college students were assigned to watch one of two clips from a popular movie, *Final Destination.* The students were placed into two groups. One group watched a one-minute airplane explosion scene, while the second group watched a five-minute freeway car accident scene. Results indicated that the one-minute video resulted in higher reports of death anxiety while the five-minute video resulted in fewer reports of death anxiety after viewing. This could be due to the desensitization of a longer five-minute view, or due to the commonality of a car accident as opposed to a plane crash. Modern college students are highly involved in various types of media and can watch whatever they please, whenever it is convenient for them. There are rarely filters on what the media can show versus not show. This can cause highly graphic

scenes portraying death (ex: a sudden violent murder), which in turn can increase anxiety and fear for college students who watch these programs, even if deep down they know it is unrealistic for it to happen to them. Contrary, if these fears are created, it may keep students aware of the world around them and they may become more vigilant. Although it is not extremely common, unfortunately, instances of college students dying, tragically or not, does happen.

Measurement Tools for Attitudes Toward Death

For the current study, these specific tools for measurements will not be used since questions will be replicated from Middleton's (1936) previous study; however, it is important to note the various scales of measurements in the field of thanatology. Thanatology is the study of the social and emotional reactions to death (Jones-Eversley & Rice, 2020). The 1936 survey by Middleton is a 14-item, 14-sub-item, scale that includes Likert-type, yes or no, and fill-in-response questions. Further detail regarding the 1936 survey by Middleton has been described within the methods.

When measuring attitudes towards death and dying, numerous tools can be used. In a systematic review of these scales, Groebe et al. (2018) identified 44 measurement tools regarding death and dying. Of these 44 tools, 34 specifically explored anxiety towards dying. Although these 44 measurements included various response formats, languages, and revisions, the most common measurements used through the literature within this current review are the revised version of the Collett-Lester Fear of Death Scale (2004), Hoelter's Multidimensional Fear of Death Scale (1979), Templer's Death Anxiety Scale (1970), and the Death Attitudes Profile-Revised (1994). Each of these most common forms of measurement is based on a Likert-type scoring scale. The Collett-Lester Fear of Death Scale (1990) measures how upset or distressed

participants begin to feel when they think about death. This scale measures four fears: the death of the self, the dying process of the self, the death of others, and the dying process of others. Each of the four fears has eight accompanying questions, for a total of 32 items. Items are scored by using a five-point Likert-type scale on how disturbed participants are to the event stated (Lester, 1990). Hoelter's Multidimensional Fear of Death Scale (MFODS) (1979) is another five-point Likert-type scale that includes 42 total items. These items are used to measure eight death-related fears. These eight fears within this scale include the fear of: the dying process, the dead, being destroyed, significant others dying, the unknown, a conscious death, the body after death, and premature death (Barnett, Anderson, & Marsden, 2018). The Death Attitudes Profile-Revised (DAP-R) (1994) is a 32-item questionnaire, involving a seven-point Likert-type scale. This scale measures five subscales: fear of death, death avoidance, neutral acceptance, approach acceptance, and escape acceptance. Overall, the most commonly used scale to determine death attitudes is Templer's Death Anxiety Scale (DAS) (1970) (Templer, 1970). This 5-point Likert-type scale includes 15 items and is used to measure the participant's overall feelings about their level of death anxiety. For each of these four measurements listed, the higher score, the higher the overall score of death anxiety. Having multiple ways of measuring attitudes towards death is very important in thanatology because there is no one size fits all approach for understanding how each individual develops their view toward death.

Theoretical Perspectives

The research that will be presented will have a foundation of two theories, the life course theory, and symbolic interactionism. The life course theory (LCT) describes human development through life experiences. More specifically, the LCT integrates four main paradigms that occur during an event: historical and geographic location, social embeddedness, human agency, and

timing (Elder & Giele, 2009). The LCT is important to reference because it emphasizes that humans are influenced by more than their families. As humans navigate their way through life, they are influenced by everything around them, such as family, friends, religious beliefs, culture, government influence, and historical context (Bengston & Allen, 1993). When speaking about death, the LCT explains that attitudes about death differ to individual experiences. The timing of the event (age of the deceased/ill), family context (closeness, responsibility that member held), and social context (income levels, dependent/independent) are all examples of how death attitudes can be formed throughout life experiences (Smith & Hamon, 2017).

The second theoretical perspective to support the study of death attitudes is symbolic interactionism. Symbolic interactionism helps society understand the world around them and allows them to make meaning of various things. This is done through the use of symbols, gestures, social norms, and rituals (Smith & Hamon, 2017). Symbolic interactionism relies on three basic themes: humans respond to objects based on the meaning of those objects, the meaning given to an object emerges from social interactions, and object meanings are modified based on societal norms and values (Blumer, 1969). As such, death can be assumed as the symbol; however, the symbol of death has a variety of meaning to different people. Attitudes towards death will be dependent on the meanings that are attributed to it. Both of these theoretical frameworks can provide acknowledgment and understanding as to why students think about death in certain ways. It is important to realize that each individual has had unique life experiences that have caused these differences in attitudes. While taking those differences into account, we hope to gain a general understanding of attitudes about death, while examining what could cause these differences.

Research Questions

This study aims to compare findings from 1936, 1970, and 1993 to the current year,

2021. Specific research questions are as followed:

1. What are the attitudes of college students regarding death in 2021?

2. What are the differences in attitudes between different gender and racial demographics?

3. Are there differences in attitudes about death between the 1936 and 2021 samples?

4. What are the trends in attitudes about death based on the 1936, 1970, 1993, and 2021

   samples?

CHAPTER 3: METHODS

Participants/Sample

Participants in this study will be current college students from a large university in the South Eastern United States. Initially, the students that will be in this sample will be enrolled in a family and marriage relations course during the spring 2021 semester. This course has been chosen due to its average enrollment size of 125 students. To further increase the sample size for this study, researchers have decided to use a snowball sampling strategy (Berndt, 2020). The 125 students who are enrolled in the class will be invited to send the survey to two additional students who attend the same university. This method of collecting participants has been chosen to increase sample size, as well as increase variations of academic majors, genders, races, and class standing. All participants will be voluntary.

Procedure

Data will be collected from participants through an online survey created in Qualtrics. This survey link will be provided to students via Canvas (university course platform) and university email. Due to the current state of the COVID-19 pandemic, courses at this university are being taught in an online format; therefore, no hard copy surveys will be distributed. Since discussing death and dying is often taboo in the United States, taking the survey might cause feelings of uneasiness, distress, or anxiety. Prior to completing the survey, participants will be asked to read and accept an informed consent document. Participants will be provided with a clear understanding of the study goals within the informed consent document. Therefore, participants will be provided a contact number to the university's Center for Counseling and Student Development, the university's Family Therapy Clinic, and the National Suicide Hotline if they feel that they would like to talk to a mental health professional in the near future. This

survey will be voluntary and will remain anonymous. Participants will have the option to skip any of the questions. If a participant chooses to skip any questions, they may continue with the survey without being penalized. The participant's anonymity will remain since there will be no names or other identifying factors used in this survey. The survey will be available for participants to take over a two-week period. The data collection process will close after two weeks and no additional surveys will be collected. The data gathered on Qualtrics will be transferred to SPSS and the data will be cleaned to eliminate partial completion or missing responses.

Instruments

Demographic Measures

The demographic questions asked participants to disclose information about their age, gender, race, college major, and religiosity/spirituality. Age was measured in years as a continuous variable, gender was measured as male, female, or identifying as a different gender than those listed as categorical variables, race was measured as White/Caucasian, Black/African American, Hispanic/Latino, Asian, Pacific Islander, American Indian or Alaskan Native, or identifying as a different race than those listed as categorical variables, college majors was an open-ended question and participants typed in their major, and levels of religiosity were measured on a Likert-type scale with responses ranging from *very, somewhat, not very, not at all,* and *don't know.* A full set of demographic questions are listed in appendix B.

The 1936 survey by Middleton

Information will be gathered about death attitudes by use of the 1936 survey by Middleton. By using the same survey, data will be more attainable when comparing findings from 1936 and 2021. This survey is a questionnaire consisting of 14 main items and 14 sub-

items, resulting in 28 total questions. These 28 items involve Likert-type questions, written

response, and yes or no questions. In addition to the original 28 questions nine additional

questions have been added to enhance the understanding of how college students are most

influenced about death, what their previous experience with death has been, whether

contemporary events which may increase death anxiety (9/11, COVID-19, school shootings,

etc.), how death is portrayed in the media, and personal reactions/experiences with the impacts of

the COVID-19 pandemic. These nine additional questions will consist of Likert-type questions,

written response, and yes or no questions. The full survey used is listed in appendix B.

Analysis

Three main features will be analyzed: demographics, survey responses, and previous

study findings. Demographics will be examined through descriptive analysis to determine

differences between students regarding gender, race, and religiosity/spirituality by running a *t*-

test. Analyzing the 1936 survey by Middleton will entail using a *t*-test to compare groups within

each question to observe trends and commonalities that may exist, for example comparing the

survey responses based on gender, race, and religiosity/spirituality. The data will be compared to

Middleton's (1936) published dataset. The 1936 data consists of frequencies for each question.

Each question is reported a male response frequency, female response frequency, and total

response frequency. Since data for each question was not described in Lester (1970) or Lester

and Becker (1993), reported findings from these two replicated studies will be compared and

addressed with the findings that will come from our 2021 study; however, the majority of the

compared gender data will come from Middleton (1936).

To analyze qualitative responses for open ended questions, responses were independently

coded by the researcher and the two co-chairs. The final response coding were determined by

group negotiation of the three research team members. Open-ended responses add depth and supplement quantitative data.

Potential Limitations

As with any study, there are a handful of potential limitations that may arise. The first of these limitations is that Lester (1970) and Lester and Becker (1993) do not provide datasets from their replicated study. Since datasets are not provided, a cross-sectional analysis cannot be fully completed. Although datasets are not given, these studies still report findings and their comparisons between their study and Middleton's (1936) original study. Enough reported findings can be used to reinforce possible differences and similarities from our 2021 study. A second possible limitation is the number of participants completing the survey. Middleton (1936) had 825 participants, Lester (1970) had 411 participants, and Lester and Becker (1993) only had 63 participants. In our original sample of the marriage and family relations course, that would only deliver about 100 to 150 probable responses; however, by using the snowball sampling strategy method (Berndt, 2020) of participants inviting additional students to take the survey, we hope to increase our sample number to about 300 students. A third potential limitation could be that the language and wording in Middleton's original survey from 1936 are fairly outdated. Some of these items use wording that may confuse college students in 2021 who are filling out this survey. For this reason, the language of some items has been slightly altered, but not altered enough to change the meaning of the items. If Middleton's original 1936 survey language has been altered, the original wording has been noted (see appendix B).

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CHAPTER 5: COLLEGE STUDENTS ATTITUDES ABOUT DEATH: AN 85-YEAR COMPARISON

Death is the one thing in life that is inevitable, yet it seems to be the one thing that Americans do not feel comfortable openly discussing. Every individual has their attitudes and expectations about death (Lukianoff & Haidt, 2019). These attitudes are manifested throughout people's lifetime and will influence how people choose to live their life. Death attitudes are dynamic throughout a person's life. Attitudes are believed to be heavily dependent on the person's definition of death, their meaning of life, and their ability to cope with anxiety (Petty, Hayslip, Caballero, & Jenkins, 2015).

Attitudes about Death

Gender

Gender differences in attitudes about death have contradictory research findings. As multiple research hypotheses have predicted, women have been found to have higher scores on death anxiety when compared to males (Russac, Gatliff, Reece, & Spottswood, 2007; Bassett, McCann & Cate 2008; Lyke, 2013; Dönmez, Yilmaz & Helvaci 2015; Tang, Chiou, Lin, Wang, & Liand, 2011). These differences in gender attitudes about death may be a result of cultural expectations, the willingness for women to report honest scores, the different language used between genders to discuss death, and societal gender roles about emotions associated with fears (Assari & Lankarani, 2016). Gender-related death studies have also reported that men have higher reported death anxiety than women (Daaleman & Dobbs, 2010; Malliarou et al., 2011) or that there was no significant evidence about gender differences towards death attitudes death (Assari & Lankarani, 2016; Harrawood, White & Benshoff 2008; Makgati & Simbayi 2005,

Peters et al. 2013). Throughout the process of reviewing this literature about gender, no studies had data inclusive of additional gender identities other than male and female.

Race

As with gender, race has shown to be related to a variety of attitudes about death. White participants have displayed a high fear regarding the dying process, whereas Black participants scored higher on subscales about a fear of the unknown, fear of conscious death, and a fear of the body after death (Jung, 2018). A secure attachment to God and higher involvement in religious beliefs serve as a protective factor against death anxiety for Blacks more than Whites (Jung, 2018). Jung (2018) attributed these findings to the Black communities' historical battles of discrimination, causing them to be more vulnerable to poor health care, more common loss of family members, and less physical safety than Whites which in turn creates more death anxiety. Latinos are more likely to report that death was not expected, death is more likely to happen in a hospital, and discussion about death is seen as taboo (Romo, Cenzer, Williams, & Smith, 2018). Within the Latino population, there has been a drastic increase in suicide ideation and attempts (Kastenbaum & Moreman, 2018). The 2008 state of Minnesota ninth-grade female Latina population reported that 40% of Latinas have thought of ending their own life and one in five have attempted suicide in the past year (Garcia, Skay, Sieving, Naughton, and Bearinger, 2008). Suicidality is most likely to be experienced by mixed-race youth, especially in females during this developmental stage (Kastenbaum & Moreman, 2018).

Media

Television shows (57%) portray some type of violence, typically leading to a violent and sudden cause of death for the victim (King & Hayslip, 2002). Consequently, viewers may overestimate their chances of being a victim of a violent murder, ultimately raising death fears

and anxiety about death. Deaths in the media are related to greater death anxiety, specifically mentioning that references about death bring fears related to death into the conscious, but real-life examples of death increase both unconscious and conscious fears. Media exposure is not always incorrect; however, it commonly paints an inaccurate picture of the dying process and can create irrational fears about death (King & Hayslip, 2002). Modern college students are highly involved in various types of media and can watch whatever they please, whenever it is convenient for them. There are rarely filters on what is shown in the media. As such, highly graphic scenes portraying death, i.e., a sudden violent murder which in turn may increase anxiety and fear for college students who watch these programs, even if consciously they know it is unrealistic for it to occur. Contrary, if these fears are created, it may keep students aware of the world around them and they may become more vigilant. Although it is not extremely common, unfortunately, instances of college students dying, tragically or not, do happen.

College Students Attitudes about Death

Throughout time, the attitudes which encompass death have been consistently changing. These changes can be seen consistently among college students in the United States. Middleton (1936) administered the initial survey on college students' attitudes towards death. This initial study consisted of students from two Midwestern universities, Butler University, and DePauw University. The total sample size was 825 students, 337 males and 488 females between the ages of 15 - 24 years old. Middleton (1936) did not clarify how students were selected as participants and it is unknown how many students from each university participated in the study. This same survey was replicated by Lester (1970), followed by Lester and Becker (1993). Each of these replicated studies used the same survey from Middleton (1936). Lester's (1970) comparison to Middleton (1936) concluded that students were more preoccupied with thoughts of death, and

females respond to death more negatively than males. In Lester and Becker's (1993) comparison to Middleton (1936), they concluded that death was a much greater concern in 1993 than in 1936; students thought about death more, feared death more, and were more depressed and anxious than students in 1936. Since 1993, this survey has not been administered to our knowledge. College students are a vulnerable population who are still impressionable although they are considered young adults.

Theoretical Perspective

The life course theory (LCT) is applicable to this age group and how their attitudes are formed. Once students leave their household families, they are introduced to a variety of other students, some of whom may or may not be as likeminded as them. This interaction with new peers could open the mind of someone who has not challenged their own opinions. This population is becoming more aware of the world around them and more aware of various aspects of death. Increasing anxiety about death during this age group may be attributed to the death of grandparents and other aging family members (Prothero, 2020). This may be especially difficult for college students because students are away from their families for an extended period. During this time, students may feel disconnected from their elders and feel helpless when others are sick. College is also a time of an expansion of overall knowledge and world experiences, being surrounded by different cultures and other students with different experiences can introduce the student to many new worlds.

The number one leading cause of death in college students ages 15 - 19 are accidents/unintentional injury and the second leading cause of death in college students ages 15 - 19 is suicide (CDC, 2018). Both causes of death can be attributed to the high rates of college students' anxiety about death. When a peer dies, students may begin to consider their mortality

and how they perceive dying. Accidents and suicide are both sudden and unanticipated. Students may become more anxious about death after an accident because that accidental event may be something that the student takes part in doing. Experiencing a peer die is an extremely challenging event with which to cope. Coping strategies for college students are challenged during this time (Cox et al., 2015). Once a student moves away, they may lose close social ties and social support that they had all their lives. When a student experiences a traumatic event or even daily stressors, they are once again challenged and forced to manage new stress in a new environment (Son et al., 2020). Coping strategies vary, but commonly involve a form of social support. Social support is very important, but it can be difficult to promote social support during the COVID-19 pandemic. The ongoing COVID-19 pandemic has created challenges and fears for college students all over the country. COVID-19 has caused colleges to send students home early, not allow students back on campus, cancel sporting events and other social activities, and have discouraged students from attending college at all. Student deaths due to COVID-19 could also account for a contemporary increase in college student death anxiety. There have been an estimated 70 - 75 COVID-19 related deaths on United States college campuses (Martelli, 2020). Since the COVID-19 pandemic is still ongoing, there is not enough research to formulate data about how the pandemic has impacted college students. It has been widely accepted that the pandemic has drastically heightened college student's overall anxiety (Biber, Melton, & Czech, 2020).

Purpose of Study

The purpose of this research study was to explore how college students in 2021 felt about death and compare findings to Middleton's death attitudes survey in 1936. The following research questions were answered:

- What are the attitudes of college students regarding death in 2021?

- What are the differences in attitudes between different demographics (gender and race)?

- Are there differences in attitudes about death between the 1936 and 2021 samples?

- What are the trends in attitudes about death based on 1936, 1970, 1993, and 2021 samples?

Methods

Participants

A total of 216 participants comprised the final sample. Participants who identified themselves as "not currently enrolled in college" were removed from the study (n=10), and participants with total incompletion were removed from the study (n=32). Listwise deletion was used to analyze missing data. Since missing data was less than 10%, the remaining participants (n=216) were utilized for the data analysis (Little, 1988). Participants completed an online survey assessing demographic characteristics (including age, gender identification, race identification, college status, current college major, perceived level of religiosity, and perceived level of spirituality), attitudes about death, societal/familial/media influence on death attitudes, and contemporary events such as the current COVID-19 pandemic. The age of participants ranged from 18 years old to 49 years old, with a mean age of 22.5 years. This sample mirrors this university's racial enrollment. The university studied has an enrollment of 35% BIPOC, whereas the current study consists of 39.8% BIPOC. Table 1 describes the complete sample of demographics.

Table 1

Demographic Characteristics

Description of characteristics categories	Frequency	Frequency Percent
Gender		
Male	58	26.9
Female	158	73.1
Race		
White/Caucasian	130	60.2
Black/African American	58	26.9
Hispanic/Latino	15	6.9
Asian	4	1.9
Pacific Islander	1	.5
American Indian or Alaskan Native	3	1.4
Other:		
Mixed White/Black	2	.7
Multiracial	1	.5
White and Middle Eastern	1	.5
Bulgarian	1	.5
College Status		
Freshman	19	8.8
Sophomore	67	31
Junior	92	42.6
Senior	29	13.4

Description of characteristics categories	Frequency	Frequency Percent
Graduate Student	9	4.2
Major		
Business	36	14.3
Human Development and Family Science	23	9.2
Psychology/Sociology	33	13.3
Education	29	11.6
Computer Sciences	2	.8
Exercise sciences	7	5.6
Biology/Chemistry	14	5.6
Public Health	5	2
Communications	11	4.4
Social Work	16	6.4
Nursing	13	5.2
Criminal Justice	11	4.4
Engineering	2	.8
Undecided/General studies	3	1.2
Other	7	2.8
Level of religiosity		
Very	48	22.2
Somewhat	96	44.4
Not very	42	19.4
Not at all	27	12.5

Description of characteristics categories	Frequency	Frequency Percent
Don't know	3	1.4
Level of spirituality		
Very	51	23.6
Somewhat	105	48.6
Not very	42	19.4
Not at all	14	6.5
Don't know	4	1.9
Participation in religious/spiritual observances		
Several times a week	24	11.2
Weekly	64	29.8
Monthly	32	14.9
3-4 times a year	41	19.1
Annually	21	9.8
Never	33	15.3

Procedure

Data were collected from participants through an online survey created in Qualtrics. This survey link was provided to students via Canvas (university course platform) and university email. Due to the current state of the COVID-19 pandemic, courses at this university were being taught in an online format; therefore, no hard copy surveys were distributed. Since discussing death and dying is often considered taboo in the United States, taking the survey may have caused feelings of uneasiness, distress, or anxiety. Prior to completing the survey, participants

were asked to read and accept an informed consent document. Participants were provided with a clear understanding of the study goals within the informed consent document. Following the completion of the survey, participants were provided a contact number to the university's Center for Counseling and Student Development, the university's Family Therapy Clinic, and the National Suicide Hotline if they feel that they would like to talk to a mental health professional in the near future. The survey was voluntary. Participant's anonymity remined since no identifying information was associated with responses, and responses were anonymous and analyzed at the aggregate level. Participants had the option to skip or not answer any of the questions. If a participant chose to skip a question, they were able to continue with the survey without being penalized. The survey was available for participants to take over two weeks. The data collection process closed after two weeks and no additional surveys were collected. The data gathered on Qualtrics was transferred to SPSS and the data was examined for partial completion or missing responses.

Instruments

Demographic Measures

The demographic questions asked participants to disclose information about their age, gender, race, college major, and religiosity/spirituality. Age was measured in years as a continuous variable, gender was measured as male, female, or identifying as a different gender than those listed as categorical variables. Race was measured as White/Caucasian, Black/African American, Hispanic/Latino, Asian, Pacific Islander, American Indian or Alaskan Native, or identifying as a different race than those listed as categorical variables. College majors was an open-ended question and participants typed in their major, and levels of religiosity were

measured on a Likert-type scale with responses ranging from *very, somewhat, not very, not at all, and don't know.* Full demographic questions are listed in appendix B.

The 1936 survey by Middleton

Information was gathered about death attitudes by use of the 1936 survey by Middleton. By using the same survey, data will be more attainable when comparing findings from 1936 and 2021. This survey is a questionnaire consisting of 14 main items and 14 sub-items, resulting in 28 total questions. These 28 items involve Likert-type questions, written responses, and yes or no questions (see appendix B). In addition to the original 28 questions, nine additional questions have been added to enhance the understanding of how college students are most influenced about death, what their previous experience with death has been, whether contemporary events which may increase death anxiety (9/11, COVID-19, school shootings, etc.), how death is portrayed in the media, and personal reactions/experiences with the impacts of the COVID-19 pandemic. These nine additional questions will consist of Likert-type questions, written responses, and yes or no questions. The full survey distributed to participants is listed in appendix B.

Analysis

Three main features were analyzed: demographics, survey responses, and previous study findings. For qualitative analyses, the Statistical Package for Social Sciences (SPSS) 27 was used to analyze the data. For demographic variables, descriptive statistics and frequencies were calculated. Pearson Correlation coefficient was used to measure the relationship between groups. Analyzing the 1936 survey by Middleton entailed using a *t*-test to compare groups within each question to observe trends and commonalities that exist, for example comparing the survey responses based on gender, race, and religiosity/spirituality. The data were compared to Middleton's (1936) published findings. The 1936 data consists of each total number of responses

per question and is split up into male and female categories. Since raw data were not provided in Lester (1970) or Lester and Becker (1993), reported findings from these two replicated studies were compared and addressed with the findings that came from our 2021 study; however, the majority of the compared gender data and basic qualitative analysis will come from Middleton (1936).

To analyze qualitative responses for open ended questions, responses were independently coded by the researcher and the two co-chairs. The final response coding were determined by group negotiation of the three research team members. Open-ended responses add depth and supplement quantitative data.

Results

Descriptive Statistics

Descriptive statistics were calculated for demographic information. 26.9% of participants identified as male and 73.1% of participants identified as female. No participants identified themselves as an additional gender, although the option was given. The mean age was 22.5 years old. Further demographic detail were described in Table 1.

Comparison of Means

Means of gender groups (male and female) and means of racial groups (Whites and Blacks, Indigenous, and People of Color (BIPOC)) were compared by using two statistical methods, t-test and chi-square. Results of these statistical analyses indicated that there were significant differences between genders and races when reporting their attitudes about death. Chi-square results only indicated one significant finding when examining gender and racial differences for each question. Chi-square results indicated that males vividly picture themselves as dead more often than females ($X^2(1)=5.559$, $p=.018$). The t-test results determined that males

(M=2.34, SD= .870) were significantly more spiritual than females (M=2.07, SD=.925), t(2.026) = 107.416, *p*=.045, vividly pictured themselves as dead more often, *t*(-2.142), *p* = .018, more frequently visualized themselves as dead, *t*(.368)=33.130, *p*=.041, and were more emotionally impacted by the death of a pet, t(-2.113)=93.756, *p*=.037 in comparison to female participant respondents. Further gender comparisons are shown in Table 2. Results of a *t*-test revealed that Whites (M=2.31, SD- .987) are significantly more spiritual than BIPOC (M=1.90, SD=.736), *t(*3.511)=210.880, *p*=<.001, make more of an effort to attend funeral services *t*(-2.783)=186.199, *p*=.006, and have been more impacted by the death of a pet *t*(-1.998)=157.329, *p*=.047 in comparison to BIPOC participant respondents. Further racial comparisons are shown in Table 3. A full comparison between the original 1936 responses and 2021 responses is described in appendix C.

Discussion

The purpose of this study was to replicate the survey findings from Middleton's 1936 study and the current 2021 study. Identical surveys were used to help distinguish similarities and differences between college students' attitudes about death in 1936, and college students' attitudes about death in 2021.

Attitudes about Death in 2021

Findings of the current study suggest that this 2021 college sample frequently reported thoughts about death. These reported thoughts about death include disease-related deaths, accident-related deaths, painful death expectations, a strong fear of death, worries about afterlife existence, impacts of previous death experiences, lasting death anxiety from historical events, extreme media influence, and COVID-19 pandemic involvement with death anxiety.

Participants in this study are spending a majority of their time thinking about their own death with 24.1% reporting frequently, and 36.6% reporting occasionally thinking about death compared to 39.4% that rarely think about it. These thoughts are occurring while participants are living their daily life. A majority reported thinking of their death while in a vehicle (11.4%), when someone in their life has died (10.9%), when something harrowing has happened (10.9%), or during the night (10.4%), respectively. Narrative comments provided specific insight to depth of their thoughts related to death.

"I think about it daily, just existing. I'm not suicidal. I find myself swinging between religious perspectives and complete, cosmic nihilism. Like we evolved from bacteria in water, and our species is so poorly designed. It's either a natural joke or a creature designed by an all-powerful being and quite honestly they're both plausible at this junction in my life." (White, female)

"Just how everyone dies and you can't stop it from happening. Also what will have to happen once I'm gone like all my stuff and my relationships with people." (20-year-old Black, female)

"I sometimes have thoughts of how I would want to die and how I want my funeral arrangements to be with the respect by my children." (30-year-old Black, female)

"It makes me nervous knowing that one day will be my last day on Earth and I may or may not know that." (21-year-old White, female)

These narratives illustrate how students think about death are formed by symbolic interactionism. Symbolic interactionism helps people understand the world around them and allows them to make meaning of various things. This is done through the use of symbols, gestures, social norms, and rituals (Smith & Hamon, 2017). Death is symbolic for each

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individual and has its own specific meaning. Death brings about worries and wonders, as seen with the narratives above. One individual is concerned with how humans were created, while other respondents are concerned with how their relationships will be affected. Each of these responses reflects how death is perceived within their specific worldview.

Respondents indicated that their first experience with death commonly happened between the age of 1 and 26, with a mean age of 9.64 years. Being exposed to death-related events at such young ages reinforces the idea that children should not be shielded from death. With 81.9% of participants reporting that they have had someone emotionally close to them die by the time they took this survey, death is not something that should be hidden or taboo. Regardless of how hard someone may try; death will eventually occur and will continue to occur daily. The most severely impactful deaths that these college students have experienced are with immediate grandparents, pets, and close friends, respectively. Participants were asked to identify the age which they first experienced a death:

"Two weeks old, my mother died after childbirth." (20-year-old Black, female)

"At a young age when my cat was put down." (19-year-old White, female)

"My great grandma passing away when I was 9" (White, female)

"My dog died about 4 years ago. I was 16." (20-year-old White, female)

The impact of family related death comes as no surprise since the life course theory (LCT) suggests that family is the first contact the child has with the outside world. The LCT and symbolic interactionism both explain how individuals define the construct of a family. LCT may illustrate how the construct of family is first introduced to children by their household family, then as children age, they may begin to expand their definition of family. Symbolic interactionism, as seen with the narratives above, the death of a dog and cat was an impactful

moment for that student, whereas other students may have not been phased by the death of an animal. In some families, pets may be considered a family member while other families may consider a pet just an animal that does not take priorities over human family members.

Parents are a major support system for college students. As the life course theory (LCT) suggests, from the day children are born, their family becomes their first source of knowledge, interaction, and support (Bengston & Allen, 1993). This is also true when shaping children's minds about death. The number one reported influence on death feelings is from religious beliefs, which may have begun from family traditions. This finding aligns with the literature about religiosity impacts regarding death attitudes. Students who hold internal beliefs about their religion have less death anxiety than students who do not have internal beliefs (Tomer & Eliason, 2005). Students may choose to hold these religious beliefs to lessen their death anxiety and create an appropriate level of comfort. The second biggest influences are parents, especially mothers and fathers. Mothers are an extreme influence on how children are raised to think about death (Longbottom & Slaughter, 2018).

Historical events have had a major impact on death anxiety. It is not surprising that the highest identified event causing major to severe death anxiety was the current COVID-19 pandemic, followed by past school shootings, the events surrounding the attack on 9/11, and recent wars. There is not a single person who has not been impacted somehow by the COVID-19 pandemic i.e., financial strain from not being able to go to work, mental health concerns about depression from isolation, physical illness from the disease. For college students, the impact began when the virus forced the shutdown of college campuses and the return home of millions of students. The threat of school shootings has been a serious concern within the past several years. Over the past 20 years, there have been 229 U.S. school shootings (Vigderman, 2020).

Since these current college students were born, they have lived through roughly 11 school shootings per year of their life, not including non-school-related mass shootings such as the Pittsburgh synagogue shooting, Las Vegas shooting, Orlando nightclub shooting, among others.

The power of media is very prevalent in 2021. When a harrowing event happens or there is a death, society knows about the event within minutes. The current research study shows that the biggest media influence comes from news outlets, social media, and movies. In current times, it is almost impossible to hide from media sources. Daily life revolves around the latest news. Breaking news is not only broadcasted on televised news channels during certain times of day but is on a constant cycle on social media. Having an immediate source of information can help relay information to a larger audience, but there is also a concern for false information being spread quickly (Galan et al., 2019).

It is no secret that the current COVID-19 pandemic has created challenging times in our society. Physical fitness, mental stability, social reliance, and financial aspects have all been tested during this time. As of early March 2021, 32.5% of participants indicated that they personally knew someone who has died from COVID-19. Since then, this number could have increased due to the pandemic continuation following the survey as well as various states easing restrictions.

The events related to the COVID-19 pandemic which have had the most profound impact on participants thoughts about death are having friends/family members infected with the virus, having to quarantine/separate from others, the government's response to the pandemic, mask-wearing by the public, and being personally infected with the virus, respectively. The top three events listed have created extreme stress, anxiety, and increasing levels of thoughts about death. The biggest influence, friends/family members infected with the virus, could be from not

knowing the extent of one's illness while being away at college. Family members may choose to not disclose potentially stressful information to their college student because of the possible anxiety it may cause them. Mental health has been an extremely common factor when discussing the impacts of this pandemic. College students have experienced an increase in depressive thoughts and an increase in suicidal thoughts associated with the COVID-19 pandemic (Son et al., 2020). The mental health impact on college students has been concerning. The second most influential factor on thoughts about death related to the pandemic is related to quarantine and separation from others. Humans are social beings and need social interaction and physical contact with others. By having to quarantine, possibly alone or with unknown peers, students have more time to think about negative thoughts and experience undesirable emotions, which in turn could lead to more negative attitudes about their own mortality, or the mortality of their loved ones. Without social interaction, mental health can be extremely impacted in a negative way. These quarantine practices have caused students to note changes in their relationships. Maintaining social relationships during COVID-19 has become increasingly difficult due to the lack of physical interaction (Son et al., 2020).

As the results from the current study find, the third most impactful pandemic-related event is the government's response to the pandemic. College students are, typically, a very diverse group of individuals who come from a variety of backgrounds, geographic locations, and opinions. When specifically asked to which level they agree with this statement: "Overall, I am pleased with the Government response to the COVID-19 pandemic", 59.3% strongly/somewhat disagreed, 24.8% neither agreed nor disagreed, and 15.9% strongly/somewhat agreed. When speaking about the government, it is important to note related political facts during the period these students took this survey. In just 2021 alone, there have been major political and social

reform events. Examples include the storming of our Nation's Capitol, former President Donald Trump's second impeachment trial, former President Trump being banned from social media accounts, the presidential inauguration of current President Joe Biden, rapid COVID-19 vaccination distribution, new COVID-19 strains, the ongoing fight for racial equality, international boarders closing, lack of vaccination distribution to third world countries, and many more. These events potentially shaped students' view of the 2021 new year within the first three months. Considering collectively, these events and the tone of US society could provide insight into why a majority of participants identified that they are not pleased with the government's response to the COVID-19 pandemic.

Gender

Two demographic characteristics, gender (male and female), and race (White and BIPOC), were statistically compared on and analyzed on each of the attitudes of death asked in the survey. Significant gender differences include males visualizing themselves as dead more frequently, males have been more impacted by the death of a pet, and additional significant differences are shown above in Table 2. The findings show that death anxiety for males is highly influenced by outside factors such as historical events, media, and the COVID-19 pandemic. Responses that were found to not be significant, such as imaging death being horribly painful, wishing they were dead, and having a fear or horror of death, provides much needed research as well. Both males and females are thinking about causes of death, fearing death, and believing in the afterlife in the same amount. Efforts to equalize gender socialization of both males and females may help to explain males being encouraged to explore their feelings, speak about their emotions, and not suppress negative positions (de Boise & Hearn, 2017). Gone are the days where men are the breadwinners, where men do not cry, where men are the sole providers, or

where only men are educated. This is not to say our female respondents do not have anxieties about death, but historically, women have more consistently reported their true emotions whereas men have not. This new generational wave will bring valuable data to research and close the gender gap in research.

Table 2

2021 Sample Gender Differences about Death Anxiety

		Male		Female		t-test results for gender	
		M	*SD*	*M*	*SD*	*t*	*p*
Societal Event							
	The events surrounding the attack on 9/11	2.96	1.778	3.30	1.881	-1.204	.231
	Past school shooting	2.75	1.806	3.54	1.602	-2.898	**.005**
	Recent wars	2.54	1.722	3.25	1.891	-2.559	**.012**
	The current COVID-19 pandemic	2.49	1.390	3.31	1.577	-3.685	**<.001**
Media Type							
	Movies	2.00	1.545	2.78	1.707	-3.206	**.002**
	Television shows	1.90	1.483	2.72	1.774	-3.408	**<.001**
	Video games	1.74	1.371	2.75	2.181	-4.035	**<.001**

	Male		Female		*t*-test results for gender	
	M	SD	M	SD	*t*	*p*
Social media	1.83	1.286	2.83	1.649	-4.692	**<.001**
Music	2.02	1.516	2.56	1.822	-2.190	**.030**
Magazines	2.04	1.802	2.52	2.081	-1.663	.099
Books	2.00	1.589	2.64	1.907	-2.467	**.015**
News	1.97	1.475	2.95	1.696	-4.158	**<.001**
COVID-19 Event						
Government response to the pandemic	2.33	1.480	2.91	1.483	-2.559	**.012**
Mask wearing by the public	2.31	1.429	2.77	1.586	-2.025	**.045**
Quarantine/separation from others	2.60	1.632	3.03	1.468	-1.727	.088
Personally infected with COVID-19	2.52	1.809	3.85	2.012	-4.653	**<.001**
Friend/family member infected with COVID-19	2.74	1.653	3.56	1.731	-3.167	**.002**

Note. **Bold** indicates p < 0.05

Racial differences were also examined between participants identifying as White and

BIPOC. White participants were significantly more impacted by the death of a pet. Pet

ownership was most prevalent amongst Whites (70.4%), lowest amongst African Americans

(29.0%), relatively low for individuals from other racial groups (33.0%), and close to the

national average amongst Latinx (60.0%) (Applebaum et al., 2020). Additionally, White

participants attended funeral services more frequently and were more pleased with the

government's response to the COVID-19 pandemic. Additional significant racial differences are

shown above in Table 3. Racial differences about the higher rates of media influence could be

related to people of color having less access to media outlets such as social media platforms,

video game consoles, or printed media (Chen et al., 2013). The racial inequality between Whites

and BIPOC has come to light within the past decade or so. Systemic racism is becoming

exposed, and many Americans are no longer silent about the racial inequities BIPOC have

experienced. These experiences and distrust with the government may be why BIPOC responded

as being displeased with the government's response to the COVID-19 pandemic. Also based on

historical precedence of the unequal treatment of the government (Jung, 2018).

Table 3

2021 Sample Racial Differences about Death Anxiety

	White		BIPOC		t-test results for race	
	M	*SD*	*M*	*SD*	*t*	*p*
Societal Event						

	The events surrounding the attack on 9/11	3.15	1.803	3.32	1.943	-.636	.526
	Past school shooting	3.22	1.693	3.50	1.687	-1.177	.241
	Recent wars	2.92	1.840	3.27	1.907	-1.294	.197
	The current COVID-19 pandemic	2.83	1.547	3.50	1.525	-3.119	**.002**
Media Type							
	Movies	2.26	1.553	3.05	1.801	-3.329	**.001**
	Television shows	2.19	1.541	2.95	1.914	-3.060	**.003**
	Video games	2.29	1.929	2.76	2.188	-1.596	.112
	Social media	2.26	1.476	3.01	1.729	-3.279	**.001**
	Music	2.24	1.595	2.67	1.960	-1.689	.093
	Magazines	2.13	1.849	2.79	2.199	-2.294	**.023**
	Books	2.19	1.659	2.88	2.032	-2.625	**.010**
	News	2.47	1.654	3.00	1.711	-2.234	**.027**
COVID-19 Event							
	Government response to the pandemic	2.47	1.442	3.18	1.497	-3.413	**<.001**
	Mask wearing by the public	2.22	1.388	3.28	1.586	-5.013	**<.001**
	Quarantine/separation from others	2.65	1.493	3.31	1.488	-3.153	**.002**
	Personally infected with COVID-19	3.23	2.052	3.88	1.979	-2.316	**.022**

Friend/family member infected with COVID-19	3.08	1.733	3.73	1.700	-2.717	**.007**

Note. **Bold** indicates p < 0.05

Differences in Attitudes about Death between 1936 and 2021

The demographic make-up of college students in 2021 differs from college students in 1936. The sample of students from Middleton's 1936 study included 59.2% women and 40.8% men between the ages of 15 to 24, and no data was reported on racial identity or religiosity/spirituality preferences. In today's sample, college participants consisted of 73.1% female and 26.9% male between the ages of 18 and 49. The demographic composition of students is notable to understand why there are and are not differences in death attitudes throughout the past 85 years.

Overall, 2021 college students are thinking more about death compared to college students in 1936. Over this 85-year gap, there have been many lifestyle changes which could influence attitudes about death. One of the biggest influences is the media. In 1936, news was distributed by newspapers, magazines, and radio advertisements. The great depression began in 1929, which caused over 16 million people to become unemployed by 1933. The cost of advertising and printing newspapers became very expensive, so media became dependent on the radio (Smith, 2014). Society in the 1930's relied heavily on radios; however, for news to reach society, radios must be purchased, turned on, and listened to or else news on the radio did not reach its desired audience. Currently in 2021, news stories are reporting within minutes. Technology had made the spread of breaking news easier than ever. With the invention of the smartphone, which rose to tremendous popularity in 2007 (Tocci, 2020), breaking news is at our fingertips. The rate of news being reported may explain this increase in college students thinking

about death. Currently, if an event related to death occurs, it is broadcasted within minutes; whereas in 1936, it may have taken hours, or even days, for news to spread. Society is now seeing death related events on a more regular basis than before, credited to the media.

Another highly reported difference between these two cohorts is whether death is expected to be horribly painful. The current 2021 sample reported a higher expectation for death to be horribly painful compared to the 1936 sample. This may be contributed to the various ways to die, which have been brought to light by the media. Once again, the media can report death related events to a large audience. This audience can now visually see footage or graphic images about a death, credited to the invention of the internet, television, and social media platforms. By visually seeing graphic death, this may heighten the expectation that death will be horribly painful; whereas in 1936, watching someone die was not possible unless the individual was physically present in that moment.

Symbolic rituals associated with death have remained inconsistent between these two cohorts as well. For example, both the cohorts of 1936 and 2021 viewed funeral attendance differently. Students in 1936 reported that they avoided funeral services altogether, and students in 2021 reported attending funeral services frequently. The symbolic meaning of funeral services has changes over the last 85-years. College students are findings themselves attending services on a frequent basis. This may be because of the ease of transportation to attend services, live streamed online services for those unable to attend, or how funerals are arranged. Funerals were not as traditional as they used to be. As symbolic interaction would suggest, end-of-life events may look different for each person based on how they view their life. Often, the word "funeral" is not used, but is replaced by the word "celebration". By addressing a "funeral" as a "celebration", this symbolizes that an individual's death should not be mourned, but praised for

the memories and legacy that person left behind. There has been an increase in nontraditional end-of-life services since the 1970s (Volpe, 2019). The 1970's began wider acceptance of cremation for cost-effective reasons and environmental concerns. Traditional burial and cremation are not the only two options, there are now options for ashes of the dead to be made into tree planting soil, a vinyl record, or a firework display (Volpe, 2019). Each of these options is symbolic to the dead individual and their loved ones. In 1936, these options were not available, but in 2021 funerals have become more welcoming to all ages.

These two cohorts shared differences in attitudes, but they also shared similarities. Both cohorts reported similar attitudes about wishing they were dead and being fascinated by media stories about death. Both cohorts highly reported never or very rarely wishing that they were dead. This does not come as a surprise since there have been additional mental health advancements for struggling adults, education about mental health disorders, and more access to professional help with the advancement of telemedicine. The additional similarity between these two cohorts describes being fascinated by media stories about death. Both cohorts report not having this fascination. The fascination with media stories about death may have remained low because participants may have been taught to not find fascination in the death of others, who they may not have known. By using the word "fascinated" within the question, participants may have felt uncomfortable associating this word with death. The symbolic meaning of the word fascinated may have redirected participants into answering this question because they do not want to feel like they are gruesome minded.

The 85-year difference in these samples has shown a difference in attitudes about death as well as similarities. These comparisons can be driven by the LCT which may suggest an influence of historical events, technological inventions, previous experiences, and familial

influence, as well as symbolic interaction which suggests attitudes are influenced by how everyone has their own version of death definitions.

Comparing Trends between 1936, 1970, 1993, and 2021

Full statistical analysis cannot be provided based on previous study reporting, but trends between 1936, 1970, 1993, and 2021 have shown a continuous growth of thoughts about death, fear of death, and emotions surrounding death lasting for an extended period. The leading disease concern has consistently remained as cancer, and the leading accident concern has consistently remained car accidents. When college students were asked about afterlife beliefs, responses have remained consistent as well. Students have reported that they are less likely to have a belief in an afterlife, and increasingly want to know a definite answer about an afterlife. This may imply that religion is no longer a leading factor in how students navigate their way through life. In the current sample, more students identified themselves as being spiritual rather than being religious. Contrary to the literature, the current sample of students did not report a high belief in the afterlife, even though they identify as more spiritual (Taghiabadi, 2017). This may suggest that current students are relying less on specific religious beliefs and are more openminded to creating their own spiritual views. These spiritual views can guide them on their own journey to shape attitudes towards death and their own idea of the afterlife.

Other notable differences between respondents from 1936, 1970, 1993, and 2021 are that current participants are more worried about factors around death. Participants from the current study identified as more expecting of death to be horribly painful, more depressed after a funeral, doubled their fear of death, and are more worried about the afterlife. Death is becoming more impactful on current students. Each of these responses from 1936 to 2021 involves a higher response rate in negative death expectations. Society is driven by factual data and wants answers.

To society, the unknown is scary. To cope with this fear, more college students in 2021 believe in a future existence of some kind after death. Participant responses from 1936 and 2021 are described in appendix C.

In 1970, male and female students were both increasingly preoccupied with death. Lester (1970) identified that death was becoming a common topic of discussion amongst college students during this time. An additional finding was that students reported fewer beliefs about the afterlife and higher desires of knowing an exact answer about afterlife existence. During this period in time, the United States was involved in the Vietnam War (1954-1975). American soldiers were deployed through the draft to Vietnam to fight in the war. By the 1970s, the American people began protesting the war, and socially based issues about equality were brought to light. It was not until 1975 that the war ceased (Spector, 2020). During this time of war and the demand for peace, these college students were affected and impacted their thoughts about death. Historical events highly impact how individuals view the world around them according the LCT (Bengston & Allen, 1993). College students going through major historical time periods may alter their beliefs based on what is currently happening.

Disease

Death by specific diseases is reported in the current study as more worrisome for students in 2021 as opposed to the previous study replications. Students in all four studies were asked to identify diseases which they relate to their death. In each study, results showed similarities and differences. The full comparison across each study is shown in Table 4.

Over 85 years, the consistent leading disease that is thought about the most is cancer. Cancer treatment continues to improve and not all forms of cancer are eminently terminal. Two specific diseases mentioned in 1936, tuberculosis and appendicitis, are not a threat in 2021.

Tuberculosis treatments began testing in 1945 and did not finalize a formula until the 1970s, which was not a disease concern in the sample from 1970. While students were in college during the 1930s, tuberculosis was a leading cause of death during this time (Murray et al., 2015).

Appendicitis was another disease not mentioned since the 1936 study. The first appendectomy was not completed until the 1990s. Penicillin has assisted in lowering the death rate in the United States for all diseases. Penicillin was not introduced until 1943- seven years after this survey was conducted (Hamill & Hill, 2016). The average life expectancy in 1936 was 56.6 years; now in 2021, the average life expectancy is 78.99 years (CDC, 2021a). The increase in life expectancy helps explain the worrisome feelings students in 2021 face. In previous years, individuals died at a much younger age compared to 2021. These younger deaths were not uncommon, especially with the lack of medical technology that we have today.

In 2021, disease responses such as COVID-19 and diabetes were not reported by previous participants. From January 1, 2020, until April 3, 2021, there have been a total of 3,447 college-aged (18-29 years old) COVID-19 deaths (CDC, 2021b). The death rate may be smaller for a population of college-aged students compared to an elderly population, but college students also may have underlying health conditions, which they may or may not know about. Although the chance of dying from COVID-19 while in college is not extreme, it is not impossible. This statistic may increase current college student's death anxiety since death is occurring around them during this time.

Another disease that was not a concern in previous studies is diabetes. Diabetes can take one of two forms, type 1 (juvenile-onset) diabetes, and type 2 diabetes (adult-onset). Participants did not disclose which type of diabetes to which they were referring. Almost 10% of Americans have a form of diabetes and 33.9% of the US population 18 years or older have prediabetes

(Joslin, 2021). The participants in this study may have identified diabetes as a health condition because of the geographic location of the university students surveyed. The "diabetes belt" is a region of the Southern United States characterized by a high prevalence of diabetes (over 11%). This specific geographic region includes high rates of poverty, obesity, lack of accessible healthcare, and low educational levels (Myers et al., 2016). The university studied is located in the South Eastern United States, which is within the diabetes belt. This may be why students are concerned about the effects of diabetes while attending college in this region.

The most commonly mentioned disease in 1993 is acquired immunodeficiency syndrome (AIDS). Between the years 1970 and 1993, the emergence of a new disease occurred- AIDS. AIDS first appeared in the early 1980s. Fear of contracting this disease continued through the 1980s and 1990s, even after the Center for Disease Control (CDC) ruled out transmission through casual contact (Onion, Sullivan, & Mullen, 2017). The AIDS crisis and the COVID-19 pandemic can be relatable for students in college during each of those periods. The word "AIDS" and "COVID-19" both have symbolic meaning. When these diseases were first introduced, they were associated with the death. These diseases were incurable and instilled fear in society. As medical technology has improved, these diseases can be manageable. Each sample of students in 1993 and 2021 identified the current pandemic that society was faced with at that time in history. The LCT suggest that each of these historical pandemics have shaped the fear and concerns surrounding death caused by diseases. As the study was replicated, responses about specific disease began to be directed towards incurable or lifelong diseases.

Table 4

Comparison of Diseases Concerns

Study Year	1936	1970	1993	2021
	Cancer	Cancer	Cancer	Cancer
	Tuberculosis	Heart disease	AIDS	Heart disease
	Heart Disease	Old age	Heart disease	COVID-19*
	Pneumonia	Leukemia		Lung disease*
	Appendicitis	Brain tumor		Diabetes

Note. n value was not reported in previous surveys; 1993 only reported top two responses; * represents same number of responses

Accidents

Not only were there notable differences about a disease which may ultimately cause death, but students also identified a specific accident which they have considered to cause their death. Students in all four studies were asked to identify diseases which they relate to their death. In each study, results showed similarities and differences. The full comparison across each study is shown in Table 5.

Over 85 years, the consistent leading disease that is thought about the most is car accidents. Car accidents were identified by 2021 participants because of the commonality of them, previous experience/witness to them, and distrust in other drivers on the road. In 1936, college students driving a vehicle was much different from college students driving in 2021. Up until 1936, driving laws did not include wearing a seat belt, average speed limits were 12 mph in cities and 15 mph on country roads, and the first stoplight was not introduced until the 1930s (NHTSA, 2020). Driving in 2021 is a whole new world. 2021 college student response about why they believe car accidents may cause their death include:

"I've been hit in the back twice by a texter and driver." (42-year-old Black, female)

"When I hear stories of people being injured or killed from car crashes, I place myself in

that scenario and think about what would happen." (18-year-old White, female)

"I am always nervous about driving at night around a college town because my one

friend was killed in a drunk driving accident" (20-year-old White, female)

The speed limit law began to increase in the mid-1970s, and more safety features were

included. Seatbelts were offered in vehicles in 1950, driver airbags were invented in 1951,

seatbelts were required in some states in the late 1980s, and passenger airbags were required

beginning in 1999 (NHTSA, 2020). Even with all the ever-changing driving laws and safety

features, car accidents remain the number one concern about accident-related deaths for college

students. These safety features have saved lives but have also allowed some modern-day drivers

to become more comfortable behind the wheel- resulting in potentially risky driving behaviors.

Over the past 85-years, there has been an extreme increase in the United States

population. In 1936, the United States population was 128.1 million people. Currently, in 2021,

the United States population is 331.42 million people (US Census Bureau, 2020). This increase

in population through the last 85-years is important because there are more ways to die. The

more people there are, the more room there is for error. While driving, this means there are more

people on the roadways. While living daily life, there are multiple ways to die. College students

in the current study identified situations that are, unfortunately, unique to contemporary life.

Responses are as followed:

"I've always had nightmares about home invasions and just as a young woman on a

college campus, I fear rape." (20-year-old White/Black, female)

"I am a black person living in America where police brutality and racially-fueled crimes are a big thing." (19-year-old Black, female

"I think that so many crazy things happen like school shootings and shootings in general that it's hard not to think about it possibly happening to you." (19-year-old White, female)

These responses reflect feelings from current college students in America. The prevalence of rape on college campuses is very realistic with every one in five women experiencing rape (Lipinski et al., 2021). As shown in Table 5, the second highest concern for a death related accident is getting shot. Various responses about getting shot include police related shootings, victim to mass shootings, and being an innocent bystander to a shooting. The LCT would suggest the historical battles and current inequality have heightened concerns for BIPOC individuals about getting shot. The current events surrounding political unrest, police brutality, systemic racism, and the Black Lives Matter movement have given a voice to Black individuals in America, but it still does not mean the problem is solved. In 1936, Black individuals would not have been able to express their anger about racial inequality without being harassed, abused, or even arrested. These attitudes about death have been attributed to Black communities' historical battles of discrimination, causing them to be more vulnerable to poor health care, more common loss of family members, and less physical safety than Whites which in turn creates more death anxiety (Jung, 2018). Between 1936 and 1970, there were extreme social and civil movements which occurred that seemed to have no impact on accident-related death responses. Examples of these historical events between 1936 and 1970 include the Brown v. Board of Education trial (1954), actions by Rosa Parks leading to the Montgomery bus boycott (1955), and the assassination of President John F. Kennedy (1963) (United, 2017).

Mass shootings have also been at the forefront of concerns for the public. Whether an individual is at school, in a shopping mall, in a movie theater, in a church, etc., there is always a possible threat that they may become victim to a mass shooting. In 1970, the United States experienced an average of 1.1 mass shooting per year (Levitz, 2015). In the year 2020 alone, there were 611 mass shootings (Shumaker, 2021). It is no surprise that being victim to a mass shooting is a concern to college students now more than ever. There are an estimated 270 to 310 million privately owned guns in the United States. This makes Americans the worlds most armed civilians. The number one reason for owning a gun is the fear of crime and perceived risk of victimization (Stroebe et al., 2017). Ideally, those at a higher risk for crime would own a firearm; however, while Black individuals are significantly more likely to be firearm related victims than white, Black individuals are half as likely to have a firearm in their home (19%) compared to white individuals (41%) (Morin, 2014).

According to the CDC (2018), unintentional injury (accidents) is the leading cause of death for college aged individuals. It is no surprise that current participants reported the highest concerns about dying by an accident in comparison to the previous replications. These extreme differences in responses between 1936, 1970, 1993, and 2021 show how society has changed within the past 85 years. There are still similar concerns, but there is a new wave of fear and the unknown. Many factors can direct the cause of these differences such as technology, social acceptance, and societal independence.

Table 5

Comparison of Accident Concerns

Study Year	1936	1970	1993	2021
	Car	Car	Car	Car
	Train	Airplane	Airplane	Getting Shot
	Airplane	Falling		Airplane
	Drowning	Motorcycle		Drowning
	Falling	Drowning		Unsure

Note. n value was not reported in previous surveys; 1993 only reported top two responses.

Future Research

Current findings signify the increasing awareness of death among college-aged individuals. Future research should focus on the possible benefits and drawbacks of offering additional college courses about death and dying. Since research is showing an increase in death-related thoughts in college students, these thoughts can be manifested into an educational conversation and eliminate lasting taboo around conversations about death. Additional research should focus on the impacts that COVID-19 has had on society. The current study posed the first questions regarding COVID-19 and attitudes towards death. By administering more survey questions about COVID-19 impacts, the field of death and dying could begin a new wave of data. It is apparent how important historical context is when discussing results from these studies mentioned. With a decline in religious attitudes about death, further research should focus on why religious attitudes are not as apparent in the modern world. Religious orientations are now being replaced by spiritual guidance. These modern views could be impacting the younger generation's outlook on death.

College campuses encourage students to be vocal about their fears, concerns, dreams, and opinions. If death is something students would benefit from vocalizing about, college campuses should explore adding a death and dying class open to all enrolled students. By discussing death in a comfortable and educational setting, fears and concerns may lessen and life empowerment may increase. These courses could offer death and dying cultural practices, burial options, funeral preparations, guidance on how to approach situations about death, how to use healthy coping strategies, how to help others cope, or simply begin a small conversation about end-of-life wishes between family and close friends. Since death is universal, it should be a discussion everyone has. There is no age limit on when to start talking about death.

The time between each replicated study from 1936 to 2021 included its own historical events and challenges which have impacted attitudes about death. The most current significant event is the ongoing COVID-19 pandemic. Future research should explore how the COVID-19 pandemic has impacted attitudes towards death. This study should, once again, be replicated and compared to previous findings to discover trends and significant changes.

Limitations

The initial survey by Middleton (1936) used outdated language which resulted in the researcher's altering language to more contemporary verbiage. To modernize the language used in 1936, researchers collaborated to update the language for an easier understanding. Another factor that would have furthered findings was not having access to raw data from 1936, 1970, or 1993. Each of these studies reported findings in their own way, but no statistical analysis was published. Further analyses would have been completed if the research team had access to raw data. Middleton (1936) had a sample size of 825 students from two universities whereas the current sample size consisted of 216 students from one university. Sample size should have been

increased to all college students regardless of university and course enrollment. The survey would have benefitted from being distributed through social media, and open to all college students who came across the survey link.

Conclusion

Death and dying literature have provided impactful information about how death attitudes are formed. From birth until death, death is around society daily. Death is the one event in life that is inevitable but seems to be the one event that society chooses not to discuss. The current findings suggest that discussions about death may not be as taboo as they once were. College students are thinking about death more and have more death-related concerns. These concerns are how they will die, whether death will be painful, and how influential the media and current events are towards their death anxiety. These differences can be attributed to the LCT tenants such as historical factors, societal factors, familial factors, and previous experiences. Each of these tenants shapes the mindset for how each individual think about death.

Responses also described similarities between 1936, 1970, 1993, and 2021 samples. A consistent death concern is dying from a car accident and dying from cancer. These consistent responses reflect how common these events are, and how incontrollable they can be. Car accidents and cancer are both events that humans have little control over happening. Additionally, there has been a consistent report from 1936 to 2021 that participants do not wish they were dead. Death symbolizes different meanings to different people. As the narratives from the current study suggest, when asked about death participants responded in a variety of ways. There is no singular or correct direction to go when discussing death. Everyone's own life course must be taken into consideration when analyzing attitudes about death. With the findings

presented, and future research conducted, discussion about death can become comfortable and widely accepted.

<div align="center">**References**</div>

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APPENDIX A: IRB APPROVAL

EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board
4N-64 Brody Medical Sciences Building· Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office **252-744-2914** · Fax **252-744-2284** ·
rede.ecu.edu/umcirb/

Notification of Exempt Certification

From: Social/Behavioral IRB
To: Karlie Abbott
CC: Alan Taylor
Date: 2/10/2021
Re: UMCIRB 20-003030
           College Students Attitudes About Death: An-85 Year Comparison

I am pleased to inform you that your research submission has been certified as exempt on 2/10/2021. This study is eligible for Exempt Certification under category # 2a.

It is your responsibility to ensure that this research is conducted in the manner reported in your application and/or protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.

This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

Document	Description
Email Script Revision.docx(0.02)	Recruitment Documents/Scripts
Exempt Research Template 2 20 20.doc(0.01)	Consent Forms
Survey Questions Revision.docx(0.02)	Surveys and Questionnaires

For research studies where a waiver or alteration of HIPAA Authorization has been approved, the IRB states that each of the waiver criteria in 45 CFR 164.512(i)(1)(i)(A) and (2)(i) through (v) have been met. Additionally, the elements of PHI to be collected as described in items 1 and 2 of the Application for Waiver of Authorization have been determined to be the minimal necessary for the specified research.

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

IRB00000705 East Carolina U IRB #1 (Biomedical) IORG0000418
IRB00003781 East Carolina U IRB #2 (Behavioral/SS) IORG0000418

APPENDIX B: DEATH ATTITUDES SURVEY
The content in red reflects Middleton's (1936) original survey question if the question wording has been changed for the 2021 survey.
Questions 23-31 are not replicated questions from 1936 and have been additionally added to capture attitudes specific to contemporary life.

Death Attitudes Survey
The following questions relate to your own thoughts, attitudes, and behavior reactions toward death. You are encouraged to *give responses honestly,* since your name is not affixed to this survey. Your cooperation is greatly appreciated.

1. Please list your current age:
     TYPE YOUR ANSWER BELOW:

2. How do you identify?
     _____ Male
     _____ Female
     _____ Prefer to describe myself as: Please specify

3. How do you identify?
     _____ White/Caucasian
     _____ Black/African American
     _____ Hispanic/Latino
     _____ Asian
     _____Pacific Islander
     _____ American Indian or Alaskan Native
     _____ Other

4. What is your status in college?
     _____ Freshman
     _____ Sophomore
     _____ Junior
     _____ Senior
     _____ Graduate student
     _____ Not currently enrolled in college

5. What is your current major?
     TYPE YOUR ANSWER IN THE SPACE BELOW:

6. I consider myself to be:

    ____ Very religious
    ____ Somewhat religious
    ____ Not very religious
    ____ Not at all religious
    ____ Don't know

7. I consider myself to be:

    ____ Very spiritual
    ____ Somewhat spiritual
    ____ Not very spiritual
    ____ Not at all spiritual
    ____ Don't know

8. How often do you participate or observe religious/spiritual observances?

    ____ Several times a week
    ____ Weekly
    ____ Monthly
    ____ 3-4 times a year
    ____ Annually
    ____ Never

9. How frequently do you think of your own death?

    ____ *Very* Rarely
    ____ Rarely
    ____ Occasionally
    ____ Frequently
    ____ *Very* Frequently

10. Under what circumstances, if any, do you most often experience thoughts of your own death?

Under what special circumstances, if any, do you most often entertain thoughts of your own death?

    TYPE YOUR ANSWER IN THE SPACE BELOW:

11. (a) Do you sometimes vividly picture yourself as dead?

Do you sometimes vividly picture yourself in your imagination as dying or being dead?

    ____ Yes
    ____ No

(b) How frequently do you visualize this scene?
How frequently do you experience this imaginary scene?

_____ *Very* Rarely
_____ Rarely
_____ Occasionally
_____ Frequently
_____ *Very* Frequently

12. (a) Have you ever considered a *specific* disease which may cause your death?
Are you inclined to entertain thoughts of some *specific* disease which may cause your death?

_____ Yes
_____ No

(b) How frequently do you experience this thought?
How frequently do you entertain such thoughts?

_____ *Very* Rarely
_____ Rarely
_____ Occasionally
_____ Frequently
_____ *Very* Frequently

(c) What *specific* disease/illness do you most often think of in connection with your own death?

TYPE YOUR ANSWER IN THE SPACE BELOW:

(d) Explain why you identified the response above
Can you account for your tendency to think of this -*particular* disease instead of some other?

TYPE YOUR ANSWER IN THE SPACE BELOW:

13. (a) Have you ever had thoughts of being killed in an accident?
Are you inclined to entertain thoughts of being killed in an accident?

_____ Yes
_____ No

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(b) How frequently do you have such thoughts?

How frequently do you entertain such thoughts?

    ____ *Very* Rarely

    ____ Rarely

    ____ Occasionally

    ____ Frequently

    ____ *Very* Frequently

(c) What *particular* kind of accident do you most often think of in connection with your own death?

    TYPE YOUR ANSWER IN THE SPACE BELOW:

(d) Explain why you identified the response above

Can you account for your tendency to think of this *particular* kind of accident instead of some other kind?

    TYPE YOUR ANSWER IN THE SPACE BELOW:

14. Do you imagine that your death will be horribly painful?

Do you picture in your imagination that your death will be horribly painful?

    ____ Yes

    ____ No

15. Do you ever wish that you were dead?

    ____ Never

    ____ *Very* Rarely

    ____ Rarely

    ____ Occasionally

    ____ Frequently

    ____ *Very* Frequently

16. Do you ever have dreams of dying or of being dead ?

Do you ever have nocturnal dreams of dying or of being dead?

    ____ Never

    ____ *Very* Rarely

    ____ Rarely

____ Occasionally
____ Frequently
____ *Very* Frequently

17. (a) How often do you make an effort to attend funeral services?
Do you make it a practice to attend funeral services frequently; do you attend infrequently, or do you, *whenever possible,* avoid them altogether?
____ Attend frequently
____ Attend infrequently
____ Avoid altogether

(b) Does attending a funeral service (other than the funeral of a near relative or a very close friend) depress you for some considerable time afterwards?
____ Yes
____ No

18. Does visiting a cemetery depress you considerably?
____ Yes
____ No

19. (a) Do you like to read poems or stories about death?
____ Yes
____ No

(b) How frequently do you read death poems or death stories?
____ *Very* Rarely
____ Rarely
____ Occasionally
____ Frequently
____ *Very* Frequently

(c) How do death poems or death stories make you feel?
Do death poems or death stories depress you, console you, or have an indifferent effect upon you?
____ Depressed
____ Comforted
____ Indifferent effect

20. Are you fascinated by media coverage about death (tragic accidents, murders, executions, *etc*)?

Are you inclined to be rather fascinated by newspaper stories about death (tragic accidents, murders, executions, *etc.)*?

    ____ Yes
    ____ No

21. Do you have a strong fear or horror of death?

Do you have a strong fear or horror of death; are you absolutely unafraid and resigned to your fate; or is your attitude toward death one of indifference?

    ____ Strong fear
    ____ Absolutely unafraid
    ____ Indifferent

22. (a) Do you have a strong wish to live after death?

    ____ Yes
    ____ No

(b) Does the question of an afterlife worry you considerably?

Does the question of a future life worry you considerably?

    ____ Yes
    ____ No

(c) Would you prefer to know a definite answer about an afterlife, not knowing about afterlife, or   having a belief in afterlife?

Would you prefer to know about the future life positively, or would you prefer to have it left as a matter of ignorance or of belief?

    ____ Know definitely
    ____ Not know
    ____ Having a belief

(d) Do you personally believe that there will be a future existence *of some kind* after death?

Is it your honest personal belief that there will be a future existence *of some kind* after death?

    ____ Yes
    ____ No

(e) If you knew *positively* that there was no future life in store for you, do you think that your manner of living in the present life would be changed?

_____ Absolutely no change

_____ Slight change

_____ Considerable change

_____ Radical change

23. At what age was your first experience with death?

TYPE YOUR ANSWER IN THE SPACE BELOW:

24. Have you ever had a person emotionally close to you die?

_____ Yes

_____ No

25. How have you been impacted by the death of any of the following?

	(1) Insignificantly	(2) Minorly	(3) Moderately	(4) Majorly	(5) Severely	N/A
Immediate parent						
Immediate sibling						
Immediate grandparent						
Immediate aunt/uncle/cousin						
Stepparent						
Stepsibling						
Spouse/Significant other						
Close friend						
Pet						

26. What/who has the biggest influence on how you feel about death?

TYPE YOUR ANSWER IN THE SPACE BELOW:

27. How have the following impacted your death anxiety?

	(1) Insignificantly	(2) Minorly	(3) Moderately	(4) Majorly	(5) Severely	N/A
The events surrounding the attack on 9/11						
Past school shootings						
Recent wars						
The current COVID-19 pandemic						

28. How do each of the following influence your anxiety about death?

	(1) Insignificantly	(2) Minorly	(3) Moderately	(4) Majorly	(5) Severely	N/A
Movies						
Television shows						
Video Games						
Social media posts (Instagram, Snapchat, Tik Tok, Facebook)						
Music						
Magazines						
Books						
News (CNN, Fox, MSNBC, etc.)						

29. To what extent have the following influenced your thoughts about death during the COVID-19 pandemic:

	(1) Insignificantly	(2) Minorly	(3) Moderately	(4) Majorly	(5) Severely	N/A
Government response to the pandemic						
Mask wearing by the public						
Quarantine/separation from others						
Personally infected with COVID-19						
Friend/family member infected with COVID-19						

30. Do you personally know someone who has died from COVID-19?
   ____ Yes
   ____ No

31. Overall, I am pleased with the Governments response to the COVID-19 pandemic
   ____ Strongly disagree
   ____ Disagree
   ____ Neither disagree nor agree
   ____ Agree
   ____ Strongly agree

Is there anything else I should know?
Due to the content discussed in this research, you may develop undesirable feelings and emotions about death. If you experience any personal concerns or anxieties, you are encouraged to contact a mental health professional. As an East Carolina University student, you have access to the Center for Counseling and Student Development, free of charge. To schedule an appointment, please call 252-328-6661 Monday-Friday from 8:00 am-5:00 pm. For urgent support, call 252-328-6661 and press '2'. Additional information about this center can be found at https://counselingcenter.ecu.edu.
East Carolina University also offers the Family Therapy Clinic which is available to the surrounding community for a flat-fee of $20, and an additional $120 for each 60-minute session. Appointments can be made by calling 252-328-4206. Additional information about this clinic can be found at https://hhp.ecu.edu/hdfs/family-therapy-clinic/

If you do not feel comfortable contacting services in the immediate area but would still like to contact someone, the National Suicide Prevention Lifeline is available 24 hours a day, seven days a week at 800-273-8255.

APPENDIX C: RESPONSE COMPARISON BETWEEN 1936 AND 2021 SAMPLE

Comparison Between 1936 and 2021

Question	Answer	1936 Results Men N	%	Women N	%	Total N	%	2021 Results Men N	%	Women N	%	Total N	%
Frequently think about death													
	Very rarely	92	27.29	163	34.17	255	31.32	11	19	22	13.9	33	15.3
	Rarely	94	27.89	92	19.28	186	22.85	13	22.4	39	24.7	52	24.1
	Occasionally	127	37.68	189	39.62	316	38.82	21	36.2	58	36.7	79	36.6
	Frequently	24	7.12	17	3.56	41	5.03	8	13.8	23	14.6	31	14.4
	Very frequently			16	3.35	16	1.96	5	8.6	16	10.1	21	9.7
Picture yourself as dead													
	Yes	93	27.59	40	10.28	133	18.30	18	31	26	16.5	44	20.4
	No	244	72.40	349	89.71	593	81.68	40	69	132	83.5	172	79.6
How frequently picture self as dead													
	Very rarely	34	35.05	60	39.47	94	37.75	2	11.1	2	7.7	4	9.1
	Rarely	26	26.80	36	23.68	62	24.89	2	11.1	4	15.4	6	13.6
	Occasionally	34	35.05	53	34.86	87	34.93	8	44.4	14	53.8	22	50
	Frequently	3	3.09	1	0.65	4	1.60	3	16.7	3	11.5	6	13.6
	Very frequently			2	1.31	2	0.80	3	16.7	3	11.5	6	13.6
Disease that will cause your death													
	Yes	69	20.84	104	21.62	173	21.30	24	41.4	69	43.7	93	43.1
	No	262	79.15	377	78.37	639	78.69	34	58.6	89	56.3	123	56.9
How frequently think about disease													
	Very rarely	51	46.78	99	54.09	150	51.36	3	12.5	7	10.1	10	10.8
	Rarely	22	20.18	39	21.31	61	20.89	6	25	16	23.2	22	23.7
	Occasionally	30	27.52	39	21.31	69	23.63	11	45.8	36	52.2	47	50.5
	Frequently	5	4.58	4	2.18	9	3.08	2	8.3	10	14.5	12	12.9
	Very frequently	1	0.91	2	1.09	3	1.02	2	8.3			2	2.2
Accident that will cause your death													
	Yes	186	56.02	230	48.31	416	51.48	43	76.8	125	79.1	168	78.5

		n	%	n	%	n	%	n	%	n	%	n	%
	No	146	43.97	246	51.68	392	48.51	13	23.2	33	20.9	46	21.5
How frequently think about accident													
	Very rarely	85	36.95	115	40.63	200	38.98	12	27.9	19	15.2	31	18.5
	Rarely	60	26.08	63	22.26	123	23.97	16	37.2	37	29.6	53	31.5
	Occasionally	67	29.13	81	28.62	148	28.84	11	25.6	43	34.4	54	32.1
	Frequently	18	7.82	20	7.06	38	7.40	1	2.3	15	12	16	9.5
	Very frequently			4	1.41	4	0.77	3	7	11	8.8	14	8.3
Horribly painful death													
	Yes	33	10.34	32	6.98	65	8.36	14	24.1	41	25.9	55	25.5
	No	286	89.65	426	93.01	712	91.63	44	75.9	117	74.1	161	74.5
Wish that you were dead													
	Never	172	51.96	238	62.96	410	57.82	35	60.3	99	62.7	134	62
	Very rarely	96	29.00	13	3.43	109	15.37	12	20.7	28	17.7	40	18.5
	Rarely	27	8.15	41	10.84	68	9.59	6	10.3	8	5.1	14	6.5
	Occasionally	29	8.76	60	15.87	89	12.55	2	3.4	17	10.8	19	8.8
	Frequently	4	1.20	21	5.55	25	3.52	1	1.7	5	3.2	6	2.8
	Very frequently	3	0.90	5	1.32	8	1.12	2	3.4	1	.6	3	1.4
Dreams of being dead													
	Never	197	59.87	308	65.39	505	63.12	18	31	65	41.1	83	38.4
	Very rarely	86	26.13	89	18.89	175	21.84	15	25.9	43	27.2	58	26.9
	Rarely	20	6.07	27	5.73	47	5.87	14	24.1	20	12.7	34	15.7
	Occasionally	22	6.68	40	8.49	62	7.75	6	10.3	19	12	25	11.6
	Frequently	3	0.91	7	1.48	10	1.25	4	6.9	7	4.4	11	5.1
	Very frequently	1	0.30			1	0.12	1	1.7	4	2.5	5	2.3
Funeral service attendance													
	Attend frequently	20	6.11	36	7.69	56	7.04	17	29.3	41	25.9	58	26.9
	Attend infrequently	162	49.54	242	51.70	404	50.81	33	56.9	87	55.1	120	55.6
	Avoid altogether	145	44.34	190	40.59	335	42.13	8	13.8	30	19	38	17.6
Do funerals depress you													
	Yes	49	16.83	120	29.77	169	24.35	25	43.1	74	46.8	99	45.8

No	242	83.16	283	70.22	525	75.64	33	56.9	84	53.2	117	54.2
Does cemetery depress you												
Yes	41	12.34	85	18.20	126	15.76	16	27.6	50	32.1	66	30.8
No	291	87.65	382	81.79	673	84.23	42	72.4	106	67.9	148	69.2
Read stories about death												
Yes	130	43.62	196	43.94	326	43.81	12	20.7	25	15.8	37	17.1
No	168	56.37	250	56.05	418	56.18	46	79.3	133	84.2	179	82.9
How often do you read death stories												
Very rarely	110	34.48	193	41.15	303	38.45	5	41.7	2	8	7	18.9
Rarely	66	20.68	100	21.32	166	21.06	4	33.3	3	12	7	18.9
Occasionally	127	39.81	154	32.83	281	35.65	2	16.7	12	48	14	37.8
Frequently	10	3.13	20	4.26	30	3.80			8	32	8	21.6
Very frequently	6	1.88	2	0.42	8	1.01	1	8.3			1	2.7
Death story emotion												
Depress	40	12.73	104	22.46	144	18.53	2	16.7	2	8	4	10.8
Console	42	13.37	59	12.74	101	12.99	4	33.3	7	28	11	29.7
Indifferent	232	73.88	300	64.79	532	68.48	6	50	16	64	22	59.5
Fascinated by media story about death												
Yes	122	37.19	150	32.39	272	34.38	21	36.2	63	40.1	84	39.1
No	206	62.80	313	67.60	519	65.61	37	63.8	94	59.9	131	60.9
Have a fear of death												
Strong fear	31	9.84	64	14.34	95	12.48	7	12.1	41	26.3	48	22.4
Absolutely unafraid	73	23.17	119	26.68	192	25.23	18	31	21	13.5	39	18.2
Indifferent	211	66.98	263	58.96	474	62.28	33	56.9	94	60.3	127	59.3
Wish to live after death												
Yes	220	78.29	328	78.09	548	78.17	40	69	109	70.3	149	70
No	61	21.70	92	21.90	153	21.82	18	31	46	29.7	64	30
Afterlife worry you												
Yes	52	16.00	80	17.81	132	17.05	16	40	33	30.3	49	32.9
No	273	84.00	369	82.18	642	82.94	24	60	76	69.7	100	67.1
Prefer to know afterlife												

	Know positively	130	41.66	112	24.83	242	31.71	26	65	52	48.1	78	52.7
	Ignorance or belief	182	58.33	339	75.15	521	68.28	14	35	56	51.8	70	47.3
Option about afterlife existence												
	Yes	175	59.32	316	72.14	491	66.98	35	87.5	103	95.4	138	93.2
	No	120	40.67	122	27.85	242	33.01	5	12.5	5	4.6	10	6.8
Change living based if no future life												
	Absolutely no change	183	56.48	321	70.24	504	64.53	11	27.5	27	24.8	38	25.5
	Slight change	94	29.01	106	23.19	200	25.60	16	40	34	31.2	50	33.6
	Considerable change	34	10.49	21	4.59	55	7.04	7	17.5	32	29.4	39	26.2
	Radical change	13	4.01	9	1.96	22	2.81	6	15	16	14.7	22	14.8

Note. Statistical analyses were not provided from 1936 data