

The Relationship Between Anxiety About Aging and Attitudes About Death

Aging and death are inevitable parts of life. Yet in a youth-centered society, many people fear aging. Research shows that many people fear death, but there is limited research on the relationship between attitudes about aging and attitudes about death.¹ While it is also of interest to assess the attitudes of middle-aged and older adults, demographic changes call for an increased focus on the attitudes of younger adults. Millennials, those born between 1981 and 1996, and baby boomers, those born between 1946 and 1964, are the two largest generational groups in the United States, with each making up about 21 percent of the population. It is today's young adults who will be caring for members of the aging baby boomer generation, so it is essential, then, that society gains a better understanding of young adults' attitudes about aging and their attitudes about death. The research findings will have implications for the identification of those best suited to providing care and will also have implications for the development of educational programs.

Attitudes about Aging

Ageist societal attitudes tend to influence how older adults are treated within a population. Unfortunately, individuals of all ages hold more negative views of older adults compared to middle-aged or younger adults.² In pre-industrial, agrarian societies, there were fewer older adults. Those who lived long lives were respected for their land ownership and their knowledge. In industrialized societies, old age is more common, and aging tends to be associated with physical illness and lower productivity. Consequently, older adults are seen as less relevant and in need of more care and resources, which results in a fear of aging and age-based discrimination.

In addition to the influence of societal stereotypes, individuals are affected by their own personal biases and ageist ways of thinking. For young and old adults, more negative views towards one's personal aging process, or the aging process of other individuals, can lead to a decline in well-being.³ Negative attitudes can result from the fear of illness, physical and mental decline, or aging in general. In contrast, when individuals have more positive self-perceptions of aging, they focus on accomplishments, abilities and opportunities, and they tend to have higher levels of well-being and health. As Dr. Anna Donizzetti suggests, by educating people on positive, successful aging, it may be possible to overcome fears of aging and reduce the impact of negative stereotypes.⁴

Although individuals of every age have been shown to have ageist attitudes, age itself is a good predictor of how one views aging and older adults. Research reveals that younger people's views about older adults tend to be more negative than the self-views of older adults. This is even true in a comparison of young-old (age 55-75) with old-old (those over 75). In a 2020 publication, Li Chu and associates report that young-old people have more negative attitudes about aging than their elders.⁵ It is reasoned that the young-old have more resistance to aging because they have greater fear about their own decline and death.

In 2014, to gain a better understanding of aging fears and their root causes, the pharmaceutical and biotechnology corporation Pfizer, Inc. commissioned the Harris Poll to conduct a large-scale study. Harris surveyed 2,088 participants 18 years old and older, asking whether they had a fear of aging and what specific things might trigger that fear.⁶ It was found that 87 percent of the respondents feared getting older. A decline in physical ability was mentioned as a specific concern by 23 percent percent; 15 percent worried about memory loss; 12 percent worried about running out of money; 12 percent were concerned about chronic

illness; and 10 percent mentioned a fear of death. It is interesting to note the small percentage of people who feared death and related this fear to aging.

As Meg Selig proposes, though individual fears about aging are varied, they can each be countered with specific recommendations for action.⁷ For example, those who fear loss of physical ability can be encouraged to make healthy lifestyle choices (e.g., exercise regularly and avoid alcohol, tobacco, and unhealthy foods). Others can combat their specific fears by challenging themselves cognitively to minimize or slow memory loss, or by seeking assistance with financial planning to ensure economic security.

Fear of Death as a Factor in Anxiety about Aging

In a 2022 study, Dr. Fiona Rupprecht and associates concluded that fears about aging and death are associated with how people view their own life expectancy and what they wish for their future.⁸ It was found that fears about aging and death were related to lower self-reported health, life satisfaction, and social satisfaction. Those who had more fears or anxieties about death were the people who stated that they wanted a longer life expectancy, which would mean a postponement of the death that they feared. In contrast, those who did not fear death, but rather loneliness and disease, opted for a shorter lifespan, presumably so they would not be burdened with the struggles of aging. However, maintaining physical and mental health in old age is to a large extent dependent on the individual keeping social connections and making healthy lifestyle choices. Consequently, helping individuals understand the agency they have over their own lives could help them develop more positive views of aging. Dr. Susan Mason and Allison Steger provided support for this notion in a study of preferred life expectancy in college students and community-dwelling old adults.⁹ The researchers hypothesized that a positive, interdisciplinary course in gerontology would help to counteract the effects of negative stereotypes and could

influence how students view aging and life expectancy. On the first day of class, the students were most likely to report a preferred life expectancy between 80 and 89 years. This is in contrast to the most common response of the older adults, who identified their preferred life expectancy to be between 90 and 99 years. Interestingly, once the students completed the gerontology course their assessments of preferred life expectancy increased to 100-109 years, not only reaching but surpassing the longevity considered desirable by the older adults.

Testing the hypothesis that educating individuals about the aging process and increasing contact with older adults might effectively decrease ageist attitudes and anxieties about aging, Dr. Michael Barnett and Cassidy Adams implemented both approaches with young adults.¹⁰ They found that knowledge about aging and the aging population, as well as direct contact with older adults, was associated with lower ageism. At the same time, those who had an increased fear of death and lower levels of optimism were found to have greater anxiety about aging. The study provided support for the idea that negative views about aging can be improved by exposing young people to older adults, by educating them about aging, and by promoting positive, optimistic thinking.

Aging anxiety not only affects attitudes and behavior towards older adults, but it is also a factor in one's personal aging process. As discussed earlier, there are many different factors that contribute to one's fear of aging, including anxieties about money, illness, loss, and death. The Anxiety About Aging Scale is a way to assess the relative weights of factors associated with aging anxiety.¹¹ A principal components analysis of responses revealed four factors, which were labeled fear of old people, psychological concerns, physical appearance, and fear of loss. Notably, fear of death is not one of the four factors. In the initial research using the Anxiety About Aging Scale, Kathleen Lasher and Patricia Faulkender found that while most participants

were anxious about aging, men were more anxious than women. Concern and anticipation of losses is the factor that made people the most anxious. This could include loss of family members and friends due to them passing away, loss of physical ability, loss of cognitive ability, and loss of societal engagement.

Death Anxiety

Concerns about the loss of loved ones is one form of death anxiety. Death anxiety can also stem from the idea that dying is painful, prolonged, and causes a reduction in quality of life. In addition, many people fear dying alone.¹² With a better understanding of death anxiety, it may be possible to reduce the fear individuals have about their own deaths and the death of those around them. Individuals who are comfortable with their mortality may have less fear of death and less fear of aging, thus enhancing well-being.

A meta-analysis revealed that although fear of death and dying is reported in all age groups, younger age groups tend to be more anxious about the concept of death than older cohorts.¹³ Furthermore, among older adults there is a greater fear of the potential pain and suffering associated with the dying process than there is of death itself, and those with greater religiosity, moral support, and higher self-esteem have less fear of death and the unknown. There is also evidence that self-esteem mediates the effects of meaning in life on death anxiety.¹⁴ One interpretation of the data is that promoting religion/spirituality, healthy relationships, and a positive self-view may help to minimize death anxiety and allow for a better quality of life.

In a 2017 study, Dr. Gary Sinoff administered Templer's Death Anxiety Scale to elderly adults and their children.¹⁵ Results showed that the children believed that their parents were very anxious about their own deaths, estimating their parents' anxiety levels to be 8.9 out of 15 on the scale. However, the older individuals scored only 4 out of 15 on the death anxiety scale while

their children scored 6.9 out of 15 on the scale, demonstrating significantly higher death anxiety in the children than in their parents. If the children of elderly parents fear death and assume that their parents fear death, there is a risk that the children will be hesitant about disclosing medical information, discussing advance directives, or making funeral plans. Educating young adults about aging and dying may be critical not only to their acceptance of these natural processes in themselves, but also to their acceptance of the aging and dying of those close to them. With a clear understanding of the challenges and interests of those in later life, family members and caregivers can provide optimal support.

Although elderly individuals tend to have relatively low levels of anxiety about their own death, they tend to fear for significant others and fear the dying process. Dr. Marolein Missler and associates assessed death anxiety in a sample of older men and women in an assisted-living facility.¹⁶ They found that poor physical health was correlated with fear for loved ones, while low self-esteem, having little purpose in life, and having poor mental health were correlated with fear of the dying process. Women were more likely than men to show concern for their loved ones, both in terms of potentially losing a loved one and in terms of how their own death would affect a loved one.

Understanding the cause of death anxiety is an important step toward minimizing or coping with death anxiety. In *The Denial of Death*, cultural anthropologist Dr. Ernst Becker wrote that it is universal to deny death and that most human activity is motivated by the desire to ignore or avoid death.¹⁷ Becker's views have been credited with giving rise to Terror Management Theory, which states that individuals face constant conflict between their self-preservation instincts and their knowledge of the inevitability and unpredictability of death.¹⁸ According to Terror Management Theory, self-esteem is key to having better management of the fear of death,

and those with low self-esteem are more likely to be uncomfortable or anxious in death-related situations. Mental health disorders such as depression, post-traumatic stress disorder, generalized anxiety disorder, panic disorder, and obsessive-compulsive disorder have also been found to be related to death anxiety.¹⁹ Though poor mental health can contribute to death anxiety and death anxiety can contribute to poor mental health, cognitive behavior therapy is seen as a potentially effective treatment for a range of mental health problems, including death anxiety.

One way to assess people's anxiety related to death is to administer the Death Attitude Profile.²⁰ The scale includes four subscales: fear of dying/death, approach acceptance, escape acceptance, and neutral acceptance. When the scale's developers initially administered the Death Attitude Profile to three hundred participants, they found that older adults were less afraid and more accepting of death than younger adults. The researchers also found that negative attitudes about death and anxieties about death were generally linked to depression; as depression scores increased, negative attitudes and anxieties increased.

Purpose of the Present Study

The present study was designed as a replication and extension of previous research on attitudes about aging and attitudes about death. The focus is on undergraduate college students who will soon be entering the work force, with many working in some capacity with members of the fast-growing older population. Assessing students' anxiety about aging and death, as well as determining the relationship between the two types of anxiety, could be valuable in identifying the students best suited to working with older adults or those suited to working with seriously ill or dying patients. In addition, the results could suggest ways to help students understand and cope with their own aging and death anxieties. Based on the literature reviewed, it is hypothesized that there will be a positive correlation between anxiety about aging and anxiety

about death. In other words, those who have high levels of anxiety about aging are predicted to also have high level of anxiety about death.

Methodology

A total of 72 undergraduate students at a small, private university in the Northeast United States participated in the study. Some of the participants earned extra course credit. Most of the participants were between the ages of 18 and 22 (91.7 percent), most were female (90.3 percent), and most were white (88.9 percent). The two majors most heavily represented were psychology (55.6 percent) and nursing (31.9 percent). Students were recruited from those programs because of the relevance of the topic to their studies. The majority of students in the psychology and nursing programs are women. Most of the participants (73.6 percent) reported that they had not had end-of-life training.

Participants were informed that the survey would take about 20 minutes. After reading the consent form and responding to demographic questions, participants completed the Anxiety About Aging Scale²¹ and the Death Attitude Profile–Revised,²² both of which include Likert scales for responses. There were nine response options for each item on the Anxiety About Aging Scale. If participants strongly disagreed with a statement, they responded by marking 1. If participants strongly agreed with a statement, they marked 9. There were seven response options for each item on the Death Attitude Profile, with 1 for strongly disagree and 7 for strongly agree.

Results

For the purposes of the present study, the analysis was limited to certain items from the two scales. The Anxiety About Aging Scale includes 13 statements related to fear of aging (questions 1, 3, 4, 7, 9, 10, 11, 12, 13, 15, 16, 18, and 19; see Table 1). Those 13 items were included in the analysis. The Death Attitude Profile includes 7 statements related to fear of death

or dying (questions 1, 2, 7, 18, 20, 21, and 32) and 5 statements related to death avoidance (Questions 3, 10, 12, 19, and 26). Those 12 items (see Table 2) were included in the analysis.

Table 1

Anxiety About Aging Scale Items Relating to a Fear of Aging

- Q1. I enjoy being around old people.
- Q3. I like to go visit my older relatives.
- Q4. I have never lied about my age in order to appear younger.
- Q7. I will have plenty to occupy my time when I am old.
- Q9. It doesn't bother me at all to imagine myself as being old.
- Q10. I enjoy talking with old people.
- Q11. I expect to feel good about life when I am old.
- Q12. I have never dreaded the day I would look in the mirror and see gray hairs.
- Q13. I feel very comfortable when I am around an old person.
- Q15. I have never dreaded looking old.
- Q16. I believe that I will still be able to do most things for myself when I am old.
- Q18. I expect to feel good about myself when I am old.
- Q19. I enjoy doing things for old people.
- Q20. When I look in the mirror, it bothers me to see how my looks have changed with age.

Table 2

Death Attitude Profile Items Relating to Death Anxiety and Death Avoidance

- Q1. Death is no doubt a grim experience.
- Q2. The prospects of my own death arouses anxiety in me.
- Q3. I avoid death at all costs.

- Q7. I am disturbed by the finality of my death.
- Q10. Whenever the thought of death enters my mind, I try to push it away.
- Q12. I always try not to think about death.
- Q18. I have an intense fear of death.
- Q19. I avoid thinking about death all together.
- Q20. The subject of life after death troubles me greatly.
- Q21. The fact that death will mean an end to everything I know frightens me.
- Q26. I try to have nothing to do with the subject of death.
- Q32. The uncertainty of not knowing what happens after death worries me.
-

Higher scores on the Death Attitude Profile reflect more negative attitudes about death. Since twelve items were analyzed and there were seven response options, participants total death anxiety scores could range from 12 (if they strongly disagreed with each item, revealing a low level of anxiety) to 84 (if they strongly agreed with each item, revealing a high level of anxiety). With the exception of question twenty, Anxiety About Aging Scale items were reverse scored so that a higher score would reflect greater anxiety and could be more directly compared with scores on the Death Attitude Profile. As thirteen items from the Anxiety About Aging Scale were analyzed and there were nine response options, participants' total aging anxiety scores could range from a low of 13 to a high of 117. Total aging anxiety scores were divided by 12 to give a mean aging anxiety score for each participant, and total death anxiety scores were divided by 13 to give a mean death anxiety score for each participant.

The mean score of all participants for aging anxiety was 3.83 on the 9-point scale, meaning that anxiety levels were relatively low, as a neutral value would have been 4.5. The mean score for death anxiety/avoidance was 5.54 on the 7-point scale, meaning that fear and

avoidance were relatively high, as a neutral value would have been 3.5. A Pearson correlation was run on the data and $r(70) = .59, p < 0.001$. High aging anxiety was strongly correlated with high death fear and avoidance. It can be concluded then that undergraduate students who have high fear of death are also likely to have a high fear of aging, and those who have a low fear of death are likely to have a low fear of aging.

An interesting contrast was observed in the participants' attitudes about older adults in general and their attitudes about their older relatives in particular. While 42 percent of the participants strongly agreed with the statement "I like to go visit my older relatives," only 21 percent strongly agreed with the statement "I enjoy being around old people," and only 21 percent strongly agreed with the statement "I feel very comfortable when I am around an old person."

The results of the present study are consistent with the findings of a previous study using different scales. Süleyman Kahraman and Damla Erkent²³ demonstrated a positive correlation between death anxiety and fear of aging after administering the Death Anxiety Scale²⁴ and the Attitude Scale Towards Aging and Elderliness²⁵

Discussion

Given that the present study is a correlational study, causal conclusions cannot be drawn from the resulting data. Though it is true that participants with higher aging anxiety also tended to have higher death anxiety, one cannot conclude that aging anxiety causes death anxiety, nor can one conclude that death anxiety causes aging anxiety. One of those interpretation may be true, or there may be a third factor, such as anxiety about health or concerns for family, that is influencing both aging anxiety and death anxiety. Future research should be aimed at further delineating the relationships between the relevant factors. A causal relationship would suggest

that decreasing anxiety levels in one area could effectively decrease anxiety levels in another area.

It is encouraging to see that aging anxiety levels were below neutral. This can be interpreted as a more positive than negative view of aging. In contrast, death anxiety levels were above neutral. Student responses tended to reflect negative views of death. It is interesting to note that most of the participants had not had end-of-life training. Future research could evaluate death anxiety levels before and after end-of-life training to directly assess how training affects an individual's views. People often fear what they do not understand, and lack of knowledge about death and dying could be a significant factor in death anxiety.

A limitation of the present study is that it is based on self-report data. In any self-report study, there is the possibility that participants are responding in a way they feel is socially acceptable. It is also possible that participants interpret questions differently than intended. Nonetheless, when assessing anxiety levels, self-report is often the best methodology available. Another limitation of the study is that the sample was fairly homogeneous. All the participants were university students, and a large majority of the participants were white and female, which limits the generalizability of the findings. Education level, race and gender could influence individuals' views about their future financial security, which could in turn affect their attitudes about aging. It would be beneficial for future research to replicate this study with a more diverse sample.

In conclusion, anxieties about aging and death can interfere with an individual aging successfully. Such anxieties on the part of caregivers can also create barriers to care. If a caregiver has negative associations with older adults, aging, death, or the dying process, those negative associations can lead to avoidance or less optimal care. If, on the other hand, a caregiver

has neutral or positive associations, that individual may be able to assist others in aging successfully or in dying with dignity. As the population ages, young adults who plan to work with older adults will need to be well educated about aging and about death, reflective about their own attitudes, and understanding of the anxieties of the people they serve. Those with a clear appreciation and acceptance of the universal nature of aging and dying will be better able to serve, promote, and protect the dignity of older adults.

ENDNOTES

1. Süleyman Kahraman and Damla Erkent, "The mediator role of attitude towards aging and elderliness in the effect of the meaning and purpose of life on death anxiety," *Current Psychology*, 42, (2023): 19518–19525. Doi: 10.1007/s12144-022-03087-x
2. Li Chu, Jennifer C. Lay, Vivian Hiu Ling Tsang, and Helene H. Fung, "Attitudes toward Aging: A Glance Back at Research Developments over the Past 75 Years," *The Journals of Gerontology: Series B*, 75(6), (2020): 1125-1129. Doi: 10.1093/geronb/gbz155
3. Anna R. Donizzetti, "Ageism in an Aging Society: The Role of Knowledge, Anxiety about Aging, and Stereotypes in Young People and Adults," *International Journal of Environmental Research and Public Health*, 16(8), (2019): 1329. Doi: 10.3390/ijerph16081329
4. Anna R. Donizzetti, "Ageism in an Aging Society: The Role of Knowledge, Anxiety about Aging, and Stereotypes in Young People and Adults," *International Journal of Environmental Research and Public Health*, 16(8), (2019): 1329. Doi: 10.3390/ijerph16081329
5. Li Chu, Jennifer C. Lay, Vivian Hiu Ling Tsang, and Helene H. Fung, "Attitudes toward Aging: A Glance Back at Research Developments over the Past 75 Years," *The Journals of Gerontology: Series B*, 75(6), (2020): 1125-1129. Doi: 10.1093/geronb/gbz155
6. Pfizer, Inc., "#FOGO? – New Survey Reveals 87% of Americans have a Fear of Getting Old (FOGO) – Results Show Top Fear is Decline in Physical Ability," (2014, July 16). https://www.pfizer.com/news/press-release/press-release-detail/fogo_new_survey_reveals_87_of_americans_have_a_fear_of_getting_old_fogo_results_show_top_fear_is_decline_in_physical_ability1
7. Meg Selig, "Do you have 'Fogo?' Taming the Fear of Getting Old," *Psychology Today*, (2021, June 29). <https://www.psychologytoday.com/us/blog/change-power/202106/do-you-have-fogo-taming-the-fear-getting-old>
8. Fiona S. Rupprecht, Kristina Martin, and Frieder R. Lang, "Aging-related Fears and Their Associations with Ideal Life Expectancy," *European Journal of Ageing*, 19, (2022): 587-597. Doi: 10.1007/s10433-021-00661-3
9. Susan E. Mason and Allison E. Steger, "Preferred Life Expectancy," Presented at the meeting of the Eastern Psychological Association, New York, NY, (March 2016).

10. Michael D. Barnett and Cassidy M. Adams, "Ageism and Aging Anxiety among Young Adults: Relationships with Contact, Knowledge, Fear of Death, and Optimism," *Educational Gerontology*, 44(11), (2018): 693-700. Doi: 10.1080/03601277.2018.1537163
11. Kathleen P. Lasher and Patricia J. Faulkender, "Measurement of Aging Anxiety: Development of the Anxiety About Aging Scale," *The International Journal of Aging and Human Development*, 37(4), (1993): 247-259. Doi: 10.2190/1U69-9AU2-V6LH-9YIL
12. David San Filippo, "Perspectives on the Fears of Death & Dying," Faculty Publications. (2006): 30. https://digitalcommons.nl.edu/faculty_publications/30
13. Victor G. Cicirelli, "Fear of Death in Older Adults: Predictions from Terror Management Theory," *The Journals of Gerontology: Series B*, 57(4), (2002): 358-366. Doi: 10.1093/geronb/57.4.P358
14. Jiaxi Zhang, Jiaxi Peng, Pan Gao, He Huang, Yunfei Cao, Lulu Zheng, and Danmin Miao, "Relationship between Meaning in Life and Death Anxiety in the Elderly: Self-esteem as a Mediator," *BMC Geriatrics*, 19, (2019): 308. Doi: 10.1186/s12877-019-1316-7
15. Gary Sinoff, "Thanatophobia (Death Anxiety) in the Elderly: The Problem of the Child's Inability to Assess Their Own Parent's Death Anxiety State," *Frontiers in Medicine*, 4:11. (2017). Doi: 10.3389/fmed.2017.00011
16. Marolein Missler, Margaret Stroebe, Lilian Geurtsen, Mirjam Mastenbroek, Sara Chmoun, and Karolijne van der Houwen, "Exploring Death Anxiety among Elderly People: A Literature Review and Empirical Investigation," *Omega*, 64(4), (2011): 357-379. Doi: 10.2190/om.64.4e.PMID: 22530298
17. Ernest Becker, *The Denial of Death* (New York: Free Press, 1973).
18. Sheldon Solomon, Jeff Greenberg, Jeff, and Tom Pyszczynski, "A Terror Management Theory of Social Behavior: The Psychological Functions of Self-esteem and Cultural Worldviews," in *Advances in Experimental Social Psychology*, 24, (1991): 93-159.
19. Maria Cohut, "Death anxiety: The fear that drives us?" *Medical News Today*. (August 11, 2017). www.medicalnewstoday.com/articles/318895
20. Paul T. P. Wong, Gary T. Reker, and Gina Gesser, "Death Attitude Profile – Revised: A Multidimensional Measure of Attitudes toward Death (DAP-R)," in *Death Anxiety Handbook: Research, Instrumentation, and Application*, ed. R. A. Neimeyer (Washington, DC: Taylor & Francis, 1994), 121-148. <http://www.drpaulwong.com/wp-content/uploads/2018/03/Death-Attitude-Profile-Revised-DAP-R-Wong-Reker-Gesser-1994-Paper-NEW.pdf>
21. Kathleen P. Lasher and Patricia J. Faulkender, "Measurement of Aging Anxiety: Development of the Anxiety About Aging Scale," *The International Journal of Aging and Human Development*, 37(4), (1993): 247-259. Doi: 10.2190/1U69-9AU2-V6LH-9YIL
22. Paul T. P. Wong, Gary T. Reker, and Gina Gesser, "Death Attitude Profile – Revised: A Multidimensional Measure of Attitudes toward Death (DAP-R)," in *Death Anxiety Handbook: Research, Instrumentation, and Application*, ed. R. A. Neimeyer (Washington, DC: Taylor & Francis, 1994), 121-148. <http://www.drpaulwong.com/wp-content/uploads/2018/03/Death-Attitude-Profile-Revised-DAP-R-Wong-Reker-Gesser-1994-Paper-NEW.pdf>
23. Süleyman Kahraman and Damla Erkent, "The mediator role of attitude towards aging and elderliness in the effect of the meaning and purpose of life on death anxiety," *Current Psychology*, 42, (2023): 19518–19525. Doi: 10.1007/s12144-022-03087-x

24. Yusuf Sarıkaya and Mustafa Baloğlu. “The development and psychometric properties of the Turkish death anxiety scale,” *Death Studies*, 40(7), (2016): 419–431.
Doi.org/10.1080/07481187.2016.1158752
 25. Mustafa Otrar. “An Attitude Scale toward Aging and Elderliness: A validity and reliability study,” *Istanbul University Journal of Sociology*, 36(2), (2016): 527–550.
-