

The Correlation Between Religiosity and Death Anxiety During the COVID-19 Pandemic in Palestine

Fayez Mahamid*, Priscilla Chou†, Ahmed Mansour‡

Previous studies have demonstrated that religiosity may be a predictive factor for anxiety related to death among adults amid the COVID-19 pandemic; however, current study variables have not been examined among Palestinians. This correlational study was the first to test the association between religiosity and death anxiety among Palestinians in the middle of the COVID-19 pandemic. Sample data consisted of 548 Palestinian adults. Data was collected through online advertisements, e-mail, and social media campaigns. Findings confirmed that death anxiety negatively correlated with religiosity ($r = -.31$, $p < 0.01$). Regression analysis for predicting anxiety related to death determined that religiosity accounted for statistical and significant variance in death anxiety ($B = -.191$, $SE = .040$, $\beta = -.20$). It is recommended that further studies be conducted to explore the correlation between our current study variables and other related variables. This study also recommends the development of intervention programs to decrease death anxiety during pandemics or crises and enhance the protective factors of individuals.


Keywords

religiosity • death anxiety • COVID-19 • Palestine


Introduction

Since its emergence in Wuhan, China in late 2019 (Huang et al., 2020), the novel coronavirus disease (COVID-19) has had an unprecedented impact that ignited a global pandemic (WHO, 2020). As of August 1, 2021, there have been 197, 788, 117 confirmed cases of COVID-19, and 4,219,578 global deaths (WHO, 2021a). The virus has resulted in mass panic with reports


*An-Najah National University, Mahamid@najah.edu

 <https://orcid.org/0000-0001-8050-4783>

†University of Guelph-Humber, priscilla.chou@hotmail.com

 <https://orcid.org/0000-0002-1764-4764>

‡An-Najah National University, psyahmedm@gmail.com

 <https://orcid.org/0000-0001-8508-866X>

Correspondence concerning this article should be addressed to Fayez Mahamid, An-Najah National University, Department of Psychology & Counseling, Nablus, Palestine.

doi: 10.3998/jmmh.1553

Conflict of interests:

The authors have no conflicts of interest to disclose. No funding was received for this study.

of hoarding of antibacterial supplies, physical aggression in grocery stores, voluntary self-isolation, and racial aggression towards individuals of Asian descent (Menzies & Menzies, 2020). COVID-19 has led to intense nervousness in the public and has pushed individuals into a state of high stress and anxiety (Bao et al., 2020; Wang et al., 2020). Additionally, there has been widespread fear of the severity of the disease, its side effects, and the probability of transmission (Xiang et al., 2020). With the emergence of this new disease and its rapid spread amongst the public, governments around the world began implementing stringent public health measures to curtail the spread of the virus (Menzies & Menzies, 2020).

In the race to prevent hospitalization numbers from rising and diseases from spreading, vaccination roll outs are the most effective means in controlling the spread of COVID-19, and in achieving herd immunity to halt the transmission of the virus (Wouters et al., 2021). To ensure global and equal access to the COVID-19 vaccinations, an initiative by COVAX announced plans to provide nearly two billion doses of COVID-19 vaccine to select candidates, with Palestine being among those chosen (WHO, 2021a).

As infections in the West Bank and Gaza began to increase, Palestinians began receiving vaccinations under the global COVAX program, which included the Russian-made vaccine, Sputnik V, and the Moderna vaccine. However, vaccination rates remained low since the availability of such vaccines was difficult to guarantee, as they were arriving in small amounts, and vaccine hesitancy began to rise (Maraqa et al., 2021).

This virus has aroused significant attention nationwide with health professionals seeking answers, the media continuously sharing information to alleviate any uncertainty (Zheng et al., 2020), and the public's insurmountable psychological pressure leading to fear, anxiety, insomnia, and depression (Li et al., 2020). Psychological stress exists when there is panic in the public under the effect of the internal and external environment. There exists an imbalance between one's ability and the objective requirements, thus leading to a state of tension that one must adapt to the environment. The psychosomatic and behavioral responses employed by individuals to stress are a psychological mechanism for self-defence (Veronese et al., 2021). These responses are natural, and also necessary when confronted with dangerous situations. From a physical and mental health perspective, an adequate response towards COVID-19 can stimulate the internal drive of humans to fight against the threat of this infection (Wang et al., 2020). If a reaction is inappropriate and exceeds the limit that the human body can endure, it can disrupt the equilibrium of psychological and physical functioning, thus impacting one's mental and physical health and resulting in either severe physical or mental illness (Drury et al., 2019). In essence, the response formulated towards a spreading contagious disease is likely to result in anxiety and the amplification of risk perceptions (Chew & Eysenbach, 2010).

Fear amongst the public is not an unusual occurrence; fear of death is a significant part of the human experience (Becker, 1973). Death anxiety is a conscious or unconscious psychological state employed as a defense mechanism when one feels threatened by death (Kesebir, 2014). Death anxiety has been found to underpin varying conditions related to depressive symptoms (Ghaemi, 2007; Iverach et al., 2014; Simon et al., 1998). Fear of death is also prevalent in obsessive-compulsive disorders as individuals diagnosed with the contamination subtype stress find ways to avoid death from illness or diseases (Menzies & Dar-Nimrod, 2017). It is also prevalent in those who continuously act on their intrusive thoughts with aggressive obsessions (Menzies et al., 2015). Further examples of death anxiety include the ways in which individuals respond to traumatic events such as toxic contamination (Barak et al., 1998). Similarly, patients who were infected with HIV had high levels of death anxiety (Safren et al., 2003), along with those who could only watch as their loved ones struggled to recover from influenza A/H1N1 (Elizarraràs-Rivas et al., 2010).

Death is beyond an individual's control, hence the concept itself has generated great anxiety and concern among human beings (Latha et al., 2013). Death anxiety is the greatest when death is found to be correlated with pain (Abdel-Khalek, 2002). However, the amount of death anxiety one may internalize depends on a variety of factors, such as religion, education, gender, age, culture, and psychosocial variables (Dadfar & Lester, 2017; Routledge & Juhl, 2010).

Studies conducted within the Palestinian context examined the effects of the COVID-19 pandemic on different aspects of mental health and overall well-being. For example, Veronese et al. (2021) investigated the association between stress associated with COVID-19 and mental distress manifested by anxiety, depression, and stress. Results showed that mental health problems (anxiety, depression, and stress) were positively associated with stress due to COVID-19; while mental health and the stresses of COVID-19 were negatively associated with well-being and resilience.

Mahamid and Bdier (2021) investigated the relationship between mental health outcomes and the fear of COVID-19, and the mediating role of well-being in response to the emergence of COVID-19 among Palestinian psychosocial service providers. The fear of COVID-19 was positively correlated with mental health indicators (stress, anxiety, and depression) with well-being serving as a protective factor from fear of COVID-19.

Recent literature supports the relationship between mental health and religion amongst the public, especially regarding how to adapt to psychological stressors (Koenig, 2018). Furthermore, studies have highlighted a correlation between people's general health and religiosity (Abu-Raiya & Pargament, 2011; Moreira- Almeida et al., 2006). Positive religious coping has been found to mitigate the prevalence of depressive symptoms during the COVID-19 pandemic (Mahamid & Bdier, 2021; Mahamid et al., 2021).

Ghandour et al. (2020) assessed the prevalence and predictors of distress and insecurity among Palestinian university students during the COVID-19 pandemic and lockdown. Results suggested the prevalence of moderate/high distress and insecurity were 40% and 48% respectively. The following study examines this premise by examining the relationship between religiosity and death anxiety following the spreading of coronavirus (COVID-19) throughout Palestine.

Theoretical background

Religiosity

Religious belief appears to be as old as human civilization. Evidence of religion is seen in all cultures at all periods of time in history (Bulbulia, 2004). For instance, there is archaeological evidence that over 20,000 years ago the hunters and gatherers of the Upper Paleolithic era, also known as the Old Stone Age, displayed signs of religious affiliation (Jong & Halberstadt, 2016). Billions of individuals worldwide possess some varying degree of religious beliefs, and people who renounce said beliefs are also found to maintain implicit acceptance of them (Jong et al., 2012). Religious beliefs continue to persist in the mass public despite scientific advancements and aggressive persecution of religious believers (Bulbulia, 2004), with an estimated 84% of the world's population reporting some religious identification (Jong & Halberstadt, 2016).

Religiosity is defined as beliefs, feelings, and practices connected to religion (Ho & Ho, 2007) that outline the association human beings attribute to a sacred being or divinity (Gallup & Bezilla, 1992). Religiosity can be better explained within the context of religion. Religion is a set of practices and beliefs that make it a communal, group, cultural, or ethnic phenomenon (Henery, 2003). Religion also outlines the nature of God and guides worship (Meraviglia, 1999).

In Western literature, religiosity is seen as an organized system of common practices that commit to the belief of a higher power (Mystakidou et al., 2007) along with the desire to please that power (McCoubrie & Davies, 2006). Ens and Bond (2007) describe religiosity as having a set of sacred beliefs and commitments that are demonstrated through shared behaviors and actions, such as gathering together for religious meetings, reading religious literature, and making supplication or prayer.

Religious belief, or a belief in supernatural agents or events, is a defining element of human psychology (Pyysiainen, 2009) that has presented itself as a reasonable field of inquiry (Hood et al., 2009). Most of the psychological studies of religion and spirituality have targeted Christian populations, while few studies have targeted other religions such as Islam. Systematic and large-scale scientific psychological research on Muslims has been lacking (Abu-Raiya, Pargament, Mahoney et al., 2008). It was only recently that clinical observations and anthropological methods of investigation provided knowledge as to the psychology of Islam (Dwairy, 2009). Islamic researchers and practitioners have realized the value in basing their knowledge on scientific methods of inquiry (Abu-Raiya & Pargament, 2011).

Current literature on Muslim mental health points to religious directions, belief salience, and spiritual activities and practices as being imperative for resilience against hardships in life (Aflakseir, 2012). Islam teaches its followers to be patient and to trust Allah (God) for help during difficult times through regular prayers (Aflakseir, 2012). Furthermore, Muslims have indoctrinated beliefs regarding life after death where followers of the faith are encouraged to do good in life in order to prepare for the afterlife (Puchalski & O'Donnell, 2005).

Death Anxiety

In Islam, Muslims adhere to the prominent teachings in the Holy Qur'an. In the Qur'an, Allah often mentions death as a natural consequence of life and that there is no escape from it. The interpretation of death can vary from each individual and each culture with typical negative connotations associated with it (Abdel-Khalek, 2004). Mortality awareness and this fear of death is not an unfamiliar concept, and almost every culture engages in rituals to mitigate this fear of death anxiety. Death anxiety refers to an eccentric and great fear of personal mortality correlated with feelings of apprehension or dread when pondering about the dying process or the events that transpire after one's death (Rice, 2009).

Death anxiety is "the thoughts, fears, and emotions about that final event of living that we experience under more normal conditions of life" (Belsky, 1999, p. 368). It is characterized by fears, thoughts, and emotions that are associated with the end of life (Belsky, 1990). Furthermore, death anxiety has been a significant part of human life with evidence of its discourse throughout history in art, psychology, and literature (Eshbaugh & Henninger, 2013). In the late 80s, researchers initiated studies into how anxiety can be a driving force behind human motives when it comes to self-esteem and the meaning of life and, therefore, plays an important role in understanding the many complex and diverse aspects of human behavior. (Pyszczynski, 2019).

According to Kastenbaum (2003), no individual can suppress the feeling of death anxiety completely. It was proposed that fears of death are evident in a wide range of mental health diseases (Iverach et al., 2014). Death anxiety is a core feature in the presentation of somatoform disorders (Iverach et al., 2014). It has been connected with high levels of psychiatric symptoms such as anxiety and depression (Strachan et al., 2007). A study carried out by Eshbaugh and Henninger (2013) contended that death fears are inversely linked with the well-being of the individual. Higher levels of death anxiety hamper the normal functioning capacity of individuals in everyday life (Niemic & Schulenberg, 2011). These aversive emotional reactions

precipitated by the onset of death anticipation have both positive and negative potential ramifications (Furer & Walker, 2008; Neimeyer et al., 2011).

Death anxiety can result in low levels of awareness to neurotic fears about losing oneself, characterized by loss of control, perceptions of helplessness, loss of meaning (Singh, 2013), and powerlessness in human beings (Noyes et al., 2002). Being able to successfully cope with death anticipation can result in enhanced life meaningfulness and the ability to cultivate one's life to reflect personal values and goals (Vance, 2014).

The sociocultural context may be highly influential in impacting gender differences, specifically how death experiences are perceived (Vance, 2014). A vast number of empirical findings suggest that death anxiety correlates strongly with gender (Henrie & Patrick 2014; Momtaz et al., 2015). Numerous studies have shown that higher levels of death anxiety may affect older women over their male counterparts (Robah, 2017; Zana, 2009). In an overwhelming number of studies, anxiety related to death is higher amongst women than men. A study by Suhai and Akram (2002) was able to support this finding among their sample of Pakistani Muslims. Abdel-Khalek (2005) was also able to demonstrate that women displayed higher levels of anxiety related to death when compared to the males in their sample. In general, however, there have been conflicting findings as to the exact role of gender and death anxiety. A study by Dadfar, Lester, Abdel-Khalek, and Ron (2018) revealed that among Muslim Iranian men in their youth, middle-aged and later adulthood possessed greater death anxiety than females. However, studies conducted among senior citizens in both the United States and China indicate that gender does not play a significant role when it comes to death anxiety (Asari & Lankarani 2016; Wu et al., 2002). A similar result was reported by Onuoha and Idemudia (2019) in a study among students in a public university in Nigeria.

Death anxiety is positively related to age when it was found that as people age, they experience higher levels of anxiety related to death as they feel it getting closer (Belsky, 1999). In their study of participants comprised of younger, middle-aged, and older adults, Krause, Pargament, and Ironson (2018) found that the younger and middle-aged participants reported higher levels of death anxiety compared to the older participants. The results of this study confirmed findings by Russac et al. (2007) who also found younger persons experienced higher levels of death anxiety, as evidenced by similar results of a longitudinal study of 9,815 senior citizens by Chopik (2017).

These results can be explained by the development of the *wisdom model*. This model states that wisdom can prepare individuals to be mentally and physically prepared to accept death by imminent death or from aging, explaining lower perceived death anxiety in elderly people (Ardelt, 2000). However, this has been found to contradict studies that demonstrate that young adults possess increased levels of death anxiety and morality fears when compared to older people (Harrawood et al., 2009; Kastenbaum, 2003). For instance, a study by Krause and Hayward (2014) found a negative correlation between death anxiety and age in the elderly; that is, as one's age increased, their death anxiety decreased.

Religiosity and Death Anxiety

As individuals grow in age, they may accept the reality of death as they ascribe more of their time to religion. Therefore, in reducing fear of death, religious belief could work to promote well-being in an individual. Understanding and coping with death-related concerns are part of the framework of almost all religions. Traditionally, individuals seek religious knowledge to understand the unpredictability and finality of death to help reduce anxieties stemming from the reality of death. As with every aspect in life, the degree to which individuals allow religion to

influence their attitudes towards death depends on their various attitudes toward religion itself (Latha et al., 2013).

According to the Terror Management Theory (TMT), humans that are acutely aware of their vulnerability and the inevitability of death turn to strategic psychological buffers to avoid experiencing debilitating anxiety (Landau et al., 2004). Religion, therefore, affords the necessary buffer when addressing anxiety related to death, as religious groups provide “symbolic immortality” in allowing individuals to belong and commit to entities that are greater and more enduring than themselves (Vail et al., 2010). Further, as opposed to other secular alternatives, the world’s major belief systems (Islam, Judaism, and Christianity) provide opportunities for literal immortality (Atran, 2002).

An individual’s feelings towards death anxiety can be impacted by many factors, including one’s religious beliefs (Chan & Yap, 2009). People who possess internal religious motivation have lower death anxiety, and a greater belief in the afterlife is associated with lower death anxiety (Duff & Hong, 1995). Latipun et al. (2008) found that an individual with intrinsic religiosity may be calmer and more centered when confronted with facing death since they have the mental strength to control their mind and behaviors so that they become more positive and rational. A study by Shirkavand et al. (2018) involved Iranian elders enduring cancer at major hospitals in Tehran. The individuals with higher spiritual well-being experienced less death anxiety. Chow (2017) found that levels of death anxiety were higher among less religious students when studying the relationship between religiosity and death anxiety in university students in Canada.

Such studies indicate a negative correlation between religiosity and death anxiety (Abdel-Khalek, & Lester, 2009; Ltipun et al., 2018; Jong et al., 2013). Similarly, findings on Egyptian Muslim women (Al-Sabwah & Abdel-Khalek, 2005) and Pakistani Muslims (Suhail & Akram, 2002) reveal that the higher the religious beliefs a person may have, the lower the death anxiety they may face.

Despite the initial appeal of religiosity as a competent buffer against death anxiety, as evidenced by several correlational studies that show religious people to be less fearful of death than their non-religious counterparts, prior research has given rise to mixed support for this claim (Aflakseir, 2014; Dezutter et al., 2009; Latha et al., 2013). Certain studies (Azaiza et al., Roimi, 2011; Onuoha & Idemudia, 2019) have revealed that there is no direct correlation between death anxiety and religiosity.

A preventive factor against existential despair may include therapeutic interventions stemming from spiritual beliefs, life satisfaction, and religious faith. However, mental health professionals must receive adequate training on the underlying mechanisms of death anxiety and understand cultural and religious beliefs, as well as rituals to employ religious, personal, and spiritual resources to help clients cope with death anxiety. Spiritual and religious interventions to alleviate death anxiety have been found in settings such as psychotherapeutic groups, psychoeducational groups, and twelve-step groups (Pandya & Kathuria, 2021). The community of practice approach is one in which practitioners come together to share and learn on a common platform regularly. This approach may be beneficial for mental health professionals in using counseling practices in working to deal with death anxiety and documenting their practices.

The Current Study

Our study aims to test the correlation between religiosity and death anxiety among Palestinians during the COVID-19 pandemic. Based on previous research findings, the current study hypothesized that: (1) religiosity would be negatively associated with death anxiety among Palestinians

during the COVID-19 pandemic; the more religiosity, the less death anxiety Palestinians would have, and (2) religiosity would predict death anxiety among Palestinians during the COVID-19 pandemic.

Methods

Participants

Participants were recruited using a convenience sampling from Palestinian adults in the West bank of Palestine during the COVID-19 pandemic. The aims of this study along with the procedures were presented using online advertisements, e-mail campaigns, blogs, social media, and SMS campaigns. In response to study guidelines, interested participants sent an email indicating their willingness to participate. Each participant then received a letter briefly explaining the subject of the study and its purpose, mentioning all ethical issues of confidentiality and voluntary participation. Upon reading and accepting the conditions outlined in the email, participants replied with their informed consent. Participants (see table 1) included 548 Palestinian adults, including 368 males and 180 females; 10.2% aged 20–35, 67.2% aged 36–55, and the remaining 22.6% were over 56 years old. The population was selected from those who agreed to answer the questionnaire. For inclusion in the study, participants were required to be: 1) Palestinian, 2) Arabic native speakers, and 3) free of any diagnosis of impairment having to do with neurodevelopmental mental health. Our study was approved by An-Najah Institutional Review Board (IRB) before it was administrated.

Instruments and Procedures

The Islamic Positive Religious Coping (IPRC) is a seven-item subscale designed by Abu-Raiya et al. (2008) to assess the extent to which Muslims use positive religious coping methods to cope with general life stressors. The scale contained items such as, “When I face a problem in life, I look for a stronger connection with Allah,” and, “When I face a problem in life, I read the Holy Qur’an to find consolation.” It is a 4-point scale ranging from 1 (I do not do this at all) to 4 (I do this a lot). Scores were tallied and higher scores reflected a more positive approach to religious coping. In the current study, the internal consistency coefficient for IBRC was $\alpha=.88$.

Table 1. Demographic characteristics of study sample (N=548)

Characteristics	Number	Percent (%)
<i>Gender</i>		
Male	368	67.2
Female	180	32.8
Total	548	100.0
<i>Age</i>		
20–35	56	10.2
36–55	368	67.2
Above 56	124	22.6
Total	548	100.0

The COVID-19 Death Anxiety Scale (CDAS) is a 14-item scale prepared by Abdel-Khalek (1987) and assesses death anxiety related to the pandemic. The scale included items such as, “The idea of death comes to mind during the COVID-19 pandemic,” and, “I dream that I will die of COVID-19 virus.” A 3-point scale ranging from 1 (never) to 3 (usually) allows participants to rate each item. Higher scores reflect a stronger connection between COVID-19 and death anxiety. In the current study, a pool of experts in counseling, clinical psychology, and mental health reviewed the scale for content validity. A score of 80% agreement between experts was used for inclusion of each item in the scale, the internal consistency coefficient for CDAS was $\alpha=.91$.

Study Procedures

Data was collected in April 2021 and targeted Palestinian adults in Palestine. A convenience online sampling technique was used to recruit the sample of study. Participants were informed about the purpose of the research and provided with information that allowed them to decide whether they wished to continue participating in the study. They were also provided with a brief description as to the study instruments. Participants who were willing to participate signed an informed consent form. This study was performed with permissions of the Declaration of Helsinki (1967), and the American Psychological Association. It received approval from the An-Najah Institutional Review Board IRB (Archived number, April 12).

Data Analysis

Descriptive statistics tested the degree of religiosity and death anxiety among Palestinians during the COVID-19 pandemic. The Pearson correlation coefficient was used to test the relationship between death anxiety and religiosity among participants. The Pearson product-moment correlation coefficient (or Pearson correlation coefficient), denoted by r (Rencher & Schaalje, 2008), measures the strength of a linear association between two variables. To measure the causal relationship between the study variables, regression analysis was performed. Regression analysis yields a regression equation as well as an index of the relationship between the dependent and independent variables with religiosity, gender, and age identified as predictive variables, and death anxiety identified as an outcome variable.

Findings

Results of table 2 showed that participants scored moderate levels on death anxiety and had high scores on religiosity.

As shown in Table 3, religiosity was negatively correlated with death anxiety ($r = -.31$, $p < 0.01$).

Results of Table 4 indicated that regression analysis explained statistically and significantly variance in death anxiety ($B = -.191$, $SE = .040$, $\beta = -.20$).

Table 2. Means and standard deviations for research variables (N=548)

Variable	Mean	S.D	Min	Max
Religiosity	3.640	.397	1.44	4.00
Death anxiety	1.783	.373	1.00	2.93

Table 3. Correlations among study variables (N=548)

Measures	(1)	(2)
(1) Religiosity	-	.31**
(2) Death anxiety		-

** $p < 0.01$

Table 4. Regression to predict death anxiety (N=548)

Variable	B	SE	B	t	p	95% CL
Gender	.071	.034	.089	1.24	.124	[.131 - .241]
Age	-.042	.028	-.063	-1.48	.137	[-.098 - .013]
Religiosity	-.191	.040	-.203	4.83	.001**	[-.113 - .269]

** $p < 0.001$

Discussion

The current study examined the correlation between religiosity and death anxiety concerning COVID-19 for Palestinians. The study found that Palestinians received significant scores on religiosity and death anxiety. Religiosity was found to be negatively correlated with death anxiety with religion also being able to predict death anxiety amongst the participants.

Consistent with prior research, the individuals in the study scored moderately on death anxiety. COVID-19 has marked a time in which death has become salient in our society, updates on death tolls have become a frequent occurrence from the news, social distancing and public health campaigns are prevalent, hoarding of anti-bacterial sprays and wipes, and ubiquitous visible death cues are evident in face masks (Menzies & Menzies, 2020). A study conducted by Newton-John et al. (2020) found that participants had strong death anxiety along with anxious behaviours and beliefs regarding COVID-19. COVID-19 can be conceptualized as a mortality salience prime, and society has been confronted with an unprecedented crisis that has increased mental health symptoms and psychological distress. Additionally, participants in our study had high scores on religiosity. Turning to religion and spirituality in times of anguish is a common coping strategy through attendance of religious services, engaging in prayers, and reading scriptures (Tepper et al., 2001).

The effects of COVID-19 on vulnerable populations can further complicate the issue of death anxiety. Individuals living in the occupied territories of Palestine may be considered as vulnerable populations as they live under unique circumstances (such as militarization, poverty, lack of employment opportunities, cultural pressures, etc.). Therefore, the connection between heightened levels of death anxiety and COVID-19 is especially true for Palestinian populations. Palestinians face possible death and traumatic stressors daily due to occupation. In this scenario, neither individuals nor the state itself has the power to control or secure their borders; nor do they have the ability to create a country-wide strategy for COVID-19 prevention (Mahamid & Berte, 2021).

The relation between death anxiety and religion is frequently studied in the literature, however, the findings have revealed ambiguity. Some argue that religion correlates negatively with anxiety towards death (Lundh & Radon, 1998), while others state that religion is related to greater death anxiety (Ellis et al., 2013). Researchers have even formulated a curvilinear

relationship; those who are somewhat religious claim death anxiety than very religious individuals, while people who are religious and non-religious have scored lower on death anxiety (Wink & Scott, 2005). Relating to the Terror Management Theory (TMT), religion ameliorates the anxiety an individual may experience regarding the inevitability of personal mortality. According to TMT, cultural belief systems are designed to manage debilitating anxiety over death as one conceptualizes a just and safe world by abiding by culturally prescribed standards of living (Bassett & Bussard, 2021). For one to be protected against death anxiety, individuals must assume they are living up to the standards of ethical behavior based on their own internalized cultural worldviews (Bassett & Bussard, 2021).

Various studies (Bassett & Bussard, 2021; Feifel, 1974; Shadinger et al., 1999), have found no measurable differences in death anxiety when viewed as a categorical measure of belief in God, religious affiliation, or self-reported identity. These studies recommend researching more nuanced measures of religious beliefs to explore any possible relationships. Furthermore, Kastenbaum (2000) has noted the importance of researchers to transcend beyond typical measures of religious identity and affiliation due to its complexity and contingency on individual beliefs. However, although religious participation may not be the panacea to death anxiety, religious conviction and a belief in the afterlife have been found to assist in reducing this anxiety (Alvarado et al., 1995).

Despite this inconsistency in research, it has been found that individuals often turn to religion as a coping mechanism against difficult situations. Positive religious coping serves as an adaptive function to help mitigate any possible negative impacts associated with stressful and depressive symptoms. It exists as a significant coping mechanism to improve one's mental health through the attendance of religious services and engaging in prayers, and it facilitates stress management for traumatic experiences such as in a global pandemic (Chow et al., 2021).

In our study, the results demonstrate that religiosity was found to be negatively correlated with death anxiety. The use of religion as a coping mechanism against adversity is not an unfamiliar concept. Individuals who have experienced adverse life events such as a death in the family or cancer are more likely to be religious than others (Ano & Vasconcelles, 2005; Pargament, 1997). Religious coping can be deemed as a buffer against death anxiety by interrupting negative consequences associated with death anxiety, thereby enhancing optimism and hope, and inhibiting death anxiety from progressing (Vishkin & Tamir, 2020). Religion appeases death anxiety by presenting an idea of symbolic immortality, and individuals can reflect on meaningful aspects of their lives and conceptualize death as an alteration in identity, consciousness, and relationships (Pyszczynski et al., 2015).

According to the results of our study, no significant differences were found in religiosity and death anxiety due to study demographic variables: gender and age. One possible explanation of this result is that Palestinians from different populations used positive religious copying to deal with distress during the pandemics, but it is also clear that the COVID-19 pandemic negatively affected Palestinians from different ages and groups.

The findings supported our second hypothesis that religiosity would predict death anxiety among Palestinians. This is in accordance with studies that have demonstrated that Islam provides its followers with concrete methods to ameliorate profound problems of living (Abu-Raiya & Pargament, 2015). Abu-Raiya, Aytan, Tekke et al. (2019) found that Muslims from various national backgrounds utilize religious beliefs, teachings, and practices to cope with the hardships of life. It was conclusively agreed upon that religion was their major coping resource. Islam is deeply embedded in the lives of Muslims resulting in the default usage of religion as a coping mechanism. The Islamic religion encourages its believers to accept painful events and crises as a part of God's plan and as a test to strengthen one's beliefs (Abu-Raiya & Jamal, 2019).

The Islamic faith refers to multiple spiritual beliefs in dealing with crises and difficult situations. For example, Muslim believers are encouraged to accept traumatic and painful events as part of God's universal plan and view the crisis as a test from God to deepen one's faith. On the other hand, Islam discourages people from "giving up on the mercy of God" when considering self-harm (Mahamid & Bdier, 2021).

One may expand on their self-awareness through religion, emotional pain, existential crises of life and death, and in contemplating the mystery of their existence. To overcome any defensive reactions to death anxiety, individuals should experience events that lead to happiness and calms the pains of existence, as well as confronts death with equanimity, and live in the moment. (Chow et al., 2021). In the end, spiritual belief, religious faith, and satisfaction with life together work to decrease death anxiety and provide a solid measure against existential despair (Lewis, 2014; Mohammadzadeh & Najafi, 2020).

Limitations

This study presented some limitations which may offer more opportunities for future studies. The study focused on the connection between religiosity and death anxiety among adult Palestinians during the COVID-19 pandemic. As such, to generalize findings, comparative studies within differing contexts should be conducted. Quantitative data was gathered through the completion of online self-reporting instruments, which may lend itself to issues such as self-report bias. The sample of our study included only Palestinian Muslims living in the West Bank of Palestine. Additionally, the methods of the study are correlational to further test the causal connection between the variables, and longitudinal and experimental studies are recommended.

Conclusion

The findings in this current study support previous findings demonstrating that religiosity has a positive effect on death anxiety, which means that religiosity is negatively associated with death anxiety. Also, participants scored moderately on death anxiety and had high scores on religiosity. This present work may provide further insights into practical implications, and therefore contributes to the greater theoretical understanding of how the study variables relate or affect each other. One such implication may be the development of intervention programs that may decrease death anxiety during pandemics or crises and enhance protective factors of individuals. It would possibly be of greater value to apply more international concepts in the methodology of acknowledging and managing death anxiety in Palestine. A multidisciplinary approach where professionals create a forum for shared learning may be most instrumental in gathering information on the current intersections of professional knowledge and faith-based traditions. The results of the current study reflect the need to enhance mental health services and educate the Palestinian population about positive coping skills to better manage public health efforts during national and global health incidents. Recommendations include increasing general mental health resources (both access to clinics and public health messages), as well as those related specifically to spirituality and faith-based structures. Faith-based strategies are known to be effective, more accessible than mental health professional services, and carry less stigma in the target community. Increasing the knowledge of faith leaders about mental health and adding methods related to spirituality to general clinical services will increase both accessibility and effectiveness across the territories. Mosque leadership would be helpful in increasing religious

coping among congregants and thereby reducing the stress and negative mental health consequences of death anxiety. Also, religious leaders could help in defeating fatalistic and irrational religious views impeding vaccine acceptance.

Compliance with Ethical Standards

Ethical Approval

All procedures performed in this study involving human participants were in accordance with the ethical standards of An-Najah University's Research Ethics Board, the American Psychological Association (APA, 2010) and with the 2013 Helsinki Declaration.

Informed Consent

Informed consent was obtained from all participants.

References

- Abdel-Khalek, A. M. (2002). Age and Sex Differences for Anxiety in Relation to Family Size, Birth Order, and Religiosity among Kuwaiti Adolescents. *Psychological Reports, 90*(3), 1031–1036. doi:10.2466/pr0.2002.90.3.1031
- Abdel-Khalek, A. M. (2004). A general factor of death distress in seven clinical and non-clinical groups. *Death Studies, 28*(9), 889–898. doi:10.1080/07481180490491040
- Abdel-Khalek, A. M. (2005). Death anxiety in clinical and non-clinical groups. *Death studies, 29*(3), 251–259. doi:10.1080/07481180590916371
- Abdel-Khalek, A., & Lester, D. (2009). Religiosity and death anxiety: No association in Kuwait. *Psychological reports, 104*(3), 770–772. doi:10.2466/pr0.104.3.770-772
- Abu-Raiya, H., & Jamal, H. (2019). The links between religious coping and subjective well-being among Israeli-Muslims who lost a beloved person through death. *Death Studies, 25*(4), 296–304. doi:10.1080/07481187.2019.1626951
- Abu-Raiya, H., Aytan A., Tekke M., & Agbaria, Q. (2019). On the links between positive religious coping, satisfaction with life and depressive symptoms among a multinational sample of Muslims. *International Journal of Psychology, 54*(5), 678–686. doi:10.1002/ijop.12521
- Abu Raiya, H., Pargament, K. I., Mahoney, A., & Stein, C. (2008). A Psychological Measure of Islamic Religiousness: Development and Evidence for Reliability and Validity. *The International Journal for the Psychology of Religion, 18*(4), 291–315. doi:10.1080/10508610802229270
- Abu-Raiya, H., & Pargament, K. I. (2011). Empirically based psychology of Islam: summary and critique of the literature. *Mental Health, Religion & Culture, 14*(2), 93–115. doi:10.1080/13674670903426482
- Abu-Raiya, H., & Pargament, K. I. (2015). Religious coping among diverse religions: Commonalities and divergences. *Psychology of Religion and Spirituality, 7*(1), 24–33. doi:10.1037/a0037652
- Aflakseir, A. (2012). Religiosity, personal meaning, and psychological well-being: A study among Muslim students in England. *Pakistan Journal of Social and Clinical Psychology, 10*(1), 27–31.
- Aflakseir, A. (2015). Reasons for death fear and religiosity and anxiety among students of University of Shiraz. *Journal of Modern Psychological Researches, 9*(35), 19–32.

- Al-Sabwah, M. N., & Abdel-Khalek, A. M. (2006). Religiosity and death distress in Arabic college students. *Death studies*, *30*(4), 365–375. doi:10.1080/07481180600553435
- Alvarado, K. A., Templer, D.I., Bresler, C., & Thomas-Dobson, S. (1995). The relationship of religious variables to death depression and death anxiety. *Journal of Clinical Psychology*, *51*(2), 202–204. doi:10.1002/1097-4679(199503)51:2 < 202::aid-jclp2270510209 > 3.0.co;2-m
- Ano, G. G., & Vasconcelles, E. B. (2005). Religious coping and psychological adjustment to stress: A meta-analysis. *Journal of Clinical Psychology*, *61*(4), 461–480. doi:10.1002/jclp.20049
- Ardelt, M. (2000). Intellectual versus wisdom-related knowledge: The case for a different kind of learning in the later years of life. *Educational Gerontology*, *26*(8), 771–789. doi:10.1080/036012700300001421
- Assari, S., & Lankarani, M. M. (2016). Race and gender differences in correlates of death anxiety among elderly in the United States. *Iranian journal of psychiatry and behavioral sciences*, *10*(2); e2024. doi: 10.17795/ijpbs-2024
- Paul, R. A. (2005). In Gods we trust: The evolutionary landscape of religion. *American Anthropologist*, *107*(1), 141–141. doi:10.1525/aa.2005.107.1.141.1
- Azaiza, F., Ron, P., Shoham, M., & Tinsky-Roimi, T. (2011). Death and Dying Anxiety Among Bereaved and Nonbereaved Elderly Parents. *Death Studies*, *35*(7), 610–624. doi:10.1080/07481187.2011.553325
- Bao, Y., Sun, Y., Meng, S., Shi, J., & Lu, L. (2020). 2019-nCoV epidemic: address mental health care to empower society. *The Lancet*, *395*(10224), e37–e38. doi: 10.1016/S0140-6736(20)30309-3
- Barak, Y., Achiron, A., Rotstein, Z., Elizur, A., & Noy, S. (1998). Stress associated with asbestosis: the trauma of waiting for death. *Psycho-Oncology*, *7*(2), 126–128. doi:10.1002/(sici)1099-1611(199803/04)7:2 < 126::aid-pon291 > 3.0.co;2-a
- Bassett, J. F., & Bussard, M. L. (2021). Examining the complex relation among religion, morality, and death anxiety: Religion can be a source of comfort and concern regarding fears of death. *OMEGA - Journal of Death and Dying*, *82*(3), 467–487. doi.org/10.1177/0030222818819343
- Becker, C. (2004). Death Education and religion in schools and modern society. *Korean Journal of Religious Education*, *19*, 3–22.
- Belsky, J. (1999). *The psychology of aging: theory, research, and interventions*. Beverly, MA.
- Bulbulia, J. (2004). The cognitive and evolutionary psychology of religion. *Biology & Philosophy*, *19*(5), 655–686. doi:10.1007/s10539-005-5568-6
- Chan, L. C., & Yap, C. C. (2009). Age, gender, and religiosity as related to death anxiety. *Sunway Academic Journal*, *6*, 1–16.
- Chew, C., & Eysenbach, G. (2010). Pandemics in the Age of Twitter: Content Analysis of Tweets during the 2009 H1N1 Outbreak. *PLoS ONE*, *5*(11), e14118. doi:10.1371/journal.pone.0014118
- Chopik, W. J. (2016). *Death across the lifespan: Age differences in death-related thoughts and anxiety*. *Death Studies*, *41*(2), 69–77. doi:10.1080/07481187.2016.1206997
- Chow, H. P. H. (2017). A time to be born and a time to die: Exploring the determinants of death anxiety among university students in a western Canadian city. *Death Studies*, *41*(6), 345–352. doi:10.1080/07481187.2017.1279240
- Chow, S. K., Francis, B., Ng, Y. H., Naim, N., Beh, H. C., Ariffin, M. A. A., . . . & Sulaiman, A. H. (2021). Religious coping, depression and anxiety among healthcare workers during the COVID-19 pandemic: a Malaysian perspective. *Healthcare*, *9*(1), 79. doi.org/10.3390/healthcare9010079

- Cicirelli, V. G. (2002). Fear of death in older adults: Predictions from terror management theory. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 57(4), 358–366. doi:10.1093/geronb/57.4.p358
- Craske, M. G. Stein. (2016). Anxiety. *The Lancet*, 388(10063), 3048–3059. doi.org/10.1016/S0140-6736(16)30381-6
- Dadfar, M., & Lester, D. (2017). Religiosity, spirituality and death anxiety. *Austin Journal of Psychiatry and Behavioral Sciences*, 4(1), 1061
- Dadfar, M., Lester, D., Abdel-Khalek, A. M., & Ron, P. (2018). Death anxiety in Muslim Iranians: A comparison between youths, middle adults, and late adults. *Illness, Crisis & Loss*, 29(2), 143–158. doi.org/10.1177/1054137318790080
- Dezutter, J., Soenens, B., Luyckx, K., Bruyneel, S., Vansteenkiste, M., Duriez, B., & Hutsebaut, D. (2009). The role of religion in death attitudes: Distinguishing between religious beliefs and style of processing religious contents. *Death Studies*, 33(1), 73–92. doi.org/10.1080/07481180802494289
- Drury, J., Carter, H., Cocking, C., Ntontis, E., Tekin Guven, S., & Amlôt, R. (2019). Facilitating collective psychosocial resilience in the public in emergencies: Twelve recommendations based on the social identity approach. *Frontiers in Public Health*, (7), 141. doi:10.3389/fpubh.2019.00141
- Duff, R. W., & Hong, L. K. (1995). Age Density, Religiosity and Death Anxiety in Retirement Communities. *Review of Religious Research*, 37(1), 19–32. doi:10.2307/3512068
- Dwairy, M. (2009). Culture analysis and metaphor psychotherapy with Arab-Muslim clients. *Journal of Clinical Psychology*, 65(2), 199–209. doi: 10.1002/jclp.20568
- Ellis, L., Wahab, E. A., & Ratnasingan, M. (2013). Religiosity and fear of death: a three-nation comparison. *Mental Health, Religion & Culture*, 16(2), 179–199. doi:10.1080/13674676.2011.652606
- Elizarrarás-Rivas, J., Vargas-Mendoza, J. E., Mayoral-García, M., Matadamas-Zarate, C., Elizarrarás-Cruz, A., Taylor, M., & Agho, K. (2010). Psychological response of family members of patients hospitalised for influenza A/H1N1 in Oaxaca, Mexico. *BMC psychiatry*, 10(1), 1–9. doi:10.1186/1471-244x-10-104
- Ens, C., & Bond Jr, J. B. (2007). Death anxiety in adolescents: The contributions of bereavement and religiosity. *OMEGA-Journal of Death and Dying*, 55(3), 169–184. doi:10.2190/om.55.3.a
- Eshbaugh, E., & Henninger, W. (2013). Potential Mediators of the Relationship Between Gender and Death Anxiety. *Individual Differences Research*, 11(1), 22–30.
- Feifel, H. (1974). Religious conviction and fear of death among the healthy and the terminally ill. *Journal for the Scientific Study of Religion*, 13(3), 353–360. doi:10.2307/1384763
- Furer, P., & Walker, J. R. (2008). Death Anxiety: A Cognitive-Behavioral Approach. *Journal of Cognitive Psychotherapy*, 22(2), 167–182. doi:10.1891/0889-8391.22.2.167
- Gallup, G., & Bezilla, R. (1992). *The religious life of young Americans: A compendium of surveys on the spiritual beliefs and practices of teen-agers and young adults*. George H Gallup Intl Inst.
- Ghandour, R., Ghanayem, R., Alkhanafsa, F., Alsharif, A., Asfour, H., Hoshiya, A., . . . & Giacaman, R. (2020). Double Burden of COVID-19 Pandemic and Military Occupation: Mental Health Among a Palestinian University Community in the West Bank. *Annals of Global Health*, 86(1), 131, 1–11. doi.org/10.5334/aogh.3007

- Harrawood, L. K., White, L. J., & Benschoff, J. J. (2009). Death anxiety in a national sample of United States funeral directors and its relationship with death exposure, age, and sex. *OMEGA-Journal of Death and Dying*, *58*(2), 129–146. doi:10.2190/om.58.2.c
- Henery, N. (2003). Constructions of spirituality in contemporary nursing theory. *Journal of Advanced Nursing*, *42*(6), 550–557. doi:10.1046/j.1365-2648.2003.02658.x
- Henrie, J., & Patrick, J. (2014). Religiousness, religiosity doubt, and death anxiety. *International Journal of Aging and Human Development*, *78*(3): 203–227. doi: 10.2190/AG.78.3.a.
- Ho, D. Y., & Ho, R. T. (2007). Measuring spirituality and spiritual emptiness: Toward ecumenicity and transcultural applicability. *Review of General Psychology*, *11*(1), 62–74. doi:10.1037/1089-2680.11.1.62
- Hood, R. W., Jr., Hill, P. C., & Spilka, B. (2009). *The psychology of religion: An empirical approach* (4th ed.). Guilford Press.
- Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., . . . Cao, B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet*. Advanced online publication. doi:10.1016/s0140-6736(20)30183-5
- Iverach, L., Menzies, R. G., & Menzies, R. E. (2014). Death anxiety and its role in psychopathology: Reviewing the status of a transdiagnostic construct. *Clinical Psychology Review*, *34*(7), 580–593. doi:10.1016/j.cpr.2014.09.002
- Jong, J., & Halberstadt, J. (2016). *Death anxiety and religious belief: An existential psychology of religion*. Bloomsbury Publishing.
- Jong, J., Bluemke, M., & Halberstadt, J. (2013). Fear of death and supernatural beliefs: Developing a new supernatural belief scale to test the relationship. *European Journal of Personality*, *27*(5), 495–506. doi:10.1002/per.1898
- Jong, J., Halberstadt, J., & Bluemke, M. (2012). Foxhole atheism, revisited: The effects of mortality salience on explicit and implicit religious belief. *Journal of Experimental Social Psychology*, *48*(5), 983–989. doi:10.1016/j.jesp.2012.03.005
- Kastenbaum, R. (2003). Definitions of death. *Macmillan encyclopedia of death and dying*, 224–229.
- Kastenbaum, R. (2000). *The psychology of death* (3rd ed). New York, NY. Springer Publishing Company.
- Koenig, H. G. (2018). *Religion and mental health: Research and clinical applications*. Academic Press.
- Krause, N., & Hayward, R. D. (2014). Religious involvement and death anxiety. *OMEGA-Journal of Death and Dying*, *69*(1), 59–78. doi:10.2190/om.69.1.d
- Krause, N., Pargament, K. I., & Ironson, G. (2016). In the shadow of death: Religious hope as a moderator of the effects of age on death anxiety. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *73*(4), 696–703. doi: 10.1093/geronb/gbw039.
- Landau, M. J., Greenberg, J., & Solomon, S. (2004). The motivational underpinnings of religion. *Behavioural and Brain Sciences*, *27*(6), 743–744. doi: <https://doi.org/10.1017/S0140525X0435017X>
- Langs, R. (2004). Death Anxiety and the Emotion-Processing Mind. *Psychoanalytic Psychology*, *21*(1), 31–53. doi:10.1037/0736-9735.21.1.31
- Latha, K. S., Sahana, M., Mariella, D., Subbannayya, K., & Asha, K. (2013). Factors related to life satisfaction, meaning of life, religiosity and death anxiety in health care staff and students: A cross

- sectional study from India. *Online Journal of Health and Allied Sciences*, 12(2), 7. <http://www.ojhas.org/issue46/2013-2-7.html>
- Latipun, M., Khair, Z., & Dayakisni, T. (2018). *Religiosity and death anxiety among outpatients with chronic diseases: Sense of humor as mediation variable*. In 2018 3rd International Conference on Education, Sports, Arts and Management Engineering (ICESAME 2018). Atlantis Press.
- Lewis, A. M. (2014). Terror management theory applied clinically: Implications for existential-integrative psychotherapy. *Death Studies*, 38(6), 412–417. doi:10.1080/07481187.2012.753557
- Li, Q., Guan, X., Wu, P., Wang, X., Zhou, L., Tong, Y., . . . & Feng, Z. (2020). Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. *New England journal of medicine*. *The New England Journal of Medicine*, 382(13), 1199–1207. doi:10.1056/NEJMoa2001316
- Lu, R., Zhao, X., Li, J., Niu, P., Yang, B., Wu, H., . . . & Tan, W. (2020). Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding. *The Lancet*, 395(10224), 565–574. doi.org/10.1016/S0140-6736(20)30251-8
- Lundh, L., & Radon, V. (1998). Death anxiety as a function of belief in an afterlife. A comparison between a questionnaire measure and a Stroop measure of death anxiety. *Personality and Individual Differences*, 25(3), 487–494. doi:10.1016/s0191-8869(98)00072-5
- Mahamid, F. A., Bdier, D. (2021). The association between positive religious coping, perceived stress, and depressive symptoms during the spread of Coronavirus (COVID-19) among a sample of adults in Palestine: A cross sectional study. *Journal of Religion and Health*. 60, 34–49. doi.org/10.1007/s10943-020-01121-5
- Mahamid, F. A., Veronese, G., Bdier, D., & Pancake, R. (2021). Psychometric properties of the COVID stress scales (CSS) within Arabic language in a Palestinian context. *Current Psychology*. Advanced on line publication. <https://doi.org/10.1007/s12144-021-01794-5>
- Mahamid, F. A., & Berte, D. Z. (2020). Portrayals of Violence and At-Risk Populations: Symptoms of Trauma in Adolescents with High Utilization of Social Media. *International Journal of Mental Health and Addiction*, 18, 980–992. <https://doi.org/10.1007/s11469-018-9999-0>
- Mahamid, F. & Bdier, D. (2020). Fear of COVID-19 and Mental Health Outcomes among Psycho-social Service Providers in Palestine: The Mediating Role of Well-Being. *Journal of Concurrent Disorders*. Advanced online publication. [file:///C:/Users/Lenovo%20V520/Downloads/NK08_FINAL%20\(3\).pdf](file:///C:/Users/Lenovo%20V520/Downloads/NK08_FINAL%20(3).pdf)
- Maraqa, B., Nazzal, Z., Rabi, R., Sarhan, N., Al-Shakhra, K., & Al-Kaila, M. (2021). COVID-19 vaccine hesitancy among health care workers in Palestine: A call for action. *Preventive Medicine*. Advanced online publication. doi.org/10.1016/j.ypmed.2021.106618
- McCoubrie, R. C., & Davies, A. N. (2006). Is there a correlation between spirituality and anxiety and depression in patients with advanced cancer? *Supportive Care in Cancer*, 14(4), 379–385. doi:10.1007/s00520-005-0892-6
- Menzies, R. E., & Menzies, R. G. (2020). Death anxiety in the time of COVID-19: theoretical explanations and clinical implications. *Cognitive Behaviour Therapist*, 13(19), 1–11. doi.org/10.1017/S1754470X20000215
- Meraviglia, M. G. (1999). Critical analysis of spirituality and its empirical indicators: Prayer and meaning in life. *Journal of holistic nursing*, 17(1), 18–33. doi:10.1177/089801019901700103
- Meyers, K., Golden, R. N., & Peterson, F. (2009). *The truth about death and dying*. Infobase Publishing.

- Mohammadzadeh, A., & Najafi, M. (2018). The comparison of death anxiety, obsession, and depression between muslim population with positive and negative religious coping. *Journal of Religion and Health, 59*(2), 1055–1064. doi:10.1007/s10943-018-0679-y
- Momtaz, Y. A., Haron, S. A., Ibrahim, R., & Hamid, T. A. (2015). Spousal death anxiety in old age: gender perspective. *OMEGA-Journal of Death and Dying, 72*(1), 69–80. doi:10.1177/0030222815574702
- Moreira-Almeida, A., Lotufo Neto, F., & Koenig, H. G. (2006). Religiousness and mental health: a review. *Brazilian Journal of Psychiatry, 28*(3), 242–250. doi: 10.1590/s1516-44462006000300018
- Mystakidou, K., Tsilika, E., Parpa, E., Smyrnioti, M., & Vlahos, L. (2007). Assessing spirituality and religiousness in advanced cancer patients. *American Journal of Hospice and Palliative Medicine, 23*(6), 457–463. doi:10.1177/1049909106294880
- Neimeyer, R. A., Currier, J. M., Coleman, R., Tomer, A., & Samuel, E. (2011). Confronting suffering and death at the end of life: The impact of religiosity, psychosocial factors, and life regret among hospice patients. *Death Studies, 35*(9), 777–800. doi:10.1080/07481187.2011.583200
- Newton-John, T., Menzies, R., Chambers, S., & Menzies, R. (2020). Psychological Distress Associated with COVID-19: Estimations of Threat and the Relationship with Death Anxiety. Available at SSRN 3594629
- Niemiec, R. M., & Schulenberg, S. E. (2011). Understanding death attitudes: The integration of movies, positive psychology, and meaning management. *Death Studies, 35*(5), 387–407. doi:10.1080/07481187.2010.544517
- Noyes, J. R., Stuart, S., Longley, S. L., Langbehn, D. R., & Happel, R. L. (2002). Hypochondriasis and fear of death. *The Journal of Nervous and Mental Disease, 190*(8), 503–509. doi: 10.1097/00005053-200208000-00002
- Onuoha, C. U., & Idemudia, E. S. (2019). Death anxiety and associated demographic correlates in a sample of university students, *13*(3), 138–145. doi: 10.31901/24566772.2019/13.03.591
- Pandya, A. K., & Kathuria, T. (2021). Death anxiety, religiosity and culture: implications for therapeutic process and future research. *Religions, 12*(61), 1–13. doi.org/10.3390/rel12010061
- Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, practice*. Guilford Press.
- Puchalski, C. M., & O'Donnell, E. (2005). Religious and spiritual beliefs in end of life care: how major religions view death and dying. *Techniques in Regional Anesthesia and Pain Management, 9*(3), 114–121. doi:10.1053/j.trap.2005.06.003
- Pyszczynski, T. (2019). The role of death in life: Exploring the interface between terror management theory and evolutionary psychology. In T. K. Shackelford & V. Zeigler-Hill (Eds.), *Evolutionary perspectives on death* (pp. 1–24). Springer Nature Switzerland AG. doi.org/10.1007/978-3-030-25466-7_1
- Pyszczynski, T., Solomon, S., & Greenberg, J. (2015). Thirty years of terror management theory: From genesis to revelation. In *Advances in experimental social psychology* (Vol. 52, pp. 1–70). Waltham, MA: Academic Press
- Pyysiainen, I. (2009). *Supernatural agents: Why we believe in souls, gods, and Buddhas*. Oxford university press. doi:10.1093/acprof:oso/9780195380026.001.0001
- Rencher, A. C., & Schaalje, G. B. (2008). *Linear models in statistics*. John Wiley & Sons.
- Rice, J. (2009). *The relationship between humor and death anxiety*. Department of Psychology, copyright Missouri Western State University.

- Robah, K. (2017). *Determinants of existential death anxiety: a cross-sectional survey study on the effect of age, gender and religious affiliation on death anxiety*. Unpublished master's thesis, University of Twente, Netherlands
- Routledge, C., & Juhl, J. (2010). When death thoughts lead to death fears: Mortality salience increases death anxiety for individuals who lack meaning in life. *Cognition and Emotion, 24*(5), 848–854. doi:10.1080/02699930902847144
- Russac, R. J., Gatliff, C., Reece, M., & Spottswood, D. (2007). Death anxiety across the adult years: An examination of age and gender effects. *Death Studies, 31*(6), 549–561. doi:10.1080/07481180701356936
- Safren, S. A., Gershuny, B. S., & Hendriksen, E. (2003). Symptoms of posttraumatic stress and death anxiety in persons with HIV and medication adherence difficulties. *AIDS Patient Care and STDs, 17*(12), 657–664. doi:10.1089/108729103771928717
- Shadinger, M., Hinninger, K., & Lester, D. (1999). Belief in life after death, religiosity and fear of death. *Psychological Reports, 84*(3), 868–868. doi:10.2466/pr0.1999.84.3.868
- Shirkavand, L., Abbaszadeh, A., Borhani, F., & Momenyan, S. (2018). Correlation between spiritual well-being with satisfaction with life and death anxiety among elderlies suffering from cancer. *Journal of General Medicine, 15*(3), 1–7. doi.org/10.29333/ejgm/85501
- Singh, R. S. (2013). Death anxiety among aged Manipuris, India. *ZENITH International Journal of Multidisciplinary Research, 3*(1), 209–216.
- Strachan, E., Schimel, J., Arndt, J., Williams, T., Solomon, S., Pyszczynski, T., & Greenberg, J. (2007). Terror mismanagement: Evidence that mortality salience exacerbates phobic and compulsive behaviors. *Personality and Social Psychology Bulletin, 33*(8), 1137–1151. doi:10.1177/0146167207303018 1151
- Suhail, K., & Akram, S. (2002). Correlates of death anxiety in Pakistan. *Death Studies, 26*(1), 39–50. doi:10.1080/07481180210146
- Thorson, J. A., & Powell, F. C. (2000). Death anxiety in younger and older adults. In A. Tomer (Ed.), *Death attitudes and the older adult: Theories, concepts, and applications* (pp. 123–136). Brunner-Routledge
- Tepper, L., Rogers, S. A., Coleman, E. M., & Malony, H. N. (2001). The Prevalence of religious coping among persons with persistent mental illness. *Psychiatric Services, 52*(5), 660–665. doi:10.1176/appi.ps.52.5.660
- Tolstikova, K., Fleming, S., & Chartier, B. (2005). Grief, complicated grief, and trauma: The role of the search for meaning, impaired self-reference, and death anxiety. *Illness, Crisis & Loss, 13*(4), 293–313. doi:10.1177/105413730501300402
- Urien, B. (2007). Selfless Time: From life space to death anticipation. *Time & Society, 16*(2–3), 367–386. doi:10.1177/0961463x07080273
- Vail, K. E., Rothschild, Z. K., Weise, D. R., Solomon, S., Pyszczynski, T., & Greenberg, J. (2010). A terror management analysis of the psychological functions of religion. *Personality and Social Psychology Review, 14*(1), 84–94. doi:10.1177/1088868309351165
- van Bruggen, V., Vos, J., Bohlmeijer, E. T., & Glas, G. (2013). Over de plaats van existentiële thema's in cognitieve gedragstherapie [Existential themes in cognitive therapy]. *Gedragstherapie, 46*(2), 119–134.
- Vance, L. M. (2014). Death anxiety and the relational. *Journal of Humanistic Psychology, 54*(4), 414–433. doi.org/10.1177/0022167813507631

- Veronese, G., Mahamid, F., Bdier, D., & Pancake, R. (2021). Stress of COVID-19 and mental health outcomes in Palestine: the mediating role of well-being and resilience. *Health Psychology Report*. Advance online publication <https://doi.org/10.5114/hpr.2021.104490>
- Mahamid, F., & Bdier, D. (2020). Fear of COVID-19 and Mental Health Outcomes among Psychosocial Service Providers in Palestine: The Mediating Role of Well-Being. *Journal of Concurrent Disorders*. Advanced online Publication.
- Vishkin, A., & Tamir, M. (2020). Fear not: Religion and emotion regulation in coping with existential concerns. In K. E. Vail III & C. Routledge (Eds.), *The science of religion, spirituality, and existentialism* (pp. 325–338). Oxford, UK: Elsevier.
- Wang, Y., Di, Y., Ye, J., & Wei, W. (2020). Study on the public psychological states and its related factors during the outbreak of coronavirus disease 2019 (COVID-19) in some regions of China. *Psychology, Health & Medicine*, 26(1), 13–22. doi:10.1080/13548506.2020.17468177
- Wink, P., & Scott, J. (2005). Does religiousness buffer against the fear of death and dying in late adulthood? Findings from a longitudinal study. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 60(4), 207–214. doi:10.1093/geronb/60.4.p207
- Wu, A. M., Tang, C. S., & Kwok, T. C. (2002). Death anxiety among Chinese elderly people in Hong Kong. *Journal of Aging and Health*, 14(1), 42–56. doi:10.1177/089826430201400103
- Xiang, Y. T., Yang, Y., Li, W., Zhang, L., Zhang, Q., Cheung, T., & Ng, C. H. (2020). Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. *The Lancet Psychiatry*, 7(3), 228–229. doi:10.1016/s2215-0366(20)30046-8
- Zana, Á. (2009). Death attitude and changes of death image in the Hungarian society. Examination of generational value-judgment and possibilities of measurement. Is death still a taboo? *Orvosi Hetilap*, 150(25), 1183–1187. doi:10.1556/oh.2009.28577
- Zheng, Y., Goh, E., & Wen, J. (2020). The effects of misleading media reports about COVID-19 on Chinese tourists' mental health: a perspective article. *Anatolia*, 31(2), 337–340. doi.org/10.1080/13032917.2020.1747208