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ORIGINAL PAPER

Investigation into the Relationship Between COVID-19 Anxiety and Spiritual Orientation in Elderly Individuals in Nursing Homes and Care Centers in Turkey

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Abstract

Spirituality is seen as a coping strategy for reducing stress and anxiety. This research aimed to investigate the relationship between COVID-19 anxiety and the spiritual orientation of individuals aged 65 and over in nursing homes and elderly care centers during the COVID-19 pandemic in Turkey. The findings showed that with increasing age, coronavirus anxiety levels decrease, and spiritual orientation increases. There was a negative relationship between the time of diagnosis of COVID-19 and coronavirus anxiety ($r = -.48$; $p = 0.01$). Those diagnosed with COVID-19 had higher coronavirus anxiety levels ($U = 374.5$; $p < 0.001$) and had lower spiritual orientation ($U = 593.5$; $p > 0.05$). As spiritual orientation increases in elderly individuals, their level of anxiety decreases.

Keywords The elderly · COVID-19 anxiety · Spiritual orientation · Turkey

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Introduction

The elderly population is increasing worldwide. In Turkey, the rate of the elderly population (age 65 and over) increased by 22.5% in the last five years and reached 7 million 953 thousand 555 people in 2020. While the proportion of the elderly population in the total population was 8.3% in 2016, it increased to 9.7% in 2021 (TUIK, 2022). Old age is when individuals experience physical losses and an increase in disability, become dependent on the environment and experience more mental health problems (Ağar, 2020).

COVID-19 Anxiety and Spiritual Orientation

Depending on the changing social, mental and physical conditions in elderly individuals, high anxiety levels may turn into an anxiety disorder (Yanardağ & Şahin, 2019). Individuals' religious and spiritual tendencies have an important place in coping with experienced losses and anxiety (Achour et al., 2021; Akanni et al., 2021). The COVID-19 pandemic has affected religious feelings, thoughts and behaviors and has had a significant impact on lifestyles. To cope with the epidemic that causes fear, stress and depression, many people have turned to taking shelter in God more and participating in rituals (e.g., praying and reading the Qur'an) more often (Kula, 2020).

In times of epidemics, praying or worshiping to be close to God is an effective way of coping with difficulties. Some studies on this subject show that one of the prevailing tools for finding meaning in life is "spirituality," generally defined as a search for meaning (Gencer, 2019). It has been determined that there has been an increase in people's orientation to religion and fulfilling their religious rituals during the pandemic (Güngörer, 2020). As a coping strategy, spirituality is effective in eliminating an undesirable situation or stressor, changing the way of evaluating the situation that causes stress, reducing the effects of stress or managing the source of stress (Achour et al., 2021; Akanni et al., 2021; Akpınar et al., 2021.

Spiritual orientations and practices are thought to have a significant impact on how people interpret and deal with traumatic events. Today, the newly emerged health-threatening coronavirus disease (COVID-19) pandemic has taken the whole world under its influence. Elderly individuals are at higher risk for COVID-19 infection due to age-related physiological and biological changes in organs and systems and underlying medical conditions (D'Adamo et al., 2020; Mueller et al., 2020).

In nursing and care homes, the elderly often live close to each other, so it can be quite difficult to transport or quarantine them when they get sick. Isolation practices to reduce the spread of the epidemic and mortality rates negatively affect mental and physical health and functionality in elderly individuals (D'Adamo et al., 2020; İnel Manav et al., 2021). The COVID-19 pandemic has increased interest in investigating the role of religion and spirituality in coping

with anxiety (Achour et al., 2021; Kasapoğlu, 2022). A literature review among several examples of the relationship between spirituality and anxiety showed conflicting reports. Most studies have found an inverse relationship between spirituality and anxiety (Akanni et al., 2021).

Spirituality is thought to be important in reducing anxiety (Akanni et al., 2021; González-Sanguino et al., 2020; Kasapoğlu, 2020a), fear of COVID-19 (Kasapoğlu, 2020b), and death anxiety (Rababa et al., 2021). Rababa et al.'s (2021) descriptive study showed that the majority of community dwellers had low levels of religious coping and mental orientation and high levels of death anxiety. Kasapoğlu et al. (2022) investigated the effects of spirituality, general self-efficacy, and COVID-19 anxiety on people's hopelessness levels during COVID-19. Their studies have shown that spirituality, self-efficacy, and COVID-19 anxiety directly affect hopelessness.

"Spirituality" provides a positive sense of inner peace and healing for religious and secular people (Rababa et al., 2021). Some studies reported no association between spirituality and anxiety, while others showed that increased spirituality could increase anxiety. Most published studies are among patients with chronic diseases (Akanni et al., 2021). However, studies conducted in both Muslim and secular countries, such as Turkey, especially in elderly groups, are not sufficient.

In this respect, the fight against the pandemic necessitates taking preventive measures for elderly individuals, increasing their functioning, reducing their anxiety, and ensuring they do not feel alone. This study aimed to determine the relationship between COVID-19 anxiety and the spiritual orientation of individuals aged 65 and over in nursing homes and elderly care centers during COVID-19.

Methods

Research Design

This study has a descriptive correlational design.

Participants

The research population consisted of all individuals aged 65 and over living in X Province Nursing Home and Rehabilitation Center (N = 52) and Y Nursing and Elderly Care Home (N = 36) between January 30 and May 01, 2021, and among those, 80 individuals meeting the study criteria constituted the sample of the study. At the first admission to these centers, a standardized mini-mental test was administered to the elderly by a psychologist. A total of eight elderly individuals, of whom one had Alzheimer's disease, two had dementia, two were bedridden, and three had less than 24 points on the mini-mental test, were not included in the study.

Inclusion Criteria for the Study

Individuals aged 65 and over who volunteered to participate in this study; stayed in a nursing home for at least six months; were literate; had no vision, hearing, or verbal communication problems; had no cognitive disability in answering the questions (e.g., dementia, Alzheimer's and severe depression); had a mini-mental test score of 24–30; and were not immobilized were included in the study.

Data Collection Process

At the time of the study, outside entrances and visits to the institutions were limited due to COVID-19 measures. In the interviews with the management of the institutions, we were told that the studies could be conducted with the help of nurses and psychologists. We interviewed nurses and psychologists and provided information about the content of the present study and how the data would be collected. Elderly individuals were taken to the interview room in the institutions one by one. Then, the elders were informed about the content of this study by the nurse and psychologist, and their consent was obtained. The elderly individuals who agreed to participate in this study were accompanied by a nurse or psychologist while answering the questionnaire questions on the computer. They helped in cases where the questions could not be understood or read. If the elders have questions, they are answered. Questionnaires were completed in between 30 and 45 min with each elderly individual, during which time the researchers kept in touch with the staff about the conduct of this study by phone.

Data Collection Tools

The data in this study were collected with the "Personal Information Form," "Coronavirus Anxiety Scale" and "Spiritual Orientation Scale." The elderly completed the forms in approximately 30 min.

Personal Information Form

The Personal Information Form contains 20 questions prepared by the researcher in line with the literature (Doğanay et al., 2020; Gencer, 2020; İnel Manav et al., 2021) to determine the age, income status, social security, gender, marital status, education status, presence of the adult child, presence of chronic disease, physical disability, relatives, rules applied in the last month to protect from coronavirus, and COVID-19 diagnosis of individuals over the age of 65 who participated in this study.

COVID-19 diagnosis of individuals: In this study, those who were diagnosed with COVID-19 before the time of the study, those who showed the symptoms of COVID-19, who tested positive as a result of the screening, and those who experienced the isolation process were evaluated as yes. In this study, no distinction was

made between “widow”, “divorced” and "never married" among sociodemographic questions. The questions were prepared as “Divorced/Widowed/Single” and “Married”. Divorced/Widowed/Single are marked as single.

Spiritual Orientation Scale (SOS)

The Spiritual Orientation Scale was developed by Kasapoğlu (2015) according to certain parameters of spirituality, such as belief in divine power, search for meaning in life, and prayer/meditation. The Spiritual Orientation Scale is a 7-point Likert-type scale consisting of 16 items. This scale is scored from “1 = Strongly Disagree” to “7 = Strongly Agree.” The score that can be obtained from the scale varies between 16 and 112.

A high score on the scale indicates a high level of spiritual orientation. The Cronbach’s alpha reliability coefficient of the scale developed by Kasapoğlu (2015) was 0.87, and the test–retest value was 0.84. In this study, the reliability coefficient of the Spiritual Orientation Scale Cronbach’s alpha was determined to be 0.99.

Coronavirus Anxiety Scale (CAS)

The scale was developed by Lee (2020) to quickly and reliably identify possible dysfunctional anxiety cases and the severity of anxiety symptoms that may be observed in connection with the psychological reactions of the disease in individuals during the coronavirus, which is a social problem. The validity and reliability study of the scale (in Turkish) was conducted by Akkuzu et al. (2020). The scale is a five-point Likert-type scale and consists of five items.

Points that can be obtained from the scale range from 0 to 20. The higher the score obtained from the scale, the higher the coronavirus anxiety level. The Cronbach’s alpha internal consistency coefficient of the Coronavirus Anxiety Scale was 0.81. The Guttman split-half coefficient, which examines the consistency between the two halves of the scale, was calculated as 0.79. After testing 120 people at 15-day intervals, the test–retest correlation coefficient was 0.88 (Akkuzu et al., 2020). In this study, the Cronbach’s alpha reliability coefficient of the Coronavirus Anxiety Scale was 0.97.

Ethical Aspect of the Study

This research was approved by the University Social and Human Sciences Research Ethics Committee (Board number: 05.02.2021-10660/02.15), and institutional permission (Number: 26.12.2020/2361) was obtained from the Family and Social Policies Directorates. Verbal information was given in Google document form to all the elderly participating in this study, and their written consent was obtained. The volunteer elderly who could use the online system completed the questionnaires themselves, and those who could not use it completed the questionnaires with the support of nurses working in nursing and care homes.

Data Analysis

The data were analyzed with IBM SPSS V25 software. Percentage, mean, first quartile [Q1]/third quartile [Q3], and standard deviation were used to analyze sociodemographic data. Compliance with the normal distribution was examined using Shapiro−Wilk and Kolmogorov−Smirnov tests. Data that did not fit the normal distribution are presented as the median (Q1–Q3).

Mann−Whitney U and Kruskal−Wallis tests were used to compare nonnormally distributed data. Data that were statistically significantly different as a result of the Kruskal−Wallis test were evaluated using Bonferroni correction to determine which groups the difference originated from. The Spearman correlation coefficient was used to examine the relationship between nonnormally distributed variables. The significance level was accepted as $p < 0.05$. The correlation relationship was interpreted as weak (r: 0.00–0.30), moderate (r: 0.31–0.49), strong (r: 0.50–0.69) and very strong (r: 0.70–0.100) (Tavşancıl, 2002).

Results

The mean age of the elderly individuals participating in this study was 74.28 ± 8.10 years. Of the participants, 57.5% (n = 54) were middle-income status, 98.8% (n = 79) had social security, 57.5% (n = 46) were male, 7.5% (n = 6) were married and living together at nursing homes, and the majority (37.5% n = 30) were primary school graduates. The majority of the elderly had adult children. Of the participants, 58.75% had a chronic disease, and 16.25% had a physical disability.

Of the 80 participants, 33.8% (27) showed symptoms of COVID-19 and tested positive in line with the diagnostic criteria and were diagnosed of COVID-19, and 73.8% (59) had relatives diagnosed with COVID-19 (Table 1). The coronavirus anxiety levels and spiritual orientations of the participants were compared according to their demographic characteristics. Participants' coronavirus anxiety levels and spiritual orientations did not differ statistically significantly according to gender, marital status, presence of adult children, cohabiting person, and income status ($p > 0.05$). Those with high school or higher education levels had higher coronavirus anxiety levels ($\chi^2 = 7.521$; $p = 0.023$) and lower spiritual orientations ($\chi^2 = 6.807$; $p = 0.033$) than literate individuals and those with primary school education.

The ages of the participants had a weak negative ($r = -0.223$; $p = 0.046$) correlation with the coronavirus anxiety scale scores and a weak but significant positive correlation ($r = 0.236$; $p = 0.035$) with the spiritual orientation. This indicates that with increasing age, the level of coronavirus anxiety decreases and spiritual orientation increases. A previous diagnosis of COVID-19 had a significant moderate negative association with coronavirus anxiety ($r = -0.478$; $p = 0.012$). Those previously diagnosed with COVID-19 showed a weak negative association with a spiritual orientation, despite being not statistically significant ($r = -0.148$; $p = 0.461$) (Table 2).

A comparison of the participants' coronavirus anxiety and spiritual orientation scale scores according to their COVID-19 characteristics is shown in Table 3.

Table 1 Demographic characteristics of the participants (n = 80)

Characteristics		$\bar{X} \pm SD$
Age		74.28 ± 8.10
	n	%
Income status		
Low	12	15.0
Middle	54	67.5
High	14	17.5
Social security		
Yes	79	98.8
No	1	1.2
Gender		
Female	34	42.5
Male	46	57.5
Marital status		
Married	6	7.5
Single	74	92.5
Education status		
Literate	27	33.75
Primary education	30	37.5
High school and higher education	23	28.75
Presence of adult children		
Yes	51	63.8
No	29	36.3
Presence of chronic disease		
Yes	47	58.75
No	33	41.25
Physical disability		
Yes	13	16.25
No	67	83.75
Getting diagnosed with COVID-19		
Yes	27	33.8
No	53	66.2
Presence of relatives diagnosed with COVID-19		
Yes	59	73.8
No	21	26.2

Accordingly, those diagnosed with COVID-19 had higher coronavirus anxiety levels (U = 374.500; $p < 0.001$) and lower spiritual orientation (U = 593.500; $p = 0.213$). Those whose relatives had been diagnosed with COVID-19 had higher coronavirus anxiety levels (U = 341.500; $p = 0.001$) and lower spiritual orientation (U = 437.000; $p = 0.045$).

Table 2 Association of several variables with the coronavirus anxiety scale and spiritual orientation scale

		CAS	SOS
Spearman's Rho			
Age	r	− 0.223*	0.236*
	p	0.046	**0.035**
Time of diagnosis of COVID-19	r	− 0.478*	− 0.148
	p	**0.012**	0.461

Bold values indicate statistically significant $p < 0.05$

CAS coronavirus anxiety scale; SOS spiritual orientation scale

*Correlation is significant at the 0.05 level (2-tailed)

Those who stated that their anxiety levels had increased since COVID-19 had higher coronavirus anxiety levels and spiritual orientation (U = 229.500; $p < 0.001$, U = 437.000; $p = 0.045$, respectively). Those who described their level of anxiety about coronavirus transmission as high had higher coronavirus anxiety levels ($\chi^2 = 46.358$; $p < 0.001$), and those who described their anxiety about coronavirus transmission as nonexistent had a lower spiritual orientation ($\chi^2 = 0.616$; $p = 0.893$). Those with severe concerns about their own health due to coronavirus had higher coronavirus anxiety levels ($\chi^2 = 48.788$; $p < 0.001$), while those who had no concerns about their own health because of coronavirus had lower spiritual orientation ($\chi^2 = 0.743$; $p = 0.863$). Those who stated that their orientation toward spirituality increased during COVID-19 had a higher spiritual orientation (U = 291,500; $p < 0.001$) than those who stated that there was no change (Table 3).

Table 4 compares the coronavirus anxiety levels and spiritual orientations of the participants according to the measures they took in the last month to protect themselves from COVID-19. Accordingly, those who stated that they highly followed the hand and general cleaning rules had higher levels of coronavirus anxiety ($\chi^2 = 25.411$; $p < 0.001$) and higher spiritual orientation than those who stated that they mildly followed the hand and general cleaning rules ($\chi^2 = 7.614$; $p = 0.020$). Those who stated that they followed social distancing to a great extent had higher coronavirus anxiety levels ($\chi^2 = 22.614$; $p < 0.001$) and higher spiritual orientation than those who stated that they followed social distancing moderately ($\chi^2 = 8.759$; $p = 0.013$).

Those who stated that they mostly wore masks had higher coronavirus anxiety levels ($\chi^2 = 22.190$; $p < 0.001$) and higher spiritual orientation ($\chi^2 = 7.761$; $p = 0.021$). Those who stated that they often avoided going into the crowd had higher coronavirus anxiety levels ($\chi^2 = 21.440$; $p < 0.001$). Those who stated that they obeyed the rules of respiratory manners (e.g., coughing and sneezing) had higher coronavirus anxiety levels ($\chi^2 = 22.123$; $p < 0.001$) and higher spiritual orientation ($\chi^2 = 5.904$; $p = 0.052$) (Table 4).

Whether there is a relationship between coronavirus anxiety and spiritual orientation was investigated using the Spearman correlation test. The correlation analysis

Table 3 Comparison of the participants' coronavirus anxiety scale and spiritual orientation scale scores by their COVID-19 characteristics

Characteristics		CAS Median (Q1–Q3)	SOS Median (Q1–Q3)
Getting diagnosed with COVID-19	Yes	5 (0–10)	80 (66–90)
	No	0 (0–1)	87 (65–100)
Test statistics		**U = 374.500**	U = 593.500
		***P* < 0.001**	$p = 0.213$
Presence of a relatives diagnosed with COVID-19	Yes	2 (0–8)	80 (64–95)
	No	0 (0–0)	96 (65–112)
Test statistics		**U = 341.500**	**U = 437.000**
		***p* = 0.001**	***p* = 0.045**
Anxiety level change since the beginning of the epidemic process	Increased	1 (0–7)	89 (70–99)
	No Change	0 (0–0)	64 (64–78.5)
Test statistics		**U = 229.500**	**U = 279.000**
		***p* < 0.001**	***p* = 0.002**
Current level of anxiety about coronavirus transmission	None	0 (0–0)	97 (70.75–105.25)
	Mild	0 (0–0)	80 (64–101)
	Moderate	0 (0–1)	87 (64.5–102.5)
	A lot	7.5 (5–10)	80.50 (70–94.75)
Test statistics		**χ^2 = 46.358**	$\chi^2 = 0.616$
		***p* < 0.001**	$p = 0.893$
Current level of anxiety about general health due to the coronavirus	None	0 (0–0)	97 (70.75–105.25)
	Mild	0 (0–0)	80 (64–99.75)
	Moderate	0 (0–1)	82 (65–109)
	A lot	8 (5–10)	81 (70–94.5)
Test statistics		**χ^2 = 48.788**	$\chi^2 = 0.743$
		***P* < 0.001**	$p = 0.863$
Spiritual orientation level change since the beginning of the epidemic process	Increased	0.50 (0–10)	96 (81–111.25)
	No Change	0 (0–2.75)	66 (64–82.25)
Test statistics		U = 677.500	**U = 291.500**
		$p = 0.203$	***P* < 0.001**

Bold values indicate statistically significant $p < 0.05$

CAS coronavirus anxiety scale; *SOS* spiritual orientation scale; χ^2 Kruskal–Wallis test; *U* Mann–Whitney test; *Q1* first; quartile; *Q3* third quartile

results are shown in Table 5. The correlation analysis revealed a weak negative but not statistically significant relationship between COVID-19 anxiety and spiritual orientation ($r = -0.086$; $p = 0.450$) (Table 5).

Table 4 Comparison of the coronavirus anxiety levels and spiritual orientations of the participants according to the measures they have taken in the last month to protect themselves from COVID-19

Measures		CAS Median (Q1–Q3)	SOS Median (Q1–Q3)
Compliance with hand and general cleaning rules	Little	0 (0–0)	65 (64–81)
	Moderate	0 (0–2)	95 (64.75–106.25)
	A lot	8(4–10)	78 (67.75–90)
Test statistics		**$\chi^2 = 25.411$**	**$\chi^2 = 7.614$**
		$P < 0.001$	**$p = 0.020$**
Social distancing status	Little	0 (0–2)	65 (64–87)
	Moderate	0 (0–1)	96 (67–109)
	A lot	7(1.5–10)	79 (67.5–92.5)
Test statistics		**$\chi 2 = 22.614$**	**$\chi 2 = 8.759$**
		$p < 0.001$	**$p = 0.013$**
Mask wearing status	Little	0 (0–0.5)	65 (64–81)
	Moderate	0 (0–1.75)	93 (65.5–106)
	A lot	9 (0.75–10)	80 (67.75–96)
Test statistics		**$\chi^2 = 22.190$**	**$\chi^2 = 7.761$**
		$p < 0.001$	**$p = 0.021$**
Avoidance of crowd	Little	0 (0–5)	70 (64–87)
	Moderate	0 (0–1)	91 (64.5–105)
	A lot	8 (0–10)	80 (68–99)
Test Statistics		**$\chi^2 = 21.440$**	$\chi^2 = 5.939$
		$p < 0.001$	$p = 0.051$
Compliance with the rules of respiratory manners (e.g., coughing and sneezing)	Little	0 (0–0.75)	65 (64–81)
	Moderate	0 (0–2)	92.50 (64.75–104)
	A lot	9 (0.75–10)	80 (67.75–96)
Test statistics		**$\chi^2 = 22.123$**	**$\chi^2 = 5.904$**
		$p < 0.001$	**$p = 0.052$**

Bold values indicate statistically significant $p < 0.05$

CAS coronavirus anxiety scale; *SOS* spiritual orientation scale; χ^2 Kruskal−Wallis test; *Q1* first quartile; *Q3* third quartile

Discussion

In an unexpected pandemic, it is considered normal for individuals to experience fear, anxiety, and panic and try to avoid this situation (Yanarates, 2020). Especially in old age, religious and spiritual orientations have a significant place in coping with losses. This research was conducted by interviewing 80 elderly people to investigate the relationship between the anxiety experienced by individuals aged 65 and over in nursing homes and elderly care centers during COVID-19 and their spiritual orientation.

Table 5 The relationship between coronavirus anxiety and spiritual orientation

			Coronavirus anxiety scale	Spiritual orientation scale
Spearman's Rho	Coronavirus anxiety scale	r	1.000	−0.086
		p		0.450

*Correlation is significant at the 0.05 level (2-tailed)

The coronavirus anxiety levels and spiritual orientations of the participants did not differ significantly by gender, marital status, presence of adult children, cohabiting person, and income status. Regarding education status, those with a high school or higher education had higher levels of coronavirus anxiety and lower spiritual orientations than those who were literate and primary school graduates. One study found that, compared to male older adults, older female adults had higher levels of religious coping and lower levels of death anxiety. After controlling for sociodemographic characteristics, religious coping and spiritual orientations were significant predictors of death anxiety in older adults (Rababa et al., 2021).

Another study found that women experience higher levels of coronavirus fear. Those with postgraduate degrees reported significantly lower fears of coronavirus than those with other levels of education. Fear of coronavirus did not differ according to the age range, income level and marital status of the participants. According to the results of the correlation analysis, a negative relationship was found between fear of coronavirus and spiritual orientations (Kasapoğlu, 2020b).

Contrary to the findings of this study, it was previously reported that those who experienced the fear of COVID-19 the most were primary school graduates, and those who experienced the least were those with a bachelor's degree (Bakioğlu et al., 2020). Wang et al. (2020), on the other hand, found that the general population without formal education had a higher probability of depression during the pandemic. Given that the increased awareness and consciousness level with education is likely to differentiate individuals' perspectives and expectations regarding pandemic control practices, the fact that our participants were the elderly population and most had a high level of education could have increased their compliance with the pandemic control measures as well as their anxiety.

The spiritual orientation of those with a high school and above education was lower than that of those who were literate and primary school graduates. Several studies in the literature have reported that as education level increases, spiritual orientation decreases. Akyüz and Kulaoğlu (2021) stated that the higher the education level is, the lower the spiritual orientation.

As the level of education rises, it inevitably increases awareness and encourages making inquiries about the meaning of life, discovering the spiritual potentials in individuals, and hence contributing to spiritual orientation. However, the increase in education level and decrease in spiritual orientation in this study may affect the participants' own experiences and internal and religious characteristics. In addition,

regardless of the religious structure, COVID-19 might affect the meaning and purpose of life. Spirituality is private and personal and not just linked to religion.

Since people's views of spirituality differ, there is a possibility of being affected by the psychological dimension. This study shows that with increasing age, coronavirus anxiety levels decrease and spiritual orientation increases. The group with the highest severity of the disease and the highest mortality is individuals over the age of 60 and accompanied by one or more chronic diseases (WHO, 2020). As the fear of death increases with advancing age and the presence of chronic diseases, religious beliefs and spiritual orientation have had a motivating effect on physical, social and psychological anxiety and fears, especially in elderly individuals and those with chronic diseases (Çakmak & Bilici, 2021).

Solaimanizadeh et al. (2019) found a significant negative relationship between spirituality and death anxiety. Compared to people with a low spiritual orientation, people with high levels of spiritual orientation were more capable of controlling common feelings of anxiety about both the actual and expected death of themselves and their loved ones. Studies have reported that spirituality is a factor in alleviating anxiety, requestioning the meaning of life and the thought that there is great power against the thought of death is comforting (Akanni et al., 2021; González-Sanguino et al., 2020; Gürsu et al., 2021).

The fact that COVID-19 especially affects the high-risk population and taking precautions for it is a reality that affects the ability of elderly people who are already anxious to relate to pandemic conditions and their ability to cope with this situation (Drummond & Carey, 2020). Chirombe et al. (2020) concluded that people use different social, psychological, religious, and physical coping strategies during quarantine to reduce stress and anxiety and enjoy life with normal daily routines without physical contact with the outside world. Our study suggests that the fear of illness that surfaces with increasing age increases spirituality, and as spirituality increases, anxiety decreases. As a result, limited and contradictory findings have been reported in the literature regarding the effects of sociodemographic variables, such as gender, education and age, on religiosity and spirituality in the elderly (Bassett & Bussard, 2018; Kasapoğlu, 2020b; Rababa et al., 2021). There are studies showing that religious orientation is a positive coping method as well as a negative coping method. In the study of Batan and Ayten (2015) on religious coping and resilience, it was observed that as negative coping methods such as alienation from spirituality in the face of the negativities people experience, there is a decrease in their tendency to act in harmony in family relations and to support each other. Based on these findings, it can be concluded that choosing maladaptive coping methods in the face of negativities may negatively affect their psychological and emotional health. Tull et al. (2020) reported that spending time at home and high perceived social support during the COVID-19 process were associated with low loneliness. Losada-Baltar et al. (2021) emphasizes that communicating with family members during the COVID-19 pandemic can reduce loneliness. Morrow-Howell et al. (2020) emphasized that family and intergenerational relations develop during the epidemic and that the pandemic is effective in strengthening social ties. However, in the isolation conditions applied to the elderly in nursing homes during the pandemic period, there is also a loss of relationship. Loss of family contact and close environment has affected feelings of

commitment. Restriction of family visits causes the elderly to experience emotional problems such as limitation of affect, withdrawal, and anxiety. The social environment is a fundamental element for an individual's meaning and identity, and the loss of relationships in this area significantly affects an individual's well-being and even physical health (Drummond & Carey, 2020).

The coronavirus anxiety level and spiritual orientation also increased in those recently diagnosed with COVID-19. As the highest death rate occurred among elderly individuals during COVID-19 (Qiu et al., 2020), those recently diagnosed may have a higher level of COVID-19 anxiety. With COVID-19, people felt closer to death. Being diagnosed with COVID-19 may also have increased this situation. A study conducted in our country revealed that as death anxiety and fear increase, the level of behavior, emotion and cognition increases as spirituality increases regarding survival motivation (Memiş & Düzel, 2020). In one study, the fear of COVID-19 did not differ according to the COVID-19 diagnosis status of the acquaintance (Kasapoğlu, 2020b). The findings in our study are consistent with the literature. Palgi et al. (2020) stated that adults over the age of 60 have more effective emotion regulation and experience, and experience less stress against life-threatening situations. Zhang et al. (2017) and Niu et al. (2020) emphasized that there is a significant relationship between loneliness and hopelessness levels in their study with older adults and that loneliness and hopelessness can be reduced by using social support systems. Koenig (2020) stated that spirituality is a powerful source of hope and is effective in reducing anxiety.

The increase in the time from being diagnosed with COVID-19 had a moderately significant relationship with coronavirus anxiety and a weak insignificant relationship with a spiritual orientation. Accordingly, it can be concluded that those diagnosed with COVID-19 in the distant past have less anxiety about the coronavirus. The literature also includes reports of moderate coronavirus anxiety levels (Ekiz et al., 2020; Wang et al., 2020). In a study conducted in China, where COVID-19 first emerged, two-thirds of the participants stated that they experienced mild anxiety, and one-third reported moderate and severe anxiety (Wang et al., 2020). Ekiz et al. (2020) examined the control perception and health anxiety levels of 1050 individuals regarding COVID-19 and concluded that they had moderate anxiety. The reason for the low level of anxiety in the study can be attributed to the increase in spiritual orientation.

Accordingly, people turn to religion to find meaning in difficult times and sufferings. To interpret and reevaluate traumatic events, such as illness and death, turning to spirituality emerges as an effective coping method (Gencer, 2020). In their study on the biopsychosocial effects of COVID-19 on elderly individuals, Ercan and Arıca (2020) concluded that elderly individuals are fatalistic, belief has a great impact on their psychological strength, and they do not experience fear of death and consider death a fate.

Examination of the relationship between COVID-19 anxiety and spiritual orientation by the COVID-19 characteristics of the participants showed that those diagnosed with COVID-19 had higher coronavirus anxiety levels and lower spiritual orientation. Those whose relatives had been diagnosed with COVID-19 had higher coronavirus anxiety levels and lower spiritual orientations. Those who stated that

their anxiety levels had increased since the pandemic had higher coronavirus anxiety levels and spiritual orientation.

Those with a high level of anxiety about COVID-19 transmission had higher COVID-19 anxiety levels, and those with no anxiety about coronavirus transmission had a lower spiritual orientation. Those with high concerns about their own health due to COVID-19 had higher coronavirus anxiety levels, and those who had no concerns about their own health due to COVID-19 had lower spiritual orientation. Those who stated that their orientation toward spirituality increased during COVID-19 had a higher spiritual orientation than those who stated that there was no change.

In a study, participants' low levels of spiritual orientations were explained by the low life satisfaction that people experienced during COVID-19 and the sense of discomfort with the meaning and purpose of life (Rababa et al., 2021). Boztilki and Ardıç (2017) state that spirituality is a motivational force to create existential meaning in people's lives. Frequently encountered situations, such as conflict, stress and anxiety, providing moral support with the presence of moral values make a significant contribution to the ability of people to cope with negative events and difficulties (Akpınar & Aşti, 2021).

A qualitative study determined that spirituality is a basic element that helps elderly individuals adapt to daily living conditions in their lives (Rahimi et al., 2013). Studies in the literature report that spirituality has a negative and significant relationship with anxiety (Kasapoğlu et al., 2022; Rababa et al., 2021). When individuals' spirituality level is high, they respond positively to stress and distress, and their anxiety level decreases (Kasapoğlu, 2020a, 2020b, 2022). In our study, this finding is consistent with the literature.

Comparison of the coronavirus anxiety levels and spiritual orientations of the participants according to the measures they took in the last month to protect from coronavirus revealed that the elderly who stated that they followed the rules of hand and general cleaning, those who avoided crowds, those who paid attention to social distance, and those who wore masks and paid attention to respiratory manners (e.g., coughing and sneezing) had higher coronavirus anxiety levels and spiritual orientations. It is thought that the emphasis on paying attention to hygiene rules in the visual and written media and the fact that individuals live in a crowded and collective environment are effective in increasing their coronavirus anxiety levels and their orientation toward spirituality. The WHO and the Ministry of Health of the Republic of Turkey emphasize that it is important to pay attention to hygiene rules to protect ourselves from COVID-19. It is known that individuals take more precautions regarding hygiene, cleaning and contact as their concerns about their health increase. Consequently, the consumption of hygiene products increases (Karataş, 2020).

In another study, the fact that participants stated that their anxiety levels about the virus increase when they see someone coughing/sneezing at a high rate and when they are close to people showed that it increases the sense of uncertainty and increases anxiety in individuals due to the risk of transmission at any time (Memiş & Düzel, 2020). A study on the anxiety and hygiene behaviors of 240 people during COVID-19 by Altun (2020) found that those who had anxiety paid attention to hygiene rules. A study on 520 people who examined the social effects, change, and

empowerment of COVID-19 reported that after COVID-19, the use of cleaning and hygiene products, masks and gloves increased. The behavior of being in crowded places decreased (Karataş, 2020).

In the correlation analysis performed to determine the relationship between the coronavirus anxiety levels of the participants and their spiritual orientation, no statistically significant difference was found, although there was a weak negative relationship between anxiety and spiritual orientation. The literature supports the weak negative correlation between spiritual orientation and anxiety because elderly people feel close to the creator, devote more time to worship, and have effective support systems in coping with difficulties. As it adds meaning to life and promises individuals about the future, an increase in spirituality reduces the level of anxiety (Akanni et al., 2021; Akyüz & Kulaoğlu, 2021).

Vural and Ayten (2021) found a negative correlation between depression and spiritual orientation in their study with 1008 people between the ages of 18–78. Their study mentions the protective effects of religion and spiritual orientation on the individual. A study conducted by Kasapoğlu (2020a) with 565 people determined that orientation toward spirituality has an effect on the soundness of mental health and that the psychological resilience of individuals with a high orientation toward spirituality is also high. Koening (2020) stated that elderly people have an increase in their orientation to religion and spirituality in order to alleviate the anxiety they experience during the COVID-19 epidemic. Spirituality and religion can be used as strategies for coping with anxiety (Hiçdurmaz & Oz, 2013). It is thought that the increase in the spirituality and orientation of the elderly during the epidemic period supports their spiritual well-being.

Study Limitations

As this research was conducted during the pandemic period, it includes the reactions of the elderly against COVID-19. This research is limited to elderly individuals living in nursing homes. Since the data were collected from a limited number of elderly people living in nursing and care homes, they cannot be generalized to the whole population. In addition, due to the COVID-19 restrictions, the research data were collected by employees, which limited the understanding of the real attitudes of individuals. Due to all these factors, the study findings cannot be expanded.

Conclusion and Recommendations

COVID-19 causes uncertainties in the lives of elderly people, and these uncertainties may cause negative effects on mental health and increase the state of anxiety and stress. The findings obtained in this study show that the level of anxiety decreases with the increase in spiritual orientation in elderly individuals. In this study, participants' coronavirus anxiety levels decreased, and their spiritual orientation increased with increasing age.

The COVID-19 anxiety level and spiritual orientation also increased in those recently diagnosed with COVID-19. The findings suggest that supporting the spiritual resources of elderly individuals will increase their mental well-being and reduce their stress and anxiety levels. Accordingly, interventions by experts for spirituality and spiritual orientations during COVID-19 may contribute to increasing resilience to uncertainty and improving coping skills, thereby reducing anxiety.

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Declarations

Conflict of interest None.

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