

The Impact of COVID-19 on Anxiety and Loneliness Levels of Elderly People and the Role of Counseling on Their Wellbeing

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The COVID-19 pandemic has caused confusion and upset in many areas of life, resulting in humanity's rapid adjustment to changes to contain the virus. The high infection rates have stipulated many governments to introduce severe restrictions on individual freedoms to minimize broader contagion. These strict hygienic protocols have disrupted the daily routines of many people of all ages, especially third-age citizens. The elderly, one of the most vulnerable sections of the population, seem to be paying the highest toll in terms of contagion and deaths. In this study we aim to investigate the ways in which the COVID-19 pandemic contagion measures have impacted the loneliness and anxiety levels of third-age citizens (65+) in Cyprus and Greece and to explore the potential role of counseling in improving their psychological well-being. Quarantine and social isolation measures have eliminated the social life of senior citizens, creating the potential for loneliness and anxiety symptoms making the need for supportive mechanisms, e.g., through counseling, even more imminent. Our research is quantitative. We collected data through an online survey that included the Coronavirus Anxiety Scale and the UCLA Loneliness Scale. Our sample consisted of 156 Greeks and Cypriots of both genders aged 65-85 years old. Findings indicated very high levels of anxiety and loneliness, with values on both scales rising above average. Only a tiny percentage of third-age citizens were able to access counseling services during the social isolation measures.

Keywords: anxiety, counseling, COVID-19, elderly, loneliness, third-age

Introduction

The appearance but mainly the quick spread of the COVID-19 virus has, within a short time, assumed the dimensions of a global pandemic affecting the vast majority of nations. The first measures imposed aiming to curb the transmission of the virus, proved to be ineffective. This led the governments all over the world to issue stricter hygienic orders, including quarantines and social and physical distancing. Despite all the strict measures, many people, primarily of the third age, have perished because of COVID-19. Greece has reported, in August, that the median age of people who died from SARS-CoV-2 was 78, whereas, in Cyprus, this age was 77 years¹. The third age is demographically understood as the population over 65 years old, even though, taken from a psychological and functional view, the tendency is to begin this life period at 70. The EU population over 65

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¹<https://gr.euronews.com/2021/08/01/covid-19-ellada-10-thanatoi-kai-1605-krousmata> [accessed on 30/08/2021].

has grown by 3.0% points in comparison to 10 years ago and has reached 20.6%. In 2020, Italy has recorded the highest share of the elderly across the EU Member States (23.2%) followed by Finland (22.3%). Greece is on the same level with Finland (22.3%) whereas Cyprus also recorded a large increase, i.e., from 12.7% in 2011 to 16.1% in 2019 and to 16.3% in 2020. When the SARS-CoV-2 pandemic first broke out, the elevated interest in the elderly was associated with the belief that they were more susceptible to the COVID-19 virus, especially if they suffered from other underlying medical conditions and had weak immune systems. In the meantime, data accumulated worldwide regarding morbidity rates have confirmed this hypothesis, showing that although the virus can also impact younger people, the elderly remain the population most affected by the new coronavirus. A report issued in March 2020 by the US Centers for Disease Control and Prevention illustrated the higher vulnerability of the elderly to the virus, showing that the vast majority of the deaths (over 80%) concerned patients aged above 65 years (Bialek et al., 2020).



Figure 1. Population pyramids Greece and Cyprus at 2021².

The progressive global process of population aging presents a number of threats, especially regarding the mental health of the elderly. Even before the COVID-19 outbreak in December 2019, the third age group was considered a vulnerable age group, especially in the context of self-sufficiency. Even before the current pandemic crisis, research showed that older people were especially vulnerable to loneliness and social isolation. Regardless of the cause, feeling alone and vulnerable can lead to depression and a severe decline in physical health and mental wellbeing. Furthermore, among mental disorders of the third age, depression seems to be the most widespread health problem (Abe et al., 2012), contributing to a substantial deterioration of the quality of life (Luppa et al., 2010). In the U.S.A., nearly 25% of elder citizens residing in community homes seem to lack vital social connections, and nearly half of them (43%) report high levels of loneliness³. The COVID-19 pandemic is contributing to an increase of older adults who are socially isolated, including both older citizens living in community or in nursing homes, as many western countries issued curfew orders and a total ban of visitors for nursing home residents for extended periods in 2020 and until May 2021. According to Kang and Jung (2020), older adults face a 23-fold higher mortality risk due, mainly, to the fact that they often have

² <https://population-pyramid.net/en/pp/cyprus>.

³ National Academies of Sciences Engineering and Medicine, 2020 [accessed on November 3rd, 2021].

weaker immune systems and comorbidity. The individuals facing such high-risk factors, which threaten their physical and emotional wellbeing, may also have a higher risk for functional deterioration, for adverse long-term effects on the general health thus raising the possibilities for a lower life quality (Mukhtar, 2020). Zarrabian and Hasaniabharian (2020) pose that the stress experienced due to COVID-19 can also lead to the decline of their cognitive functions, e.g., reduced attention-span, decreases in learning, memory, and problem-solving skills, and in difficulty with decision-making. Social isolation due to imposed social-distancing measures upsets daily life routines and can negatively impact behavioral manifestations such as nervousness, disorganization, and aggression. Awareness of these factors facilitates the identification of individuals at risk and the factors to preserve cognitive resilience (Batsis et al., 2021). Psychological problems such as stress, anxiety, loneliness, and depression may result from people's fear of a potentially deadly virus (Li et al., 2020; Stankovska, Memedi, & Dimitrovski, 2020).

The severity of the conditions described above makes counseling support for senior citizens vital to improving their quality of life and managing their negative emotions. Through the counseling intervention, individuals may adopt new activities and feel that their lives are gaining meaning again (Glick, 2009). As of March 2020, and until May 2021, Greece and Cyprus experienced long periods of limited mobility (lockdowns), resulting in disruptions in interpersonal relations (Demetriou, 2021). Related research supports that the duration of social isolation and quarantine measures impact the resulting psychological effects. It has been reported that long-term quarantine might have a more threatening impact (Black Dog Institute [BDI], 2020; McGuire, Rowe, Cole, & Herr, 2020). McGuire et al. (2020) implied a positive relationship between a prolonged quarantine and more distressing posttraumatic stress disorder (PTSD) symptoms. Social exclusion, stigma, discrimination, and loss of income may be some of the outcomes of forced, obligatory quarantine (Brooks et al., 2020; Shigemura et al., 2020). Furthermore, extended periods of social distancing may contribute to higher depression, can lower happiness levels (Lu, Nie, & Qian, 2020), and may trigger psychological issues during the pandemic and in the aftermath (Serafini et al., 2020).

Thus, it is, at this point crucial, to study the psychological impact of pandemics alongside the protective measures taken to prevent the spread of the virus (such as physical distancing, quarantine, and isolation). In this framework, we placed the following two research questions:

Research Question 1 is related to the psychological well-being of our sample, namely, their experience with COVID-19-related anxiety and loneliness, and breaks into two subquestions as follows:

(1a) To what extent did third-age individuals experience COVID-19-related anxiety and loneliness during and/or after the lockdowns and the social distancing/isolation measures of 2020-2021 in Greece and Cyprus?

(1b) Did demographic factors such as gender, marital status, educational level, and place of residence significantly differentiate their anxiety and loneliness levels?

Research Question 2 addresses our sample's experiences with third age counseling, as follows:

(2a) How far did third-age individuals in Cyprus and Greece utilize counseling services according to their gender and family situation?

(2b) What are the anxiety levels according to the age, general health, and counseling experiences of our sample?

(2c) How do social interactions and the use of counseling services influence the feelings of loneliness of third-age individuals?

Effects of Social Isolation Measures on the Mental State of Third-Age Individuals

Previous outbreaks of highly infectious diseases also had a significant detrimental impact on peoples' psychological wellbeing. For example, when MERS (Middle East Respiratory Syndrome) broke out in 2015, a large number of affected citizens suffered anxiety and fear (Shin et al., 2019). Similarly, when in 2003, Hong Kong faced the sudden appearance and rapid spread of SARS researchers posed that it caused psychological problems including elevated stress and posttraumatic stress disorder (PTSD)⁴. Given the high death rates as well as the prevalence of COVID-19 worldwide, relevant studies illustrated increasingly adverse effects on people's mental health due to physical distancing, quarantining processes, and social isolation (Tanhan et al., 2020). Psychological facilitators such as anxiety, fear, sadness, frustration, anger, helplessness, and loneliness (Mamun & Griffiths, 2020) constitute severe indicators of the emotional distress that people may experience during and/or after a pandemic (Demetriou, 2021). According to Amoretti (2020), the third age constitutes a sector of the population on which research has focused only on the immediate effects of the pandemic; i.e., there are no in-depth studies on the possible impact of the COVID-19 pandemic outbreak on the emotional wellbeing, the self-sufficiency or the life quality of older people, nor on the economic costs that the various governments will have to bear to cope with these effects.

In the western world, retirement signifies the onset of the third age, and it is typically associated with a "withdrawal" from life and dependency due to lack of productivity. These grave changes in a person's life put him at risk for increased stress. The interruption of her working life marks the need for new forms of adaptation in a person's daily habits, social and family relationships, and personal attributes. Even under normal circumstances, the sense of loneliness can have adverse effects on various aspects of life, such as a decrease in general well-being (De Jong Gierveld, Broese Van Groenou, Hoogendoorn, & Smit, 2009), low self-esteem (Guiaux, 2010), and deterioration of mental and physical health (Cacioppo et al., 2002). The application of quarantine and social isolation measures imposed by governments to contain the pandemic had a different impact on individuals according to their social role(s). Some parts of the population are more sensitive to stress; consequently, they seem to be more exposed to the risk of anxious, depressive, and posttraumatic stress symptoms. Added to the mobility limitations, social and physical distancing from family and loved ones present a severe matter for the third age, which needs further exploration, according to Lee (2020b). Previous studies illustrated that loneliness at third age is closely associated with social isolation. Various researchers have stressed the need to address this issue as a public health issue, as it may be the underlying cause of cardiovascular, neurobiological, and psychological problems. Loneliness may also be connected to anxiety due to the various psychological states it may induce, such as anger, sadness, confusion, sleep problems, and other psychosomatic conditions (Papaioannou, 2021).

Quarantine and social isolation present negative experiences for the third age, limiting human contact to the minimum. Worldwide, people of the third age were one of the first social groups urged to limit their mobility and stay at home, applying as much as possible social and physical isolation. While older persons were gradually deprived of any social interactions, the feelings of loneliness and marginalization increased. Recent research in China (Lee, Jeong, & JongEun, 2020) indicated that 53.3% of the sample over the age of 60 felt a negative impact on their mental health due to strict COVID-19 social and mobility restrictions. On the other hand, seniors already suffering from a health problem forcing them to take medication are more

⁴<https://www.who.int/csr/resources/publications/influenza/FluCheck6web.pdf>[accessed on 21st November, 2021].

susceptible to the virus, making them feel more threatened and insecure. Coupled with the daily bombardment of information through mainstream media on the number of cases and the increased mortality rates at these ages, the general stigma they experience as a vulnerable group, and the fear of contagion of COVID-19 for themselves or loved ones, contributes to a potential peak in the anxiety levels of third age citizens often with severe psychosomatic manifestations (Laho, 2019). Nosophobia, as a severe fear of contagion, can occur in the elderly due to the stress caused by the virus, and their persistent attempt to protect themselves. For example, they may be sure that they have something serious with the slightest symptom or take medication on their initiative. Negative and persistent thoughts about the virus are also why Nosophobia, despite being a fear disorder, can be associated with stress and even cause it (Tzimas, 2017). Depression can be one of the significant health problems of the third age. People above 70 years may have lost interest, experience depressive symptoms for most of the day, lack cognitive functions (inability to concentrate, think, make decisions), and suffer from insomnia or hypersomnia, or even suicidal ideation (American Psychiatric Association, 2013). According to research data, there was a massive increase in suicide rates among the elderly in the 2003 pandemic (Lee et al., 2020).

Third-Age Counseling

Research related to COVID-19 and the third-age is growing, with three topics dominating the discussion: age discrimination, which refers to a bias based on a person's age, a problem that was widely acknowledged even before the COVID-19 pandemic. In fact, whereas Dittmann posed in 2003 (in Staton, 2021) that 80% of senior citizens experienced discrimination based on their age, Malik, Burhanullah, and Lyketsos's research (2020) produced empirical evidence that age discrimination is not only thriving but worsening during the pandemic. A second topic is social isolation. Imposed social distancing for the elderly left many third-age citizens in a condition of social isolation that caused or worsened mental health problems (Tyrrell & Williams, 2020), such as depression and suicidality (Jawaid, 2020). Last, but not least, death anxiety (Staton, 2021) or fear of death, refers in the COVID-19 literature to the phenomenon of exacerbated distress related to aging and mortality coming from the disease's effects on the elderly. COVID-19 brought death anxiety to much more elderly than younger people (Ishikawa, 2020).

Senior counseling is an important institution in dealing with stress and loneliness, especially during a pandemic. Before the SARS-CoV-2 pandemic, older adults suffering from depression, anxiety disorders, and sleep disorders were shown to benefit significantly from this procedure. In particular, the elderly responded to psychotherapeutic and counseling approaches to the same extent as young adults. For example, in the case of depressive disorder, it is argued that cognitive techniques and behavioral modification techniques contribute to the treatment and improvement of cognitive functions in the elderly (Glickin, 2009). Cognitive Behavioral Therapy for third-age anxiety symptoms commonly utilizes methods such as psychoeducation, relaxation techniques, cognitive therapy, training for the improvement of problem-solving skills, exposure and habituation to anxiogenic situations, and sleep hygiene when patients suffer from insomnia (Lenze & Wetherell, 2011). Group counseling is recommended for seniors experiencing loneliness and isolation. With group counseling, the individual acquires the feeling of "belonging" as he shares his concerns with the group's other members. Dialog, altruism, identification, self-disclosure, and purification are some of the factors that confirm the effectiveness of group counseling, as they enhance the externalization of repressed emotions that the older person may not have had the opportunity to express. In addition, clients have the opportunity to help each other

by clarifying issues, challenging and supporting each other, and may increase older people's self-esteem if allowed to offer their help to another team member (McLeod, 2013). The Alzheimer Europe Initiative suggests that forming a support network, providing accurate and relevant information, securing food and medical supplies, staying physically and mentally active through recreational activities, and keeping socially connected would benefit older individuals, especially those with mild cognitive impairment (2020).

In the case of the COVID-19 pandemic crisis, while individuals belonging to the third-age group were strictly confined at home, they were unable to attend counseling sessions by visiting a counseling center; therefore, counseling procedures had to change and new protocols had to replace the old and trusted given the health safety of counselors and clients. The primary change discussed in the international literature is the switch to telehealth and videoconferencing technology. In fact, Banducci and Weiss (2020) pose that video conferencing technology is ideal due primarily to the visual aspect, allowing counselors to observe their clients' body language. At a time where telecommunications technology can fully support technology home-based interventions (smartphones and smart TVs, tablets, computers, virtual assistants, overarching assistive devices), it can facilitate most of the recommended practices for the psychological well-being of senior citizens. Home-based interventions have been found, among their other qualities, to assist information sharing, open doors to online viewing of sports, entertainment, and to shopping, and to increase social connectedness (Smith et al., 2020). However, it is here that we can observe elements of age discrimination as a majority of senior citizens are not familiar with nor have access to the use of the devices or the internet as younger people do. This excludes a vast number of senior citizens from receiving and profiting from the services of online counseling.

In the duration of the strict lockdown and physical distancing measures for the contagion of the virus, having support at home has been described as helpful (Brooks et al., 2020). It should be noted that the reduced availability of support may increase the burden on caregivers themselves (Wang et al., 2020). A trusted source of the Centers for Disease Control and Prevention (CDC) revealed that in the first months of 2020, online therapy increased by 50% compared with 2019, which shows increased demand for such alternative telehealth methods. Mental health researchers collaborating with the Chinese government have determined that online counseling practices made mental health services accessible to larger numbers of Chinese citizens during COVID-19. Psychologists in China have used these services to share common coping mechanisms and strategies to address psychological stress caused by COVID-19, which has helped calm the public (Hu et al., 2020).

Methodology

Purpose and Research Questions of the Study

The present study aims to investigate the psychological impact of the COVID-19 pandemic on the anxiety and loneliness levels of people of the third age (65+) and explore the role of counseling in improving their psychological well-being.

Procedure—Data Collection

We surveyed a sample of third age (65-85 years old) citizens in Greece and Cyprus. We adopted a web-based method and design. The questionnaire (including the PIF and the two instruments described below) was created on the survey platform Enklikanketa and was posted and shared for two weeks (14-28 April 2021) on Facebook. Authors obtained approval from the Resilience Research Unit of the Department of Psychology

and Social Sciences at Frederick University, Cyprus. We used an opening statement to inform our subjects about the scope and aims of the study before asking them to complete the survey itself. All our subjects gave their consent online before responding to the survey items. The opening note also comprised brief instructions pertaining to the completion of Likert-scales. Our participants completed two questionnaires in the Greek language, namely, the Corona-Virus-Anxiety Scale (Lee, 2020a) and the UCLA Loneliness Scale short form (Yildiz & Duy, 2014). For the translation of the questionnaires in Greek we applied the following procedure: Both questionnaires were translated into Greek by two faculty members of Department of Psychology and Social Sciences with certified excellent knowledge of the English language and related terminology. We then carried out back translation and compared the text to the text-source in Greek. We found no significant inconsistencies and we proceeded with a validity check by calculating the internal consistency using Cronbach's alpha (α). We also collected demographic information, including age, gender, place of residence, educational level, marital status, frequency and purpose of leaving the house (during the lockdowns), and frequency of physical contacts with social networks. The participants answered the questionnaires anonymously on the Internet platform Enklikanketa from the end of March to the middle of May 2021, and they were allowed to terminate the survey at any time they wished.

Sample

Our sample consisted of 156 Cypriot (63.7%) and Greek (36.3%) participants, almost equally distributed by gender, i.e., 49% men and 50.6% women. Almost half of our participants (48.4%) belonged to the 76-80 age group, 28% were 65-75, and 22.9% were 81-85 years old at the time of the survey. Regarding their educational level, 41.4% completed high school education, 33.8% completed primary school education, and 8.9% had a university degree. Most of our subjects were either divorced (48.4%) or widowed (23%), whereas 28.2% were still married. The majority of those still together with their spouse stated that they were happily married (79%), and 21% stated that they were unhappy with their life partner. The vast majority of our sample (93%) said family and friends surrounded them.

Measures

The questionnaire we applied consisted of two scales: the Corona-Virus-Anxiety Scale (Lee, 2020a) and the UCLA Loneliness Scale short form (Yildiz & Duy, 2014). We collected demographic information using a Personal Information Form (PIF) with seven closed-type questions relating to age, gender, country of origin/residence, educational level, general health issues, marital status, and feelings associated with their life partner. Additionally, we created three questions relating to the participants' frequency of outings, their reasons for outings, and the frequency of meetings with family and friends during the lockdowns. Furthermore, two questions addressed their attitudes toward counseling and whether they had sought any counseling during the pandemic.

UCLA Loneliness Scale. The UCLA Loneliness Scale is a self-report tool that uses a 20-item scale designed to assess one's subjective feelings of loneliness and of social isolation. In this research, we applied the short version of the Scale (ULS-8) consisting of eight items (Yildiz & Duy, 2014). These eight items include two questions that are worded positively (Items 3 and 6) which are reverse scored. Answer choices range from 1 (never) to 4 (always) with 2 and 3 corresponding to "rarely" and "sometimes" respectively. The total scale score extends from eight to 32 points; higher scores indicate a higher degree of loneliness. Yildiz and Duy (2014) confirmed highly satisfactory internal consistency coefficients of the eight factors for the entire scale (Cronbach's $\alpha=0.74$). Test-retest reliability scales were determined at $r=0.84$ ($p<0.001$).

Corona Virus Anxiety Scale. The CAS (Coronavirus Anxiety Scale) was constructed by Lee (2020a) as a self-report assessment tool aiming to detect potential incidents of dysfunctional anxiety in relation to the coronavirus pandemic crisis. Based on his/her experiences of the past two weeks prior to testing, the subject rates every statement on a five-point Likert scale, with values extending from 0 (not at all) to 4 (nearly every day). The five-point scaling format corresponds to the DSM-5's interconnecting symptom measure. A total score ≥ 9 indicates a high probability of dysfunctional coronavirus-related anxiety, and may be a sign of problematic symptoms for the individual. Independent studies carried out with adults living across the U.S.A. have reported that the CAS is a reliable instrument ($\alpha > 0.90$), with a solid construct and factorial validity (indicating significant correlations with anxiety and depression)⁵.

Data Analysis

Data analysis utilized the Statistical Package for Social Sciences (SPSS) Version 25.0 to describe and analyze our samples' demographic characteristics (including the mean, standard deviation, frequencies, and percentages). The level of significance (p-value) in questionnaires was set at $p < 0.05$. To examine our research questions, we applied the following data analysis methods: t-test and two-way ANOVA, to compare the means between participants' demographic characteristics (gender, age, family income, occupation) and their impact on their overall quality of life and mental health dimensions. Furthermore, we applied Pearson's correlation coefficient to examine whether correlations (positive or negative) could be found between mental health dimensions and counseling.

Results

General levels of COVID-19-Related Anxiety and Loneliness

The exploration of our first research question, namely, the extent to which our participants experienced COVID-19-related anxiety and loneliness resulting from the implementation of the social distancing/isolation measures for the containment of the virus, revealed that 82.7% of our participants scored > 9 on the Coronavirus Anxiety Scale (CAS); a total score ≥ 9 indicates a high probability of dysfunctional coronavirus-related anxiety, and may be a sign of problematic symptoms for the individual ($M = 2.69$). Statistical analysis (t-test) did not determine any statistically significant differences between the men and women or between Greek and Cypriot participants. Furthermore, ANOVA showed no statistically significant differences ($p < 0.05$) between the three age groups or the educational level of the sample regarding their COVID-19-related anxiety. However, we did detect statistically significant differences related to the marital status of our participants, as follows (Table 1):

Table 1

Levels of COVID-19-Related Anxiety and Loneliness and Marital Status

Corona Virus Anxiety Scale		St. Deviation	UCLA Loneliness Scale		Std. deviation
Marital status	Mean	0.77	Marital status	Mean	0.68
Married	2.73		Married	3.10	
Divorced	2.81		Divorced	3.16	
Widowed	2.24		Widowed	2.66	

⁵https://www.phenxtoolkit.org/toolkit_content/PDF/Coronavirus_Anxiety_Scale_CAS.pdf [accessed on 04/09/2021].

The mean for the Coronavirus Anxiety Scale was found to be $M = 2.69$ ($F = 5.939$, $df = 2$). There were statistically significant differences in COVID-19-related anxiety levels between married ($M = 2.73$) and widowed ($M = 2.24$) subjects, as well as between divorced ($M = 2.81$) and widowed ($M = 2.24$) participants, indicating that those who were widowed had experienced significantly less COVID-19-related anxiety than those who were still married or divorced ($p < 0.05$).

In the assessment of loneliness, data analysis showed that the mean of our sample was $M = 3.06$. The general state of the population under investigation shows very high loneliness levels, with 87% of the subjects scoring above the average and only 13% below. As in the case of anxiety (CAS), we detected no significant differences between our three age groups or between Cypriot and Greek subjects, nor any discrepancies related to educational level or gender. The only significant differences we detected in loneliness were related to our samples' marital status, whereas married ($M = 3.10$) and divorced ($M = 3.16$) participants felt significantly less lonely than those who were widowed ($M = 2.66$) at the time of the survey ($p < 0.05$).

Frequency of Outings

Fear of contacting the COVID-19 virus may (but not necessarily) be reflected in the samples' frequency of going out of the house. In our sample, 38% of the participants stated that they left the house 2-3 times a week and 37% that they had an outing at least once a day. A relatively smaller percentage (12%) stated that they went out only once a week, 4% only once monthly, and 8% claimed that they did not leave the house in the duration of the strict physical and social measures. Regarding the reasons for leaving the house, our participants could state more than one reason. The majority of their outings (75%) were related to obtaining necessary goods, 54% to go to church, 25% to visit a park, 15% to visit family and friends, and 4% to see a medical practitioner.

Counseling

A very small number of our participants, namely, only 13%, sought and received professional counseling during the pandemic. Despite the very low percentage of third age participants actively seeking support in counseling services, the vast majority of our subjects (94%) agreed on the importance of the availability of counseling support during the COVID-19 pandemic crisis.

In answering our second research question, data analysis revealed the following:

How far did third-age individuals in Cyprus and Greece utilize counseling services according to their gender and family situation? Our findings show that during the strict lockdown and social/physical distancing measures, the men of our sample sought out support ($M = 1.04$) and visited significantly more frequently than the women ($M = 1.01$) counseling services ($p < 0.05$). There were no other statistically significant differences regarding the sample's demographic characteristics and participation in counseling sessions during the pandemic.

What are the anxiety levels according to the age, general health, and counseling experiences of our sample? Data analysis showed statistically significant negative correlations between anxiety levels and general health conditions and participation in counseling support sessions. Expressly, a significant negative correlation between levels of anxiety and participation in counseling sessions ($r = -0.257$, $p < 0.001$) indicated that participants who were actively receiving support through counseling tended to have lower stress levels. Similarly, a negative statistical correlation was detected between anxiety and general health ($r = -0.201$, $p < 0.001$), showing that general health in the third age group tends to deteriorate when anxiety levels increase. We detected no age-related differences in regards to this aspect. According to our participants, 91% had underlying

medical conditions, and 86% took prescription medication for their ailments. Furthermore, over 30% of our sample reported fainting episodes, sleep disorders, loss of appetite, and intense fear due to either being exposed to the virus itself or information regarding the virus (Table 2).

Table 2

Loneliness, Anxiety and General Health

N.156	Anxiety levels	Loneliness
Counseling	-257** Sig (2-tailed) .001	-234** Sig (2-tailed) .003
General Health Condition	-201** Sig (2-tailed) .012	

*p<0.05

**p<0.01

How do social interactions and the use of counseling services influence the feelings of loneliness of third-age individuals? Data analysis regarding the possible effects of social encounters and counseling on loneliness shows a highly significant negative correlation between receiving counseling and loneliness ($r = -0.234$, $sig = 0.003$). This finding indicates that the more a person participated in counseling sessions, the less loneliness she experienced. Given that 38% of our participants had neither relatives nor friends visiting them during the lockdown and social isolation measures, it should come as no surprise that feelings of isolation and loneliness intensified (Table 2).

Discussion

Our research aimed to investigate the psychological impact of the COVID-19 social isolation pandemic contagion measures on the anxiety and loneliness levels of people of the third age (65+) in Greece and Cyprus and to explore the role of counseling in improving their psychological wellbeing during these unprecedented times. The research was carried out during the third lockdown in the Spring of 2020 through using an online survey. Our findings answered all subquestions of our two posed research questions.

Regarding our first research question, which addressed the psychological outcomes such as COVID-19-related anxiety and loneliness, our data analyses showed that pandemic containment measures such as lockdown, social isolation, and restrained social mobility have significantly affected the wellbeing of third-age citizens in both countries. The COVID-19-related anxiety and loneliness levels recorded through this study were extremely high, whereas 82.7% of our participants scored >9 on the Coronavirus Anxiety Scale (CAS), thus indicating probable dysfunctional coronavirus-related anxiety. As opposed to fear, which is a response to a well-defined and realistic threat, anxiety responds to a vague or unknown threat. Anxiety is manifested when we expect that a dangerous or unfortunate event may take place (Stankovska et al., 2020). According to Jenze & Wetherell (2011), psychological and social risk factors are involved in the development and manifestation of anxiety disorders at a late life stage, which may also be understood as the impact of neurobiological changes in aging. According to Yildiz, Abukan, Öztürk, and Eker (2020), risk factors associated with lockdowns can be the potential cause for depression and negative mind-sets, even sometimes leading to collapse and anxiety. The Australian Psychological Society reported that physical distancing measures imposed to contain the Sars-Cov-2 virus may be the underlying cause of uncertainty and loneliness

(2020)⁶. Zhang, Wang, Rauch and Wei (2020) reported that losing personal physical contact and the deprivation of day-to-day social activities might result in severe social-psychological effects, such as extreme stress. Although applying physical/social distancing or complete lockdown measures has the purpose of protecting people from contagion and infection, such actions were found in most cases to cause various psychological issues, with depression, anxiety, and loneliness as the most prominent (Hwang et al., 2020). Similarly, we detected a negative statistical correlation between anxiety and general health, illustrating that general health in the third age group tends to deteriorate when anxiety levels increase. According to Brennes, Guralnik, and Williamson (2005), anxiety exacerbates disability and, in some studies, it is associated with an elevated mortality risk (Brennes, Kritchevsky, & Mehta, 2007; van Hout, Beekman, & de Beurs, 2004). Furthermore, research revealed that Generalized Anxiety Disorder (GAD) later in life contributes to a significant deterioration of the person's quality of life and to an increased burden of health care cost similar with that seen in late-life depression (Porensky, Dew, & Karp, 2009; Wetherell et al., 2004).

Similarly, in regards to loneliness, our findings are also alarming, with the vast majority of our participants (82%) reporting over average loneliness scores. Weinstein, Sandman, and Blalock (2002) emphasized the awareness of risk factors in preventing and coping with loneliness, while Pinquart and Sorensen (2001) reported that certain life events trigger loneliness, such as institutionalization, migration, loss of loved ones, and changes in socioeconomic status. The conditions invoked by the pandemic contagion measures of social isolation could, in our case, be considered as an extraordinary life event. Moreover, Routasalo and Pitkala (2003) posed that poor health is associated with loneliness, as it makes people more dependent on the help of others. People's health condition determines the extent to which they can go out and participate in activities in a social network. With fewer to no social activity options during the lockdown measures, third-age citizens were more likely to feel lonely (De Jong Gierveld, 1998; Savikko et al., 2005). In our sample, the majority (75%) left the house, either frequently (once a day, 37%) or 2-3 times a week (38%). However, most of these outings concerned only short outings just to obtain necessary goods, or go to church, or visit medical practitioners, i.e., they did not include any social networking activities. It seems that while the restricting measures were effective, our third-age participants only went out quickly to fulfill necessary needs. Another aspect is that loneliness in our sample appears to have impacted more our widowed participants, who recorded significantly more loneliness than those married or divorced. Indeed, the loss of the life partner is recorded as one of the most far-reaching life events concerning loneliness (Dykstra & De Jong Gierveld, 2004; Fokkema, De Jong Gierveld, & Dykstra, 2012). Especially when partners share a high-quality relationship, they are a primary source of support for each other (De Jong Gierveld et al., 2009). A longitudinal study carried out by Schoenmakers et al. (2014) revealed that older individuals are aware that old age itself may be a risk factor for loneliness.

As far as utilizing professional psychological counseling services to minimize or alleviate the symptoms of anxiety and loneliness, our findings show that only a very small percentage (13%) of our participants sought out and visited a counselor. However, the vast majority acknowledged the importance of professional counseling services while the social isolation and distancing measures were in effect. The men of our sample visited a counselor significantly more frequently than the women.

⁶<https://psychology.org.au/for-members/publications/inpsych/2020/june-july-issue-3/loneliness-in-the-time-of-covid-19> [accessed 20/11/2021].

Counseling support in our sample seems to have been effective as it significantly reduced stress and anxiety levels. Similarly, third-agers participating in counseling sessions showed significantly lower values in loneliness. Social support may be the most potent contributor to emotional wellbeing as it provides many benefits, including a source of distraction, a sense of connection, an involvement outside of oneself, a sounding board for one's worries, and a source of joy (Sweeney, 2020). Individuals who are overly or disproportionately affected by COVID-19, such as third-age citizens, may experience crises associated with the fear of contagion for themselves, their loved ones, or community members. When clients seek professional mental health support services due to COVID-19-related crises, professional counselors should be prepared to triage client concerns. To better support the members of more vulnerable communities during the pandemic, counselors are called to increase mental health accessibility by offering counseling services within the clients' communities but also to provide telehealth services through online platforms that are easily accessible for clients either at no cost or at a reduced cost, to help them re-establish a sense of safety and predictability (Sweeney, 2020).

During the COVID-19 crisis, the role of technology has emerged as an important factor for maintaining social connections and accessing mental health services (Vahia, Jeste, & Reynolds, 2020). However, elderly people suffer from a lack of digital inclusion to a greater extent than young people and adults. Consequently, their ability to respond to social isolation caused by anti-COVID-19 restrictions is lower than that of the rest of the population (Amoretti, 2020). Additionally, since most of the counseling during the COVID-19 pandemic has been taking place through online services, the accessibility of counseling services to a large portion of third-age citizens has inevitably been limited. This may justify our participants' very low percentage (13%) in utilizing counseling services during the pandemic. However, it is vital to establish ways through which counseling services by specialized third-age counselors become available to senior citizens in ways that take into account their special age-related conditions. Human resilience at any age is closely associated with the quality (depth and strength) of our interpersonal relations, i.e., our levels of involvement in our communities. On the other hand, loneliness appears to be one of the greatest threats to our health, survival, and wellbeing.

Limitations and Suggestions

First, it is important to consider that our study depicts senior citizens' anxiety and loneliness levels while experiencing restrictive social measures. Hence, it is likely that participants were experiencing and reporting greater levels of discomfort in the form of anxiety and loneliness related to the COVID-19 pandemic. On the other hand, it could be that these self-reported appraisals showed their long-standing issues with loneliness and anxiety rather than just ephemeral problems stemming directly from living through a pandemic period. In such a scenario, the long-term psychosocial impact of the Cov-Sars-2 will have to be studied in the framework of longitudinal studies to examine the possible long-term psychological effects of the COVID-19 confinement measures. Additionally, we consider a limitation the fact that we had no information on the participants' preexisting mental health. Furthermore, our study sample consisted of third-age citizens who had reliable internet access and had the knowledge to access and answer the items on the online questionnaire, i.e., senior citizens who were not internet savvy were practically excluded from the study.

In this framework, the study's findings can be taken into consideration for groups with similar age and socioeconomic characteristics found in Cyprus and Greece, as well as in other countries where social and physical distancing measures were implemented to mitigate the spread of COVID-19. In examining the participants' psychological reactions, this study only addressed anxiety and loneliness. So, we can enrich the

literature concerning the effects of quarantines, limited mobility and social networking by investigating different psychological variables. Counseling interventions focusing on developing resilience by promoting positive emotions, thoughts, and attitudes in individuals during home confinement are also necessary to further develop a new theoretical and practical framework adjusted to the psychological challenges third-age citizens have encountered during these challenging times.

In this context, we have the following recommendations: First, there is an impending need for the development of support mechanisms according to the needs of specific ages and social groups, and of studies pertaining to launching a continuous mental health management system. Second, more studies on prevention strategies for the increasing psychosocial impacts in the post-COVID-19 economic crisis are needed, especially regarding vulnerable populations. Third, to prevent the healthcare system's paralysis or even total collapse in pandemic situations, it is imperative to research establishing a response system for epidemic-psychiatric emergencies, especially for the elderly during the pandemic. Last but not least, we need studies illustrating how team work between various societal and professional organizations can strengthen positive social connectivity and nurture personal and community resilience.

Conclusion

At a certain point, the COVID-19 pandemic will be over. However, there seems to be no doubt that it will leave many and various effects behind on multiple levels, such as the economic, social, psychological, and health levels (Amoretti, 2021). Segregation might be a necessary measure to contain the spread of the COVID-19 virus. However, human beings are not "wired" to handle life without social networks and live in social isolation for longer time frames. In the words of Aristotle, human is a "social animal", unable to live in isolation from others.

For those most socially vulnerable, like third-age citizens as their isolation from social networks perseveres even beyond the pandemic, their interpersonal relationships become even more disconnected and loneliness becomes a reality (Pietrabissa & Simpson, 2020). Recent research has determined that depressive symptoms, posttraumatic stress disorder, cognitive dysfunction, anger and frustration, lack of interest, and loneliness are part of the long-term psychological effects of quarantine (Black Dog Institute, 2020; Hwang et al., 2020). Our study illustrated that the psychological impact of the social isolation measures on Greek and Cypriot third-age citizens was quite significant, as it raised way above average their levels of anxiety and loneliness thus confirming a well-documented reality through experiences with infectious diseases in the past: The amount of people who will become physically infected by the disease will actually be smaller compared to those who will be affected socially and mentally, thus indicating the enormous impact of pandemics on mental health.

The progressive global development of population aging poses many threats, especially regarding the mental health of the elderly (Cybulski et al., 2020). In the case of the psychological impact of the COVID-19 lockdowns and social isolation measures, we pose that even though the return to a certain kind of normality may lead to an eventual reduction of the disorders observed during the pandemic, particularly during lockdown periods, there will be portions of the population, such as the elderly with difficulties in re-establishing the network of social relations, which may manifest a particular fragility associated with difficulties in resuming the pre-COVID-19 lifestyle (Amoretti, 2020). In the current environment of ambivalence and constant worry, it is essential that experts disclose precise information not only on the problem but also regarding the management of the emergency. Hence it is vital to develop more relevant cultural and economic investments to

support and sustain better and more expedient prevention, treatment, and rehabilitation programs in mental health. Unless addressed immediately, the developing mental health issues will contribute to increasing the economic damage caused by the pandemic: For example, implementing supportive interventions among institutionalized older adults would make it possible to contain the loss of self-sufficiency while safeguarding the psychological well-being of the elderly. At the same time, they would contain the care costs that could result from a lack of attention to the side-effects of isolation resulting from social distancing (Amoretti, 2020). It is important that governments and public health system officials understand that “there is no health without mental health” (Pietrabissa & Simpson, 2020, p. 2201).

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