



THESIS - Vol. 11, No. 2, Autumn 2022

International Research Journal



ISSN: 1848-4298 (Print)

ISSN: 2623-8381(Online)

The Relationship Between Covid-19 Exposure, Death Anxiety, and Resilience in Students (Aged 19-30)

Bylyre Serjanaj & Emanuela Blea

How to cite this article:

Serjanaj, B. & Blea, E. (2022). The Relationship Between Covid-19 Exposure, Death Anxiety, and Resilience in Students (Aged 19-30). *Thesis*, (11(2), 97-123.



Published online: March 16, 2023.



Article received December 20, 2022.

Article accepted February 15, 2023.



Conflict of Interest: Authors declare no conflict of interest.

The Relationship Between Covid-19 Exposure, Death Anxiety, and Resilience in Students (Aged 19-30)

Bylyre Serjanaj* and Emanuela Blea**

*Faculty of Social Sciences, University of Tirana, Albania
serjanajbylyre@gmail.com

** DEV - AID Association, Albania
emanuelableta@yahoo.com

Abstract

The COVID-19 Pandemic confronted humanity with a new challenging reality, before which each individual would have to develop adaptation mechanisms. The purpose of this study is to explore the relationship between exposure to COVID-19 with death anxiety and the degree of resilience, in students (University of Tirana). In a sample of 175 students (aged 19-30), COVID-19 exposure, death anxiety and resilience were measured with online self-administrative surveys. The results showed that COVID-19 exposure and death anxiety were related significantly ($r = .181^*$; $p < .05$). A negative significant relationship was found between death anxiety and resilience ($r = -.175^{**}$; $p < .01$), and also between COVID-19 exposure and resilience ($r = -.153^*$; $p < .05$). The findings of this study suggest further research with more complicated design, necessary to determine the impact of COVID-19 exposure and death anxiety on resilience.

Keywords COVID-19 Exposure, Death anxiety, Resilience, Students, Relationship.

Introduction

The "coronavirus illness 2019," also known as "COVID-19," was produced in the Chinese city of Wuhan by the highly contagious SARS-Cov-2 virus, which was discovered by the World Health Organization in late 2019. The severe acute respiratory syndrome coronavirus 2 is the culprit behind the coronavirus disease of 2019 (COVID-19), a respiratory infection. The World Health Organization labeled the illness a pandemic on March 11, 2020, in response to the virus's outbreak. Nearly every element of our lives is being studied by several researchers for a variety of reasons as a result of how the COVID-19 epidemic has directly or indirectly affected almost everyone (Abad & Shirkhani, 2021). People's daily routines have changed as a result of the pandemic and its response, which has also reduced social interaction and created anxiety and fear of getting sick and/or transmitting the virus. COVID-19 and the confined situation undoubtedly marked a significant change in the environment (Silveira & Hecht, 2022).

Specifically, the purpose of our study is to explore the relationship between exposure to COVID-19 with death anxiety and the degree of resilience, in "Bachelor" and "Master" students (University of Tirana). Furthermore, for this study, the following working hypothesis has been adopted: 1) There is a significant correlation between exposure to COVID-19 and death anxiety; 2) Death anxiety correlates negatively with resilience; 3) There is a significant correlation between exposure to COVID-19 and resilience.

Literature Review

Exposure to COVID-19 and Death Anxiety

The fear of dying is as old as humanity. Only humans have the capacity to consider their mortality, which renders them susceptible to experiencing anxiety and terror about their mortality (Tillich, 1952). This is because at the core of

existentialism lies the principle that the defining characteristic of humanity is the search for meaning in the face of death (Kenyon, 2000). Death acts as a lingering, unpleasant memory or thought. It helps the person realize that life is finite and acts as a motivating factor in their search for the purpose of life (Tomer & Eliason, 2008). Meanwhile, when we talk about death anxiety, it should be noted that we are dealing with a complicated phenomenon that comprises a range of emotions and thought processes, including anxiety about dying, anxiety over physical and mental decline, loneliness, separation anxiety, sadness over losing oneself, rage, and despair over an uncontrollable situation (Tomer & Eliason, 2008). The cognitive, motivational, and social components of death anxiety typically vary based on a person's developmental stage and sociocultural life experiences (Kirthiga & Koubeissy, 2020). Death anxiety refers to an individual's reaction when experiencing negative thoughts relating to death. It is associated with death-induced anxiety with many features of the COVID-19 pandemic (Chalhoub & Koubeissy, 2022). Pandemics cause large masses to live in fear and anxiety and disrupt the natural flow of life (Waite & Hyland, 2021). Moreover, the COVID-19 pandemic produced a new wave of death anxiety across the world. Fear of the pandemic was seen to cause stress, anxiety, and depression in the students. It has presented a unique situation to understand humanity because of the constant reminders of death (Hughes & Jones, 2022). People need to feel safe about the world they live in and the ability to imagine painful and tragic events such as deaths from coronavirus or awareness of death is seen as a source of anxiety for them (Hu, 2015). Related to this, health crises such as the COVID-19 pandemic are initiated by fear of being infected which in turn can reinforce the anxious state (Bulut, 2022). Thus, the emergence of the coronavirus disease 2019 (COVID-19) pandemic, encountering death either in relatives or

acquaintances, and misleading information about the disease lead to numerous psychological consequences, such as death anxiety among students. Such stressful conditions make the person unable to process properly and experience severe psychological suffering (Mani & Fereidooni, 2022). Understanding the influence of COVID-19 on the experiences of young people is important to help understand their mental health. Therefore, our research aimed to provide new insights into the impact of COVID-19 on death anxiety by young people (Yildirim, 2019).

Death Anxiety and Resilience

Resilience is the capacity to recover from difficulties and toughness in life rapidly. It is also described as the ability to successfully negotiate, adjust to, or manage significant sources of stress or trauma. Resilience can reduce the adverse effects of stress factors on mental health (Arslan, 2019). Furthermore, COVID-19-related fear, perceived risk, stress, anxiety, and depression were all significantly mediated by resilience (Paul & Shilpa, 2021).

Taking a closer look, research suggests that people with COVID-19 with high morbidity and mortality have experienced indescribable anxiety about death. Encountering adversity and coping successfully are the core elements of mental resilience (Manuel & Rodriguez, 2021). People's fear and anxiety of death strongly affected their resilience, according to a study by the University of Bristol (Luo & Guo, 2022). People respond to death anxiety by activating different modes of coping and resilience. Resilience plays a decisive role in the response of individuals under pressure and can help them deal with pressure more effectively. High resilience was associated with lower rates of death anxiety, stress, depression, and fear among students (Flora, 2021). When we talk about resilience in students, which is

the focus of this study, it is worth mentioning that the ability to maintain a resilient posture has become difficult (McDonnell & Semkowska, 2020). At the other hand, resilient and coping can lead to optimism. Psychological resilience can serve as a protective factor and is linked to better mental health outcomes during the pandemic. A low level of death anxiety contributes to a high level of resilience among COVID-19 students (Farooq & Zaheer, 2021). Moreover, students with high mental resilience will treat death with a more positive attitude and have an increased ability to adapt to the external environment. In this regard, was found that resilience was associated with low death anxiety among students that have been exposed to COVID-19 (Zhong, 2020). Also, during a pandemic, such as COVID-19, they recover quickly from negative experiences and are willing to contribute to society and change themselves for self-improvement if their resilience level was moderate or high (Flora, 2021).

In summary of this issue, students with low and mild COVID-19 symptoms indicated a higher level of resilience which was associated with lower death anxiety and depression, as well as with high altruistic and environmentally friendly consumption (Coulombe, 2020). While, students with high COVID-19 symptoms indicated low level of mental resilience because they are unable to have an open and calm attitude toward death (Luo & Guo, 2022).

Exposure to COVID-19 and Resilience

Resilience is the capacity to recover from an adverse event and to overcome challenges or trauma. With the start of the COVID-19 Pandemic, individuals across the world had to adapt and cope with unexpected difficulties (Silveira & Hecht, 2022). Moreover, the COVID-19 Pandemic has had a negative impact on the daily functioning of individuals, affecting their mood, sense of well-being, and their overall mental health (Barton & Christiansonm,

2020). Resilient students are less likely to report symptoms of distress and death anxiety during traumatic events (Skalski & Konaszewski, 2021). Consequently, students with high levels of resilience can easily adapt to changing environments or difficult situations. In conclusion, resilience may help to safeguard mental health during the spread of a pandemic infectious disease. However, this is also depending on the course of the disease and the student's exposure to COVID-19 (Silveira & Hecht, 2022).

As a summary, resilience has a positive association with subjective well-being and psychological health by increasing the ability of individuals to bounce back from stressful situations (Yildirim & Arslan, 2022). Thus, we believe that resilience assessment is in a unique position to make a significant contribution to understanding the psychology of this Pandemic in students (Frydenberg, 2004).

Methodology

Study design

The literature reviewed suggests that there is a link between exposure to COVID-19, death anxiety, and resilience. Therefore, this study was undertaken to explore the relationships between the above-mentioned variables. This type of topic, or more precisely the connection of these three variables, has not been studied before in the Faculty of Social Sciences, University of Tirana, and meanwhile has a wide interest to be analyzed.

First, this is a correlational study because it focuses on researching the relationship between exposure to COVID-19, death anxiety, and resilience in a non-clinical sample. This type of study has its advantages, because for a very short time, numerous data have been collected, in a large and representative sample for the population under consideration (Jhangiani et al, 2019). Secondly, we understand that the method used in this study is quantitative, that is, data collection through self-report

tests. The sample is of a convenience type, including students of the Faculty of Social Sciences completing online questionnaires, for reasons related to time, access, and budget (Simkus, 2022). Statistical analysis of the data was performed using the Statistical Package for Social Science (SPSS) program.

Participants

The participants in the study are 175 students of the Faculty of Social Sciences (N=175). The age of the participants varies from 19 to 30 years, with 158 girls/women (90.2 %) and 17 boys/men (9.7 %). Initially, the sample was intended to be over 200 participants, but some of the participants did not complete the questionnaire to the end and were invalid.

Procedure

Piloting: To check the comprehensibility of the statements for the questionnaires, which were translated individually and are not validated in our country, the instruments were piloted with 20 participants. While completing the questionnaires, statements were identified that were not easily understood. Based on the identified difficulties, the questionnaires were corrected and the final version was compiled for each of them.

The administration of the questionnaires was carried out within one week in the month of October. First, the relevant instruments were distributed in the Faculty of Social Sciences and finally the instruments were distributed online. The reason for distributing the instruments in this way was due to the time and participation of as many students as possible. Completing the instruments took about 20 minutes.

Instruments for data collection

The instruments used in this study are: COVID-19 Exposure Scale (National Center for PTSD, 2021); Revised Death Anxiety Scale (Thorson & Powell, 1992); Brief Resilient Coping Scale (Sinclair & Wallston, 2004). To determine the reliability of the measurement scales, Cronbach's alpha was used. In this study, the instruments resulted with this reliability coefficient: COVID-19 Exposure Scale ($\alpha = .859$; N of items = 39); Revised Death Anxiety Scale ($\alpha = .878$; N of items = 29) and Brief Resilient Coping Scale ($\alpha = .829$; N of items = 4).

Limitations of the study

This study presents the following methodological limitations:

- The study is correlational and attempts to examine the correlational relationship between variables, but not the cause-and-effect relationship between them.
- The relatively small number of the sample (N=175) and non-representative of the population does not create opportunities for data generalization.
- The type of sample is convenient, chosen due to the lack of access to several universities in Tirana, and it also does not allow the generalization of the data.
- The instruments used in the study have not been validated in our country, which means that their original reliability and validity are not valid for our linguistic and socio-cultural context.

- The self-administration of online questionnaires, without the presence of the researcher, raises questions about the conditions of administration and the seriousness of giving answers. Different administration conditions may have played a role in the accuracy of responses.

Ethical Issues

The study respects the ethical issues related to:

a) *Informed consent of the participants*

Participants were informed in writing about the purpose and procedure of administration. Participation was completely voluntary and participants were free not to complete the questionnaire if they did not feel comfortable while completing it, given that the topic was sensitive.

b) *Confidentiality*

Individuals who participated in the study were informed that all data collected from them would be used for study purposes only and that anonymity would be respected. The research aims to study the sample and not the individuals, therefore, it has no interest in the identity of the participants.

c) *Avoidance of fraud, declaration of data*

The participants were informed about the true purpose of the study, without using double purposes, and were assured that the results will be open to communication if there is a desire to get to know them.

Findings

The data were analyzed with the statistical program "Statistical Package for Social Sciences" (SPSS), version 21. Initially, the descriptive statistics were extracted: mean value, standard

deviation, frequencies, and percentages for the questionnaire statements. To determine the reliability of the measurement scales, Cronbach's alpha was used. Statistical analyzes for hypothesis testing were done using correlational analysis (Pearson correlation). Pearson correlation was used to determine the relationship between exposure to COVID-19, death anxiety, and resilience. Regarding gender differences, no statistical analysis was performed due to the low number of male participants.

Demographic data

A significant percentage of the sample (77.14%) belongs to the age group of 18-20 years. The second superficial age group in this research is 21-23 years old (16%). Meanwhile, the least representative age group in this study is the 24-27 years old and 28-30 years old, respectively with the same percentage of representation (3.4%).

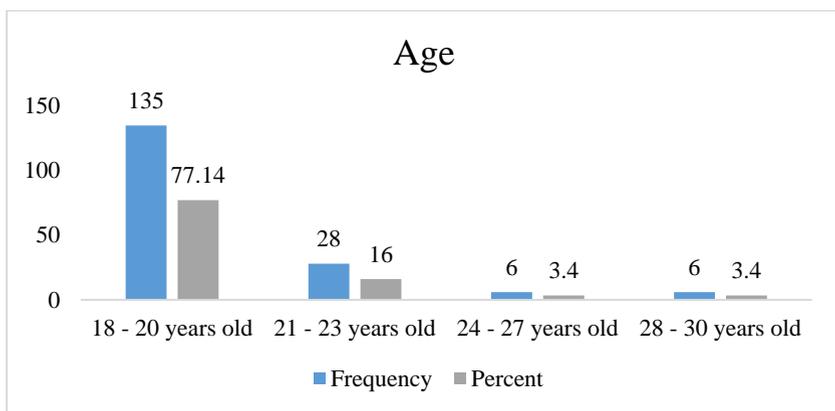


Figure 1. *The age of the sample participated in the study*

Regarding the academic year, 70.2% of the sample are year 1, bachelor. The second most representative percentage of the sample is third-year bachelor students (16% of them).

Meanwhile, a small percentage of the sample (4.5% of them) belongs to the fourth year (master).

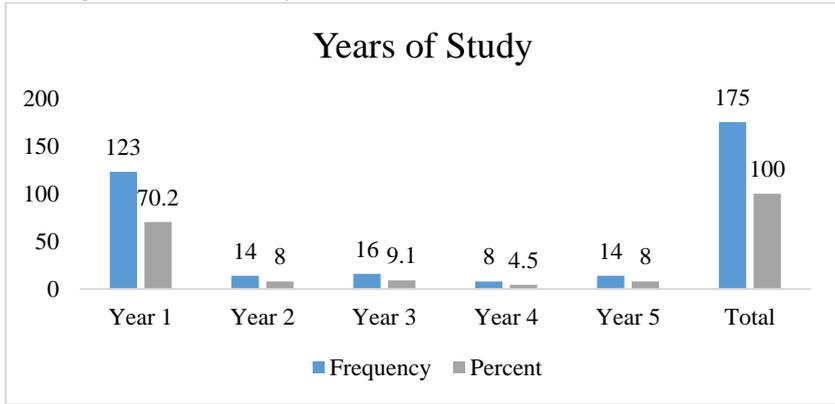


Figure 2. Years of study (bachelor and master degree)

Descriptive Data

63.42% of the sample stated that they tested positive for COVID-19 at least once. 36.57% have not tested positive for COVID-19, at least to their knowledge they have not experienced visible symptoms of COVID-19. More than half of the sample (57.71) state that a family member has tested positive for COVID-19. Meanwhile, 84.57% of the sample state that someone close to them, but who does not live at home with them, has tested positive for COVID-19.

Table 1. Data on COVID - 19 exposure

	I tested positive for COVID-19		Someone who lives in my house tested positive for COVID-19		Someone close to me (but not living in my house) tested positive for COVID-19	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	111	63.42	101	57.71	148	84.57
No	64	36.57	74	42.28	27	15.42
Total	175	100	175	100	175	100

The sample that participated in the study was asked about the severity of the symptoms of COVID-19. 78.12% of the sample

who have passed COVID-19, claim that their symptoms were not severe. Meanwhile, 14.58% of the sample who have passed COVID-19, report that they needed to visit the emergency room and 5.2% of them needed intensive treatment.

Table 2. The severity of COVID - 19

	I got sick with COVID-19, but the symptoms were not severe		My symptoms of COVID-19 required a visit to the emergency room		My symptoms of COVID-19 required intensive treatment	
	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>
Yes	75	78.12	14	14.58	5	5.2
No	21	21.87	82	85.41	91	94.79
Total	96	100	96	100	96	100

Regarding the family members of the camp included in the study, 80.39% of the sample report that the symptoms of family members living in the same house as them were not severe. 17.44% of the sample report that family members have needed an emergency visit related to the symptoms of COVID-19. Meanwhile, 13.72% of the sample claim that their family members have experienced COVID-19 with symptoms severe enough that concerns have arisen seriously about not surviving.

Table 3. The severity of symptoms of someone in the house

	He/She became ill with COVID-19, but the symptoms were not severe		His/her symptoms of COVID-19 were severe enough that there were serious concerns about not surviving		Emergency visits	
	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>
Yes	82	80.39	14	13.72	30	17.44
No	20	19.6	88	86.27	72	82.56

Total	102	100	102	100	102	100
--------------	-----	-----	-----	-----	-----	-----

The sample included in the study was asked about the relationship they had with a family member who passed COVID-19. 58.82% of them report that their parents passed COVID-19 and 15.68% of them report that their grandfather and/or grandmother have passed COVID-19.

Table 4. Please describe your relationship with the person

	Frequency	Percent
Mother/ Father	60	58.82
Grandparents	16	15.68
Cousins	4	3.9
Uncle/ Aunt	5	4.8
Other	17	16.66
Total	102	100

24.57% of the sample included in the study report that they have witnessed the death of a relative from COVID-19. The rest of the sample (75.42% of them) affirm that they have not witnessed the death of any relative/relatives from COVID-19.

Table 5. Have you witnessed the death of a relative/cousin from COVID-19?

	Frequency	Percent
Yes	43	24.57
No	132	75.42
Total	175	100

Death anxiety is divided into three categories (low anxiety, medium anxiety, and high anxiety). 36.57% of the sample were categorized with low death anxiety. While 33.71% of them are

categorized with high death anxiety. As a result, 63.42% of the sample were categorized with "medium/high" death anxiety.

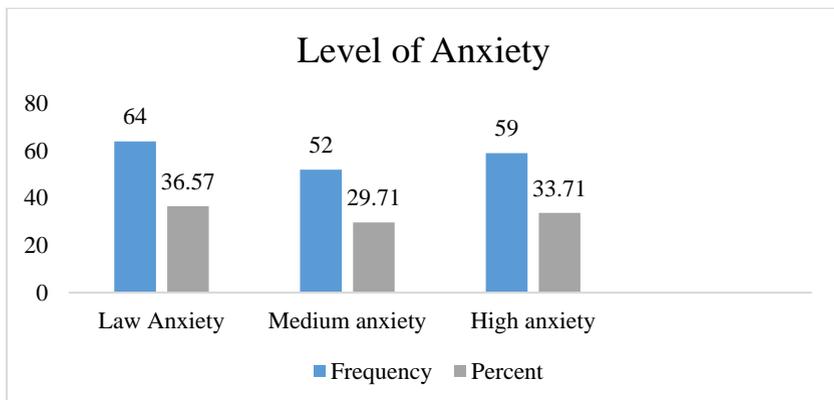


Figure 3. *The level of anxiety in the sample participating in this study*

The sample included in the study was asked about resilience. The ability to recover is divided into three categories (low, medium, and high). According to the Abbreviated Scale of Resilience (Sinclair & Wallston, 2004), 39.42% of the sample result in low level of resilience. Most of the sample (41.71% of them) results in medium resilience and the rest (18.85% of the sample) resulted in high resilience.

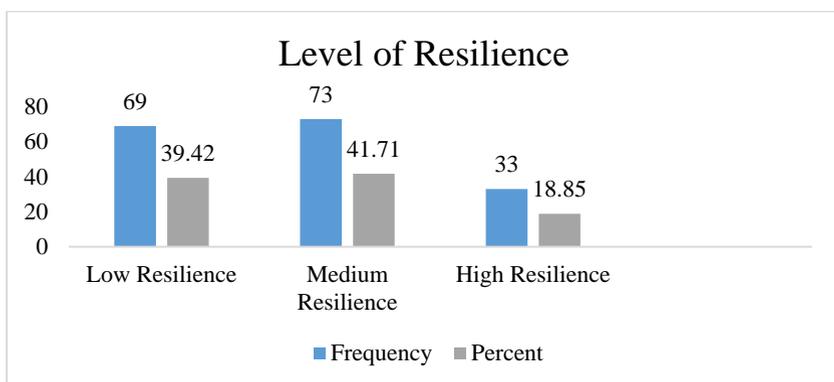


Figure 4. *The level of Resilience in the sample participating in this study*

The descriptive data analysis results that 14.28% of people with low death anxiety have a low level of resilience, but 22.27% of people with low anxiety have a "medium/high" level of resilience. 12.57% of individuals with high death anxiety have a low resilience level and 8% of individuals with high death anxiety have a high resilience level.

Table 6. Level of Anxiety in cross tabulation with the level of resilience

	Low Resilience		Medium Resilience		High Resilience	
	<i>Frequenc y</i>	<i>Percent</i>	<i>Frequenc y</i>	<i>Percent</i>	<i>Frequenc y</i>	<i>Percent</i>
Low Anxiety	25	14.28	29	16.57	10	5.7
Medium Anxiety	22	12.57	21	12	9	5.14
High Anxiety	22	12.57	23	13.14	14	8
Total	69	39.42	73	41.71	33	18.85

In this study, it was seen how the levels of death anxiety are in the sample who claimed to have passed COVID-19. 25.14% of the people included in this study who passed COVID-19 resulted in a low level of death anxiety. Meanwhile, 38.27% of people who have passed Covid-19 have a medium and high level of death anxiety. This study shows that a considerable percentage of people who have not passed COVID-19 have medium anxiety (10.85%) and high anxiety (14.28%). This result may also be because exposure to COVID-19 also includes whether one of the family members or someone known has passed COVID-19, thus increasing the level of death anxiety.

Table 7. Cross tabulation “I tested positive for COVID-19” with the level of Anxiety

I tested positive for COVID - 19	Low Anxiety		Medium Anxiety		High Anxiety	
	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>
Yes	44	25.14	33	18.85	34	19.42
No	20	11.42	19	10.85	25	14.28
Total	64	36.57	52	29.71	59	33.71

The percentage of the sample included in the study who have had a few times of COVID-19 with a low level of resilience is higher than the percentage of the sample who have had a few times of COVID-19 with a high level of resilience (21.71% vs. 13.71 %). 17.71% of the sample who affirm that they have not passed COVID-19 result with a low level of resilience and 18.84% of them result with a medium and high level of resilience.

Table 8. Cross tabulation “I tested positive for COVID-19” with the level of Resilience

I tested positive for COVID - 19	Low Resilience		Medium Resilience		High Resilience	
	<i>Frequenc y</i>	<i>Percent</i>	<i>Frequenc y</i>	<i>Percent</i>	<i>Frequenc y</i>	<i>Percent</i>
Yes	38	21.71	49	28	24	13.71
No	31	17.71	24	13.7	9	5.14
Total	69	39.42	73	41.71	33	18.85

In this study, the frequency and percentages of the level of death anxiety and resilience were measured among people who had someone in the family with COVID-19. 35.42% of the people involved in this study and who had someone in the family have a medium and high level of anxiety. Meanwhile, 12.57% of people who have had someone in their family with COVID-19 have high resilience, and 22.28% of people who have had someone in their family with COVID-19 have low resilience.

Table 9. “Someone who lives in my house tested positive for COVID-19” with the level of anxiety

Someone who lives in my house tested positive for COVID-19	Low Anxiety		Medium Anxiety		High Anxiety	
	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>
Yes	39	22.28	28	16	34	19.42
No	25	14.28	24	13.71	25	14.28
Total	64	36.57	52	29.71	59	33.71

Table 10. “Someone who lives in my house tested positive for COVID-19” with level of resilience

Someone who lives in my house tested positive for COVID-19	Low Resilience		Medium Resilience		High Resilience	
	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>
Yes	39	22.28	40	22.85	22	12.57
No	30	17.14	33	18.85	11	6.28
Total	69	39.42	73	41.71	33	18.85

The level of anxiety is higher among people who have had one of their parents with COVID-19. 35.28% of the sample taken in the study, who claim that one of their parents has had COVID-19, result in a "medium" level of anxiety/ high". 21.56% of them resulted in low resilience, the same percentage of this sample results in medium resilience, and 15.68% of the sample that one of the parents has passed COVID-19, resulting in high resilience.

Table 11. The relationship with the person and the level of anxiety

The relationship with the person	Low Anxiety		Medium Anxiety		High Anxiety	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Mother/Father	24	23.52	14	13.72	22	21.56
Grandparents	6	5.88	2	1.9	8	7.8
Cousins	1	0.9	3	2.9	0	0
Uncle/ Aunt	2	1.9	2	1.8	1	0.9
Other	5	4.9	6	5.88	6	5.88

Table 12. The relationship with the person and the level of the resilience

The relationship with the person	Low Resilience		Medium Resilience		High Resilience	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Mother/Father	22	21.56	22	21.56	16	15.68
Grandparents	7	6.8	6	5.8	3	2.9
Cousins	1	0.9	3	2.9	0	0
Uncle/ Aunt	2	1.8	2	1.9	1	0.9
Other	7	6.8	7	6.8	3	2.9

The level of death anxiety and resilience was also measured in those people who affirm that someone close to them (but not living in the same house as them) has passed COVID-19. It is worth noting that the percentage of the sample included in the study who affirm that they have had someone (outside the family) who has had COVID-19 is greater than the percentage of people who claim that someone in their family has had COVID-19. Meanwhile, 30.28% of the people included in the study, who have had someone with COVID-19 (outside their home) results in high anxiety, and 28.57% of the persons included in the study, who had a relative with COVID-19, result in low resilience.

Table 13. Someone close (but not living in my house) tested positive for COVID-19 and the level of anxiety

Someone close to me (but not living in my house) tested positive for COVID-19	Low Anxiety		Medium Anxiety		High Anxiety	
	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>
Yes	54	30.85	41	23.42	53	30.28
No	10	5.7	11	6.28	6	3.4
Total	64	36.57	52	29.71	59	33.71

Table 14. Someone close to me (but not living in my house) tested positive for COVID-19 and level of resilience

Someone close to me (but not living in my house) tested positive for COVID-19	Low Resilience		Medium Resilience		High Resilience	
	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>
Yes	50	28.57	68	38.85	30	17.14
No	19	10.85	5	2.8	3	1.7
Total	69	39.42	73	41.71	33	18.85

Correlation between variables

To understand the relationship between the variables, Pearson correlation was used through the SPSS Statistical Package. According to the Pearson correlation, there is a statistically significant positive relationship between exposure to COVID-19 and death anxiety ($r = .181^*$; $p < .05$). The more exposed to COVID-19, the higher the death anxiety among these people. A statistically significant negative relationship exists between exposure to COVID-19 and resilience ($r = -.175^{**}$; $p < .01$). The

more exposed to COVID-19 the lower the level of resilience in these people. This study shows that a statistically significant negative relationship also exists between death anxiety and resilience ($r = -.153^*$; $p < .05$). The more death anxiety a person experiences, the lower the level of resilience. This also means that the higher the level of resilience in a person, the lower the anxiety towards death.

Table 15. Pearson Correlations between variables

*Correlation is significant in level 0.05.

		Death Anxiety	Resilience
COVID - 19 Exposure	Pearson Correlation	.181*	-.175**
	Sig. (2-tailed)	.040	.043
	N	175	175
Death Anxiety	Pearson Correlation		-.153*
	Sig. (2-tailed)		.027
	N		175

**Correlation is significant in level 0.01.

Conclusions and Discussions

Hypothesis 1: There is a significant correlation between exposure to COVID-19 and death anxiety

This study shows that, there is a statistically significant positive relationship between exposure to COVID-19 and death anxiety. The more exposed to COVID-19, the higher the death anxiety among these people. Other studies confirm this result. Pandemics cause large masses to live in fear and anxiety and disrupt the natural flow of life (Chalhoub & Koubeissy, 2022). The COVID-19 pandemic has presented a unique situation to understand humanity because of the constant reminders of death (Hughes & Jones, 2022). Since COVID-19 has killed many people all around the world, people's levels of death anxiety due to

COVID-19 are likely to be promoted often resulting in increasing levels of fear during the Pandemic (Bulut, 2022).

Hypothesis 2: Death anxiety correlates negatively with resilience

Another important finding was that a statistically significant negative relationship also exists between death anxiety and resilience. The higher the death anxiety in a person, the lower the level of resilience, or vice versa. Other studies show that low resilience and ability to adapt to a changing environment causes more death anxiety among people (Farooq & Zaheer, 2021). Furthermore, COVID-19-related fear, perceived risk, stress, anxiety, and depression were all significantly mediated by resilience (Paul & Shilpa, 2021). People's fear and anxiety of death strongly affected their resilience. Encountering adversity and coping successfully are the core elements of mental resilience (Luo & Guo, 2022).

Hypothesis 3: There is a significant correlation between exposure to COVID-19 and resilience.

A statistically significant negative relationship exists between exposure to COVID-19 and resilience. The more exposed to COVID-19 the lower the level of resilience in these people. The literature of this study shows that low levels of resilience are a significant predictor of COVID-19 anxiety. Moreover, available reports generally agree that resilient students are less likely to report symptoms of distress and death anxiety during traumatic events, thereby maintaining optimal levels of well-being (Skalski & Konaszewski, 2021). Resilience may help to safeguard mental health during the spread of a pandemic infectious disease. However, this is also depending on the course of the disease and students' exposure to COVID-19 (Silveira & Hecht, 2022).

Recommendations

The literature suggests that major events, such as the Pandemic in the case of our study, bring about radical change in individuals' lifestyles. Thus, we suggest the creation by a staff of

psychologists of programs with a focus on raising psycho-emotional capacities (essentially resilience), so that these programs become a permanent part, integrated into the basic curriculum of every faculty. The implementation of these programs would contribute to the preparation of young people with a high level of resilience to face major events (not only pandemics), which can be of the most different types.

Considering the results of the study, specifically the statistically significant negative correlations between exposure to COVID-19 and death anxiety, exposure to COVID-19 and resilience, death anxiety and resilience in students, we recommend the creation of a special program "post COVID-19", in the framework of psychological recovery resulting from the consequences of direct and indirect exposure to COVID-19. This program must be built by psychologists and unified to become part of every faculty, for an indefinite period. Furthermore, taking as a basis the results of the study in terms of the level of death anxiety and resilience, as well as the relationship between the variables in students, we would underline and highlight the role of the psychologist in every faculty.

This study recommends that the relationship between these three variables (exposure to COVID-19; death anxiety and resilience) should also be explored among young people who have finished their relationship with the faculty (Bachelor and Master cycle). Also, the study recommends that the relationship between the three variables should be studied among young people living in other cities.

Another recommendation is related to the comparison between girls and boys, to identify if there are statistically significant differences in the relationship between the three variables. Another aspect of the recommendations is related to the inclusion of the socio-economic status (in addition to gender and age), to see if these demographic data affect the level of death

anxiety and resilience, as well as the relationship between the three variables. Also, a qualitative follow-up study should be carried out through the methodology of focus groups, to obtain additional, more detailed data from the students.

References

- Abad, M. & Shirkhani, M. (2021). Relationship between fear of coronavirus and death anxiety: Mediating role of behavioral inhibition system. *Journal of Fundamentals of Mental Health*, 171 - 172.
- Arslan, G. (2019). Mediating role of the self-esteem and resilience in the association between social exclusion and life satisfaction among adolescents. *Personality and Individual Differences*, 151, 109514.
- Barton, M. & Christianson, M. (2020). Resilience in action: leading for resilience in response to COVID-19. 4(3), 9 - 10. doi:<http://orcid.org/0000-0001-7707-8154>
- Bulut, M. (2022). Relationship between COVID-19 anxiety and fear of death: the mediating role of intolerance of uncertainty among a Turkish. *Current Psychology*, 10.
- Chalhoub, Z. & Koubeissy, H. (2022). Fear and death anxiety in the shadow of COVID-19 among the Lebanese population: A cross-sectional study. *PLOS ONE*, 10. doi:<https://doi.org/10.1371/journal.pone.0270567>
- Coulombe, S. (2020). Risk and Resilience Factors During the COVID-19 Pandemic: A Snapshot of the Experiences of Canadian Workers Early on in the Crisis. *Frontiers in Psychology*, 7 - 9. doi:<https://doi.org/10.3389/fpsyg.2020.580702>
- Farooq, A. & Zaheer, M. (2021). COVID-19: Anxiety, Rejection Sensitivity, Fear Of Death And Resilient Coping Among Generation X And Y. *ASEAN Journal of Psychiatry*, 22 (9).
- Flora, K. (2021). Resilience, fear of COVID-19 and their relationship with cognitive functioning and mood: a study on the administrative staff of the University of Western

Macedonia, Greece. *Journal of Ideas in Health*, 459 - 460.
doi:<https://doi.org/10.47108/jidhealth.Vol4.IssSpecial3.157>

- Frydenberg, E. (2004). Coping competencies: What to teach and when. *Theory Into Practice*, 43(1), 14–22.
- Hughes, B. & Jones, K. (2022). Young People’s Experiences of Death Anxiety and Responses to the Covid-19 Pandemic. *OMEGA – Journal of Death and Dying*, 17.
- Hu, T., Zhang, D., & Wang, J. (2015). A meta-analysis of the trait resilience and mental health. *Personality and Individual Differences*, 76, 18–27.
- Jhangiani, R.S., Chant, I., Chiang, A., Cuttler, C. & Leighton, D. C. (2019). *Research Methods in Psychology, 4th edition*. Surrey B.C.: Kwantlen Polytechnic University.
- Kenyon, G. M. (2000). *Philosophical foundations of existential meaning*. In: Urata, Y. (2015) A Psychological Model to Determine Meaning in Life and Meaning of Life. *Journal Psychology of Life*, 215-227.
- Kirthiga, H.J (2020). Influence on resilience and death anxiety during COVID-19 lockdown for Indians and foreigners. *International Journal of Indian Psychology*, 8(2), 93-103. DIP:18.01.212/20200802, DOI:10.25215/0802.212
- Luo, Y. & Guo, R. (2022). Reflection in the Context of the Epidemic: Does Death Anxiety Have a Positive Impact? The Role of Self-Improvement and Mental Resilience. (N. U. Jolene Van Der Kaap-Deeder, Ed.) *Frontiers in Psychology*, 13, 4. doi:<https://doi.org/10.3389/fpsyg.2022.804635>
- Mani, A. & Fereidooni, R. (2022). The prevalence and risk factors of death anxiety and fear of COVID-19 in an Iranian community: A cross-sectional study. *Health Science Reports*, 7. doi:10.1002/hsr2.706
- Manuel, F. & Rodriguez, M. (2021). Stress, Coping, and Resilience Before and After COVID-19: A Predictive Model Based on Artificial Intelligence in the University Environment. *Frontiers in Psychology*, 1 - 3. doi:<https://doi.org/10.3389/fpsyg.2021.647964>

- McDonnell, S., & Semkowska, M. (2020). Resilience as mediator between extraversion, neuroticism, and depressive symptoms in university students. *Journal of Positive Psychology and Wellbeing*, 4(1), 26–40.
- National Center for PTSD (NCPTSD) COVID-19 Workgroup. (2021). COVID-19 Exposure Scale. <https://www.ptsd.va.gov>.
- Paul, D. & Shilpa, I. (2021). Resilience and Death Anxiety among Covid Positive and Covid Negative People. *Saudi Journal of Humanities and Social Sciences*, 5. doi:10.36348/sjhss.2021.v06i09.005
- Silveira, S. & Hecht, M. (2022). Coping with the COVID-19 Pandemic: Perceived Changes in Psychological Vulnerability, Resilience and Social Cohesion before, during and after Lockdown. 11 - 12. doi:https://doi.org/10.3390/ijerph19063290
- Simkus, J. (2022). *Convenience Sampling: Definition, Method and Examples*. Simply Psychology. www.simplypsychology.org/convenience-sampling.html
- Sinclair, V. G., & Wallston, K.A. (2004). The development and psychometric evaluation of the Brief Resilient Coping Scale. *Assessment*, 11 (1), 94-101.
- Skalski, S. & Konaszewski, K. (2021). Resilience and Mental Well-Being During the COVID-19 Pandemic: Serial Mediation by Persistent Thinking and Anxiety About Coronavirus. *Frontiers in Psychiatry*, 2 - 3. doi:doi:10.3389/fpsy.2021.810274
- Tillich, P. (1952). *The courage to be*. In: Bolea, S. (2015). The courage to be anxious. Paul Tillich's existential interpretation of anxiety. *Journal of Education Culture and Society*.
- Tomer, A. & Eliason, G. T. (2008). Existentialism and death attitudes. In: Nienaber, K. (2015). *The Moderating Effect of Intrinsic Religiosity on the Relationship between Death Anxiety and Psychological Distress among Older Adults*. Southern Illinois University Edwardsville, USA: ProQuest LLC.

- Thorson, J. A., & Powell, F. C. (1992). A Revised Death Anxiety Scale. *Death Studies*, 16(6), 507–521. <https://doi.org/10.1080/07481189208252595>
- Waite, S., & Hyland, P. (2021). Testing alternative models and predictive utility of the Death Anxiety Inventory-Revised: A COVID-19 related longitudinal population based study. *Acta Psychologica*, 10.
- Yıldırım, M., & Arslan, G. (2022). Exploring the associations between resilience, dispositional hope, preventive behaviours, subjective well-being, and psychological health among adults during early stage of COVID-19. *Curr Psychol* 41, 5712–5722. <https://doi.org/10.1007/s12144-020-01177-2>
- Yildirim, M., & Belen, H. (2019). The role of resilience in the relationships between externality of happiness and subjective well-being and flourishing: A structural equation model approach. *Journal of Positive Psychology and Wellbeing*, 3(1), 62–76.
- Zhang, J., Lu, H., Zeng, H., Zhang, S., Du, Q., Jiang, T., & Du, B. (2020). The differential psychological distress of populations affected by the COVID-19 pandemic. *Brain, behavior, and immunity*, 87, 49.

