

# Resilience, Death Anxiety, and Mental Health of COVID-19 Survivors

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**Abstract:** The COVID-19 pandemic, a notable viral outbreak of the twenty-first century, has posed unparalleled challenges to global mental health. It has potentially escalated stress, anxiety, fear, frustration, and social isolation, impacting both our physical and psychological well-being. Patients and healthcare professionals are given psychological support, but the general public's mental health also needs a lot of attention. Therefore, present study have been conducted to examine the role of resilience, mental health, and death anxiety among COVID-19 survivors. The study was carried out on 150 COVID-19 survivors (75 male & 75 female) who were residing in urban and rural areas of Rewari, Mahendergarh and Gurgaon district of Haryana. Participants were assessed using the resilience scale, death anxiety scale, and mental health continuum scale short form. Analysis revealed that female COVID-19 survivors tend to have higher levels of death anxiety and better mental health than male COVID survivors, whereas no significant difference was found in resilience differences between male and female COVID-19 survivors. It was also revealed that there was no significant difference between urban and rural areas COVID survivors on death anxiety, mental health, and resilience. Correlation analysis shows that resilience was found positively correlated with the mental health of COVID survivors whereas death anxiety was negatively associated with the mental health of the COVID-19 survivors.

**Keywords:** Resilience, Mental Health, Death Anxiety

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## 1. Introduction

The information provided highlights the timeline of events related to the COVID-19 pandemic and the profound impact it has had on various aspects of individuals' lives and the global economy. The identification of COVID-19 as a novel coronavirus in Wuhan, China, in December 2019 marked the beginning of a rapidly evolving situation. The World Health Organization (WHO) confirmed the identification of COVID-19 on February 11, 2020, and declared it a global pandemic on March 11, 2020 [1].

The causative virus, SARS-CoV-2, shares genetic similarity with the SARS-CoV virus that caused the 2003 SARS outbreak. This genetic similarity suggests a link between the two viruses and provides some understanding of the characteristics and behavior of SARS-CoV-2. The pandemic has had far-reaching consequences, including

widespread lockdowns, economic crises, and disruptions to daily life [1]. These uncertainties and concerns surrounding the virus outbreak, coupled with the broader societal and economic impacts, have had implications for mental health. Multiple reports have indicated an increase in the prevalence of mental disorders and psychological distress during the COVID-19 pandemic [2]. Suicide rates have risen in several countries, and research studies have observed higher levels of psychological distress among the general population, individuals with pre-existing mental health conditions, and healthcare professionals [3-5].

The impact of the pandemic on mental health is a significant concern that requires attention and further research. Understanding the psychological effects of the pandemic can help inform interventions and support systems to mitigate the adverse consequences on individuals' well-being. Pandemics have been linked to elevated levels of mental stress. Biological disasters bring about fear,

uncertainty, and stigma, all of which can hinder effective mental therapy. The anxiety and suffering caused by inadequate COVID-19 pandemic management measures have a psychological impact on individuals, potentially leading to mental health issues [6]. Furthermore, prolonged periods of quarantine can result in stress-related psychological effects. Individuals who were confined indoors often turned to social media for information about the outbreak, exposing themselves to misinformation and unreliable narratives [7]. During this pandemic, many nations reported high levels of depression, anxiety, psychological distress, and post-traumatic stress disorder among the general population. Major risk factors associated with mental health problems during the COVID-19 pandemic include younger age, female gender, comorbidities, pre-existing psychiatric disorders, occupation as a student, unemployment, and increased exposure to news or social media information about COVID-19 [8].

Resilience refers to an individual's ability to maintain psychological balance during challenging circumstances [9]. It is characterized by the capacity to adapt and overcome overwhelming problems or stressful events [10]. The main sources of resilience are social circumstances and resources that support the psychological processes required for coping with adversity [11]. Resilience encourages adaptability, resistance, or the restoration of physical and mental well-being after hardship [12]. Various studies on the COVID-19 pandemic have explored how resilience influences mental health. Chan *et al.* [13] found that high levels of resilience act as a protective factor against anxiety, depression, and traumatic events in both individualistic and collectivistic societies. Havnen *et al.* [14] highlighted the importance of deploying coping mechanisms suitable for the traumatic aspects of the pandemic to provide buffering effects. Similarly, Hou *et al.* [15] emphasized that resilience serves as an adaptive factor in the face of stressful situations. In conclusion, resilience acts as a resource that enables individuals to preserve their mental health despite the challenges and obstacles encountered throughout life.

Death anxiety has been a part of human existence for a long time. It refers to the psychological state arising from fear of death or harm [16, 17]. Situations that evoke anticipation or awareness of death are recognized as triggers for death anxiety [18]. Higher levels of death anxiety have been found to predict the presence and severity of mental illnesses [19, 20]. Since people's beliefs about death are influenced by various demographic, social, cultural, psychological, and health factors, the determinants of death anxiety can vary among different populations [21]. With the emergence of the COVID-19 pandemic, encounters with death among friends or family, misinformation, and ambiguous reports about the disease have had diverse psychological effects, including terror and death anxiety [22, 23]. The studies mentioned provide valuable insights into the factors associated with psychiatric symptoms, psychological distress, and death anxiety during the COVID-19 pandemic. Mowla *et al.* [24] emphasize the need for further research

specifically focusing on the fear of dying, indicating that this aspect requires more attention in understanding the overall impact of pandemics on mental health.

Lee *et al.*, [12] conducted a comprehensive study that identified various socio-demographic characteristics, medical histories, psychological and social factors, and job-related factors associated with psychiatric symptoms during the pandemic. This highlights the multifaceted nature of the psychological impact of the COVID-19 crisis, with several factors potentially influencing individuals' mental health outcomes. Lee *et al.*, [12] suggest that death anxiety, specifically related to COVID-19, contributes significantly to psychological distress experienced by individuals. This underscores the relevance of considering death anxiety as a significant psychological factor during pandemics and understanding its impact on individuals' well-being.

Previous research has also indicated various factors influencing death anxiety during pandemics, including the loss of a family member to COVID-19, religious beliefs, cultural norms, perceived stress levels, attitudes toward COVID-19, subjective proximity to death, coping mechanisms, prior contact with COVID-19 patients, mental illness, alcohol use, loneliness, perceived risk, and stress reduction techniques [25]. These findings highlight the complex interplay of individual, social, and contextual factors in shaping death anxiety during a pandemic. Overall, these studies contribute to the growing body of knowledge regarding the psychological impact of pandemics, particularly focusing on death anxiety and its association with mental health. Further research in these areas can provide a more comprehensive understanding of the factors influencing individuals' psychological responses during crises like the COVID-19 pandemic.

## 2. Rational of the Study

Resilience can play a crucial role in safeguarding mental health during the spread of a pandemic infectious disease. However, its effectiveness may be influenced by the trajectory of the illness, as certain resources may become depleted over prolonged periods of stress or strain, as observed in different phases of the COVID-19 pandemic. However, the media is crucial for the spread of information during a pandemic, and continual exposure to COVID-19-related information in both traditional and social media causes persistent and distorted thinking. While persistent thinking increases anxiety, it also leads to a build-up of emotional tension. As a result, one's mental health may be compromised, not least as a result of the pandemic's immediate detrimental impacts. To better understand how psychological resilience, mental health, and death anxiety relate to COVID survivors, this study is being done. No previous investigations of this kind have been carried out. The gathered information will improve our comprehension of the relationships between the listed variables and aid in the creation of efficient intervention strategies. Based on the purpose of the study, the following objectives and hypotheses

have been formulated.

### 3. Objectives

1. To assess and compare the death anxiety, mental health, and resilience among male and female COVID-19 survivors.
2. To assess and compare the death anxiety, mental health, and resilience among urban and rural COVID-19 survivors.
3. To examine the relationship between resilience and mental health among COVID-19 survivors.
4. To examine the relationship between death anxiety and mental health among COVID-19 survivors.

### 4. Hypotheses

1. There would be no significant difference between male and female COVID-19 survivors on death anxiety, mental health, and resilience.
2. There would be no significant difference between urban and rural COVID-19 survivors on death anxiety, mental health, and resilience.
3. There would be a positive relationship between resilience and mental health among COVID-19 survivors.
4. There would be a negative relationship between death anxiety and mental health among COVID-19 survivors.

### 5. Method

#### 5.1. Research Design

A 2x2 factorial research design was used to assess the difference between variables and correlation design was applied to explore the role of resilience, mental health, and death anxiety among COVID-19 survivors. Convenient sampling method was applied to collect the participant's information.

#### 5.2. Sample and Procedure

The present study was conducted on 150 (male & female) COVID-19 survivors with the age range of 20 to 50 years and were residing in different urban and rural areas of Rewari, Mahendergarh and Gurgaon district of Haryana. Participants were contacted personally by visiting their residence, or working places after the second wave of pandemic and only those COVID-19 survivors were included in the study who were on isolation for at least 14 days either in hospital or at home.

The form consists of 5 sections which are: Section A, which seeks informed consent; Section B seeks the demographic details of the respondents including gender, age, locality, and educational qualification; Section C for the Resilience Scale; Section D was for the short form of Mental Health Continuum (MHCSF) and Section E was for Death Anxiety Scale. First and foremost, informed consent was

acquired before the instruments asked for their permission to participate in the study voluntarily. If the participants agree to take part in the study, then they were allowed to respond on the questionnaire in the subsequent section.

To ensure ethical considerations were observed, the research study implemented measures to protect the confidentiality of participants' information. This means that any personal or sensitive data provided by the participants were treated with strict confidentiality and not disclosed to unauthorized individuals. The questionnaire used in the study underwent a thorough review by an authority to ensure its compliance with ethical guidelines. Furthermore, the study followed the ethical guidelines established by the American Psychological Association (APA), which provides a set of principles and standards for conducting research involving human participants. Adhering to these guidelines ensures that the rights, welfare, and well-being of the participants are protected throughout the research process.

### 6. Measures

#### 6.1. Resilience Scale

The Resilience Scale, developed by Lakshmi and Narain [26], is a tool designed to evaluate an individual's capacity to adapt, recover, and grow from stressful situations and negative emotional experiences. It comprises 30 items and encompasses four dimensions: Perseverance, Composure, Self-reliance, and Faith. The scale follows a five-point Likert-type format. The test-retest reliability of the scale was calculated to be 0.87, indicating consistent results over time, while the split-half reliability was found to be 0.84, indicating internal consistency. The validity of the scale was determined to be 0.86, indicating its ability to accurately measure resilience.

#### 6.2. Mental Health Continuum Short Form (MHCSF)

Scale - The MHC-SF, a shortened version of the Mental Health Continuum, includes a total of 14 items carefully chosen to capture different aspects of well-being developed by [27]. It is composed of 3 items assessing emotional well-being, which reflects hedonic well-being, 6 items measuring psychological well-being, and 5 items evaluating social well-being. By combining the scores from these three subscales, the MHC-SF provides an overall assessment of eudaimonic well-being. The response options in this scale gauge the frequency at which individuals experience each symptom of positive mental health. Additionally, the MHC-SF can be used to determine an individual's level of flourishing or languishing mental health based on the combined scores from these subscales.

Example items from the MHC-SF include: Emotional well-being: "During the past month, how often do you feel satisfied with life?" Response options: 0 (never), 1, 2, 3, 4, 5 (everyday). Social well-being: "During the past month, how often do you feel that you had something important to contribute to society?" Response options: 0 (never), 1, 2, 3, 4,

5 (everyday) Psychological well-being: "During the past month, how often do you feel that you had experiences that challenged you to grow and become a better person?" Response options: 0 (never), 1, 2, 3, 4, 5 (everyday). These items assess individuals' experiences and perceptions related to emotional, social, and psychological well-being. Respondents provide their response on a 6-point Likert scale, ranging from 0 (indicating "never") to 5 (indicating "everyday").

The short form demonstrates excellent internal consistency, with a coefficient greater than 0.80, indicating the reliability of the measurement. It also exhibits discriminant validity, accurately differentiating between various aspects of mental health. In terms of test-retest reliability, the MHC-SF shows consistency over time, with an average coefficient of 0.68 over three successive 3-month periods and 0.65 over a 9-month period.

### 6.3. Death Anxiety Scale

The Thakur Death Anxiety Scale (TDAS), developed by [28] is designed to assess the level of death anxiety experienced by an individual. The scale is specifically tailored to Indian conditions and utilizes a response format that has shown increased reliability. The test comprises sixteen statements that have been carefully chosen to differentiate individuals based on their level of death anxiety. Among these statements, numbers 1, 2, 4, 5, 7, 9, 10, 12, 13, 15, and 16 are positively worded, while numbers 3, 6, 8, 11, and 14 are negatively worded.

For the positively worded statements, respondents indicate their agreement on a scale of 1 to 5, with 5 representing "Quite true," 4 representing "True," 3 representing "Undecided," 2 representing "False," and 1 representing "Quite false." On the other hand, for the negatively worded statements, the scale is reversed, with 1 representing "Quite true," 2 representing "True," 3 representing "Undecided," 4 representing "False," and 5 representing "Quite false."

The total score on the TDAS can range from a minimum of 16 to a maximum of 80, with higher scores indicating a higher level of death anxiety. The scale demonstrates good internal consistency, with a reliability coefficient of 0.78, and test-retest reliability, with a coefficient of 0.86. These reliability measures indicate that the scale provides consistent and stable results over time.

## 7. Results

The data acquired were analyzed using Statistical Package for Social Sciences (SPSS). Based on the objectives of the study descriptive data included, mean, standard deviation (SD), correlation, and t-tests were carried out.

The present investigation aimed to examine the role of psychological resilience, mental health, and death anxiety among COVID survivors. The data obtained from the survey were analyzed to test the objectives using descriptive and inferential statistics. The obtained results are presented in Tables 1-3. All statistical analyses were carried out using the statistical program SPSS.

**Table 1.** Mean, SD, and t-scores of males and females on Death Anxiety, Mental Health, and Resilience Measures.

	Male (75)		Female (75)		df	t-Values
	Mean	SD	Mean	SD		
Death Anxiety	48.93	10.13	53.16	5.94	148	2.23 *
Emotional Wellbeing	21.19	9.84	22.06	10.16	148	.76
Social Wellbeing	12.88	6.32	15.27	4.76	148	1.88
Psychological Wellbeing	20.44	3.88	20.59	3.81	148	-.18
Overall Mental Health	43.16	6.45	46.03	5.41	148	2.13*
Perseverance	29.56	3.38	30.11	2.99	148	.77
Composure	34.77	4.11	33.43	3.31	148	1.58
Self-Reliance	26.23	3.98	25.08	3.16	148	1.42
Faith	24.53	3.32	23.30	2.82	148	1.78
Total Resilience	115.10	9.42	111.92	6.71	148	1.71

The result presented in Table 1 showed that there was a significant difference in death anxiety between male and female ( $t = 2.23$   $p < .05$ ) COVID-19 survivors. Female ( $Mean = 53.16$ ,  $SD = 5.94$ ) tends to have more death anxiety than male participants ( $Mean = 48.93$ ,  $SD = 10.13$ ). Also, a significant difference was found in mental health between male and female ( $t = 2.13$   $p < .05$ ) COVID-19 survivors. Females ( $Mean = 46.03$ ,  $SD = 5.41$ ) tends to have higher mental health than male participants ( $Mean = 43.16$ ,  $SD = 6.45$ ). However, no significant difference was found among the dimensions of mental health i.e., emotional well-being ( $t = .76$ ), social well-being ( $t = 1.88$ ), and psychological well-being ( $t = -.18$ ) between male and female participants. Female ( $Mean = 22.06$ ,  $SD = 10.16$ ) ( $Mean = 15.27$ ,  $SD = 4.76$ )

( $Mean = 20.59$ ,  $SD = 3.81$ ) tends to high emotional, social, and psychological well-being than male ( $Mean = 21.19$ ,  $SD = 9.84$ ) ( $Mean = 12.88$ ,  $SD = 6.32$ ) ( $Mean = 20.44$ ,  $SD = 3.88$ ) respectively.

The above descriptive table shows that there was no significant difference in resilience ( $t = 1.71$ ) and its dimensions i.e., perseverance ( $t = .77$ ), composure ( $t = 1.58$ ), self-reliance ( $t = 1.42$ ) and faith ( $t = 1.78$ ) between male and female COVID-19 survivors. Male ( $Mean = 115.10$ ,  $SD = 9.42$ ) ( $Mean = 34.77$ ,  $SD = 4.11$ ) ( $Mean = 26.23$ ,  $SD = 3.98$ ) ( $Mean = 24.53$ ,  $SD = 3.32$ ) tends to have more resilience, composure, self-reliance, and faith than female ( $Mean = 111.92$ ,  $SD = 6.71$ ) ( $Mean = 33.43$ ,  $SD = 3.31$ ) ( $Mean = 25.08$ ,  $SD = 3.16$ ) ( $Mean = 23.30$ ,  $SD = 2.82$ ) respectively

whereas female ( $Mean = 30.11$ ,  $SD = 2.99$ ) tends to have more perseverance than male ( $Mean = 29.56$ ,  $SD = 3.38$ ).

**Table 2.** Mean, SD, and t-scores of Rural and Urban people on Death Anxiety, Mental Health, and Resilience Measures.

	Rural (75)		Urban (75)		df	t-Values
	Mean	SD	Mean	SD		
Death Anxiety	52.22	6.28	49.24	10.17	147	1.54
Emotional Wellbeing	10.10	1.84	9.82	1.94	147	.66
Social Wellbeing	14.56	5.38	13.50	6.16	147	.82
Psychological Wellbeing	20.76	3.85	20.32	3.87	147	.51
Overall Mental Health	45.41	6.08	43.63	6.13	147	1.30
Perseverance	29.54	3.05	30.11	3.40	147	-.78
Composure	33.00	3.38	35.55	3.74	147	-3.19**
Self-reliance	25.71	2.99	25.79	4.28	147	-.10
Faith	24.00	2.68	23.92	3.64	147	.11
Total Resilience	112.24	7.17	115.37	9.31	147	-1.68

Results presented in Table 2 showed that there was no significant difference in death anxiety between rural and urban people ( $t = 1.54$ ). Rural people ( $Mean = 52.22$ ,  $SD = 6.28$ ) tends to have more death anxiety than urban people ( $Mean = 49.24$ ,  $SD = 10.17$ ). Also, a significant difference was not found in mental health between rural and urban people ( $t = 1.30$ ). Rural people ( $Mean = 45.41$ ,  $SD = 6.08$ ) tend to have higher mental health than urban people ( $Mean = 43.63$ ,  $SD = 6.13$ ). No significant difference was found among the dimensions of mental health i.e. emotional well-being ( $t = .66$ ), social well-being ( $t = .82$ ), and psychological well-being ( $t = .51$ ) in rural and urban COVID-19 survivors. Rural people ( $Mean = 10.10$ ,  $SD = 1.84$ ) ( $Mean = 14.56$ ,  $SD = 5.38$ ) ( $Mean = 20.76$ ,  $SD = 3.85$ ) tend to high emotional,

social, and psychological well-being than urban people ( $Mean = 9.82$ ,  $SD = 1.94$ ) ( $Mean = 13.50$ ,  $SD = 6.16$ ) ( $Mean = 20.32$ ,  $SD = 3.87$ ) respectively.

The above descriptive table shows that there was no significant difference in resilience ( $t = -1.68$ ) and its dimensions i.e. perseverance ( $t = -.78$ ), self-reliance ( $t = -.10$ ), and faith ( $t = .11$ ) between rural and urban people. Urban participants ( $Mean = 115.37$ ,  $SD = 9.31$ ) ( $Mean = 30.11$ ,  $SD = 3.40$ ) ( $Mean = 25.79$ ,  $SD = 4.28$ ) tend to have more resilience, perseverance, and self-reliance than rural people ( $Mean = 112.24$ ,  $SD = 7.17$ ) ( $Mean = 29.54$ ,  $SD = 3.05$ ) ( $Mean = 25.71$ ,  $SD = 2.99$ ) respectively whereas rural people ( $Mean = 24.00$ ,  $SD = 2.68$ ) tends to have more faith than urban people ( $Mean = 23.92$ ,  $SD = 3.64$ ).

**Table 3.** Correlation coefficients of dimensions of Resilience, Mental Health, and Death Anxiety.

Measures	Emotional Wellbeing	Social Well-being	Psychological Well-being	Overall Mental Health
Perseverance	.057	.144	.150	.059
Composure	.353**	.112	.005	.210*
Self-reliance	.172	.407**	.648**	.030
Faith	.287**	.520**	.048	.606
Total Resilience	.364**	.478**	.324**	.358**
Death Anxiety	-.023	-.468**	-.290**	-.265**

\*= $p < .05$

\*\*= $p < .01$

Results presented in table 3 showed a significant positive relationship ( $r = .358$ ,  $p < .01$ ) between resilience and mental health and its dimensions i.e. emotional ( $r = .364$ ,  $p < .01$ ), social ( $r = .478$ ,  $p < .01$ ) and psychological ( $r = .324$ ,  $p < .01$ ) respectively. Among the dimensions of resilience and mental health, perseverance tends to have positive insignificant relation with emotional ( $r = .057$ ), social ( $r = .144$ ), psychological ( $r = .150$ ), and overall mental health ( $r = .059$ ). Composure tends to have positive significant relation with emotional ( $r = .353$ ,  $p < .01$ ) and overall mental health ( $r = .210$ ,  $p < .05$ ) and positive insignificant relation with social ( $r = .112$ ) and psychological well-being ( $r = .005$ ). Self-reliance tends to have positive significant relation with social ( $r = .407$ ,  $p < .01$ ) and psychological well-being ( $r = .648$ ,  $p < .01$ ) and positive insignificant relation with emotional ( $r = .172$ ) and overall mental health ( $r = .030$ ). Faith tends to have positive significant relation with emotional ( $r = .287$ ,

$p < .01$ ) and social well-being ( $r = .520$ ,  $p < .01$ ) and positive insignificant relation with psychological ( $r = .048$ ) and overall mental health ( $r = .606$ ).

Also, a significant negative relationship ( $r = -.265$ ,  $p < .01$ ) was found between death anxiety and mental health and its dimensions i.e. social ( $r = -.468$ ,  $p < .01$ ) and psychological well-being ( $r = -.290$ ,  $p < .01$ ), whereas negative insignificant relationship was found between death anxiety and emotional well-being ( $r = -.023$ ).

## 8. Discussion

The present study aimed to investigate the role of psychological resilience, mental health, and death anxiety among COVID-19 survivors. The first hypothesis, which stated that there would be no significant difference between male and female COVID-19 survivors in terms of death

anxiety, mental health, and resilience, was partially rejected based on the study findings. It was found that there was a significant difference between males and females in terms of death anxiety and mental health, while no significant difference was found in resilience. Female COVID-19 survivors tended to have higher levels of death anxiety compared to male COVID-19 survivors [29]. This finding is consistent with previous research showing that elderly women and women in general tend to exhibit higher levels of death anxiety [30]. It is possible that women's more expressive nature and sociocultural factors contribute to their stronger expression of death anxiety [31, 32].

In terms of mental health, female COVID-19 survivors were found to have higher levels of mental health compared to male COVID-19 survivors. This finding contradicts previous research indicating that women are more likely to report worse mental health and well-being compared to men. The study suggests that the changes in work routines and lifestyle brought about by the pandemic may have influenced these results, affecting both men and women [33-37]. Additionally, the spread of information on COVID-19 and the precautionary measures implemented by officials may have played a role in shaping individuals' mental health [38].

The second hypothesis, which stated that there would be no significant difference between urban and rural COVID-19 survivors in terms of death anxiety, mental health, and resilience, was supported by the study findings [39]. The results showed no significant difference in death anxiety and resilience between urban and rural areas. This finding aligns with previous research indicating similar levels of death anxiety and resilience among urban and rural populations. The level of awareness and general safety precautions related to COVID-19 may have contributed to the similarity in death anxiety levels [40]. However, the study findings contrasted with previous research indicating differences in mental health between urban and rural residents. The study suggests that the ongoing pandemic situation has resulted in a persistent state of stress for both urban and rural populations, potentially impacting their mental health similarly [41, 42].

The third and fourth hypotheses, stating that there would be a positive relationship between resilience and mental health and a negative relationship between death anxiety and mental health among COVID-19 survivors, were supported by the study findings. Previous research has also indicated a negative relationship between negative affect, depression, anxiety, and resilience, while positive affect, life satisfaction, subjective well-being, and flourishing are positively associated with resilience [43]. Resilience was found to mitigate the adverse effects of stress on mental health and promote positive mental health during challenging times such as the pandemic. The study also revealed that death anxiety was inversely related to mental health status, suggesting that individuals with lower levels of psychological symptoms exhibited higher levels of death anxiety. Several environmental, familial, biological, and social factors may contribute to the aetiology of death anxiety [44]. In other words, this correlation may have been impacted by certain

confounding variables. Worrying about how COVID-19 may affect their employment situation in the future and having fewer social interactions are two of the main causes of anxiety [45]. Important psychological disorders include mental health status, anxiety, and symptoms of mental disorders that have also been triggered by acute COVID-19 situations [46].

Overall, the study provides insights into the psychological factors experienced by COVID-19 survivors, highlighting the role of resilience, mental health, and death anxiety. These findings contribute to our understanding of the psychological impact of the pandemic and can inform interventions and support strategies for individuals affected by COVID-19.

## 9. Implications and Conclusion

The study findings indicate that there are differences in death anxiety and mental health between male and female COVID-19 survivors, with females reporting higher levels of death anxiety and better mental health. However, no significant difference was found in resilience between male and female COVID-19 survivors, suggesting that resilience levels are similar among both genders. Furthermore, the study found no significant differences in death anxiety, mental health, and resilience between urban and rural COVID-19 survivors. This implies that individuals from both urban and rural areas experience similar levels of these psychological factors in relation to the pandemic. The study also revealed a positive relationship between resilience and mental health, indicating that higher levels of resilience are associated with better mental health among COVID-19 survivors. Additionally, a negative relationship was found between death anxiety and mental health, suggesting that higher levels of death anxiety are associated with poorer mental health among COVID-19 survivors.

It is worth noting that the present study is the first empirical attempt to simultaneously assess and compare the effects of COVID-19-related death anxiety, mental health, and individual resilience among male and female COVID-19 survivors, as well as among urban and rural COVID-19 survivors. The study also examined the relationship between COVID-19-related mental health and resilience, as well as the relationship between COVID-19-related death anxiety and mental health. These findings contribute to the existing knowledge on the psychological impact of COVID-19 and provide valuable insights into the experiences of different subgroups of COVID-19 survivors.

## 10. Limitations and Recommendations for Further Research

The study acknowledges its limitations, specifically the small sample size and limited geographic focus on a specific district in Haryana. To overcome these limitations, future studies could include larger sample sizes and expand their research to include participants from different

geographical areas. By doing so, researchers can examine potential variations in the experiences of COVID-19 survivors across different regions. Additionally, the study suggests incorporating qualitative research methods alongside quantitative approaches in future investigations. Qualitative methods, such as interviews or focus groups, can provide deeper insights and perspectives into the various factors that influence the behaviour and experiences of COVID-19 survivors. This mixed-methods approach can offer a more comprehensive understanding of the psychological resilience, mental health, and death anxiety among individuals affected by the pandemic. By addressing these suggestions for future research, studies can enhance the generalizability of their findings and provide a more nuanced understanding of the psychological impact of COVID-19 on survivors.

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