Original Research Article

Resilience and Death Anxiety among Covid Positive and Covid Negative People

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Abstract

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 during this method. On the other hand, death anxiety or fear of death is present in all living humans, but it becomes more evident in settings where mortality is a factor (Greenberg *et al.*, 1990). The current pandemic has not only thrown our lives into disarray, confusion, and disorder, but it has also thrown us into an endless era of mortality, when no one can be sure of their own well-being or safety. Covid-19 pandemic has potentially increased the level of stress, anxiety, fear, frustration, social deprivation and has affected our physical and mental well-being. Hence, the present study aimed to study the difference and relationship in resilience and death anxiety among covid positive and covid negative people. Results show that there is no difference in resilience between covid positive and covid negative people, no significant difference in death anxiety between covid positive and covid negative people, there is no relationship between resilience and death anxiety among covid positive people, whereas there is a significant relationship between resilience and death anxiety among covid negative people.
Key words: Resilience, Death Anxiety, Covid positive people, Covid negative people.

INTRODUCTION

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 during this method. Individual assets and resources, as well as their life and environment, foster this ability to adapt and 'bounce back' in the face of adversity. The perception of resilience varies across one's life (Windle, 2014).

Some variables and mechanisms collaborate to increase resilience in the face of adversity in an interconnected dynamic process. It is context and time sensitive, and it may not be present in all situations or in all domains of life. Such as: Personal Aspects like personality traits (openness, extraversion, and agreeableness), internal locus of control, mastery, self-efficacy, self-esteem, and cognitive evaluation (positive interpretation). Biological and genetic factors in resilience indicate that harsh early environments can affect developing brain structure, function and neurobiological systems. Environmental–Systemic Factors on a microenvironmental level, social support, including relationships with family and peers, is positively correlated with resilience. Community factors, such as good schools, community services, sports and artistic opportunities, cultural factors, spirituality and religion, and lack of exposure to violence, contribute to resilience (Herrman. *et al.*, 2011).

Negative affect, depression, and anxiety are negatively related with resilience, whereas positive affect, life satisfaction, subjective well-being, and flourishing are positively connected with resilience. Resilience can reduce the adverse effects of stress factors on mental health and promote positive mental health in difficult times such as pandemic. Resilience lowered the impact of negative affect on psychological health while increasing the impact of positive affect. Furthermore, COVID-19-related fear, perceived risk, stress, anxiety, and depression were all significantly mediated by resilience (Yildirim, & Solmaz, 2020).

Death anxiety or fear of death is present in all living humans, but it becomes more evident in settings

where mortality is a factor (Greenberg *et al*, 1990). While defining death anxiety it can be said that it is the fear and anxiety associated with the expectation and consciousness of dying, death, and nonexistence. It usually consists of social, cognitive, and motivational elements that differ depending on a person's developmental stage and sociocultural life experiences (Kirthiga, 2020). Anxiety about dying can be perfectly natural. The fear of the unknown and what might happen next is a valid concern. However, it becomes a challenge when it begins to interfere with how individuals live their life. And if people don't find the right coping mechanisms, all that anxiety can lead to mental pain and stress.

Death anxiety may be felt consciously or unintentionally, and it can inspire people to distract themselves from their fears (Greenberg, *et al.*, 1994). Death anxiety is a common occurrence in humans, but it can cause paralyzing fear. Confronting death and the fear that comes with knowing that it is unavoidable is a common psychological dilemma for humans. Despite increasingly technologically advanced health systems, longer patient survival, and cures from life-threatening illnesses, mortality remains an ever-present fact for health care professionals (Helen, & Farchaus, 2009).

The World Health Organization (WHO) has declared the coronavirus disease of 2019 (COVID-19) outbreak a public health emergency. The second most common comorbidity was mental health issues, which came in second to cardio-respiratory disorders. Mental health issues were found to be significantly reduced in some SARS patients and caregivers. Patients not only lost family members and coworkers, but they often became stigmatized and lost their privacy as a result of media coverage. These people were unable to be present at the time of death or attend funerals due to quarantine, isolation, or hospitalization. Several people said that quarantine and isolation had a negative impact on their mental health (Tansey CM, *et al.*, 2007).

It is natural that individuals with a high level of attitude towards life consider life in a more positive way and thus they have higher level of death acceptance and experience less death anxiety. Jung believes that all people in the world have a preparation for death, thus people who have a higher and powerful attitude towards life, regard death as a natural process of life, and for these people death give a sense life (Azarian *et al*, 2016). In individuals with lower attitude towards life, awareness from the inevitability of death as an existential crisis, intrinsically leads individuals to find meaning in life and death anxiety rather than accepting death (Yavari *et al*., 2014).

REVIEW OF LITERATURE
The present study intended to fill the research gap on the relationship and difference in resilience and death anxiety among the covid positive and covid negative population. Research on risk, resilience, psychological distress, and anxiety at the beginning of the covid 19 pandemic by Petzold *et al*., (2020) shows psychological and social determinants exhibited stronger associations with anxiety regarding covid-19 than experiences with the disease. The population in Germany was screened for negative impact on mental health in the covid-19 pandemic to analyze the possible risk and protective factors. Total of 6,509 people took part and results revealed that current COVID-19 pandemic does cause psychological distress, anxiety, and depression for large proportions of the general population. Maintaining a healthy lifestyle and social contacts, accepting anxiety and negative emotions, cultivating self-efficacy, and knowing where to receive medical help if required seems to be beneficial, but drug misuse and the suppression of anxiety and negative emotions appear to be connected with increased psychological burden.

Another study on influence of resilience and death anxiety during COVID-19 lockdown for Indians and foreigners was conducted by Kirthiga, H. J. (2020), involving 112 participants out of which 77 were Indian and 35 were foreigners, revealed that there is no significant difference in resilience and death anxiety between Indians and foreigners. The study also indicated that there is no significant difference in males and females.

Hoelterhoff and Cheung Chung (2013) conducted a research examining how death anxiety influenced PTSD and mental health among people who experienced a life-threatening event, intended to consider the role of death anxiety on well-being and consider self-efficacy as resilience factor. 109 undergraduate students took part in the study and results revealed that self-efficacy was found to be significantly related to death anxiety and psychiatric comorbidity.

Another study was conducted by Azeem and Naz (2015) to find out the level of resilience, death anxiety and depression among institutionalized and non-institutionalized elderly which involved 80 participants and results revealed that noninstitutionalized elderly had high state-trait resilience and institutionalized elderly had more death anxiety and depressive symptoms also there was no gender difference on state resilience, although men had more trait resilience than elderly women.

Lower level of religious coping and spiritual well-being and high levels of death anxiety was indicated in a study that was conducted on association of death anxiety with spiritual well-being and religious coping in older adults during the covid 19 pandemic by Rababa *et al.,* (2021). Further results revealed that in

comparison to male older adults, female older adults had higher levels of religious coping and lower levels of death anxiety.

Resilience was inversely associated and was a protective factor for both anxiety and depression among the samples in China. A study conducted on 296 patients with mild covid symptoms on the relationship between resilience, anxiety and depression by Zhang *et al*. (2020) indicated that higher level of resilience was associated with lower anxiety and depression among the mild covid 19 patients in Wuhan, China.

METHODOLOGY
The aim of the present study is to understand the level of resilience and death anxiety among the covid positive and covid negative people. Quantitative research method has been used for the study.

Research Questions
- What is the difference in the resilience among covid positive and covid negative people?
- What is the difference in the death anxiety among covid positive and covid negative people?
- What is the relationship between resilience and death anxiety among covid positive people?
- What is the relationship between resilience and death anxiety among covid negative people?

Objective
- The difference in the resilience among covid positive and covid negative people.
- The difference in the death anxiety among covid positive and covid negative people.
- The relationship between resilience and death anxiety among covid positive people.
- The relationship between resilience and death anxiety among covid negative people.

Hypothesis
H0: "There is no significant difference in the resilience among covid positive and covid negative people"
H1: "There is no significant difference in the death anxiety among covid positive and covid negative people"
H2: "There is no significant relationship between resilience and death anxiety among covid positive people"
H3: "There is no significant relationship between resilience and death anxiety among covid negative people"

Operational Definitions
- Death Anxiety: Emotional distress and insecurity aroused by reminders of mortality, including one's own memories and thoughts of death.
- Resilience: The process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional,

and behavioral flexibility and adjustment to external and internal demands.
- Covid positive: individuals who have been infected and tested positive for SARS-COV2 are referred to as covid positive.
- Covid negative: individuals who have not been infected and tested negative for SARS-COV2 are referred to as covid negative.

Inclusion criteria
- Samples tested positive for covid 19 who were quarantined/hospitalized and covid negative individuals were considered.
- Samples residing from urban Kolkata, Delhi, Karnataka and Kerala were considered.

Exclusion criteria
- Samples that were under intensive care unit or under ventilation were excluded.

Sample and Sampling technique
- Purposive sampling technique was used for the study.
- Patients tested positive for Covid-19 (N=45)
- Patients tested negative for Covid-19 (N=30)

Tools of assessment
The Connor-Davidson Resilience Scale (CD-RISC-25): was developed by Kathryn M. Connor and Jonathan R.T. Davidson. It comprises of 25 items, each rated on a 5-point scale (0-4), with higher scores reflecting greater resilience. Internal consistency. Cronbach's a for the full scale was 0.89 and item-total correlations ranged from 0.30 to 0.70. Test–retest reliability was assessed in 24 subjects from the clinical trials of GAD (Group 4) and PTSD (Group 5) in whom little or no clinical change was observed from time 1 to time 2. The mean (SD) CD-RISC scores at time 1 [52.7 (17.9)] and time 2 [52.8 (19.9)] demonstrated a high level of agreement, with an intraclass correlation coefficient of 0.87.

Death Anxiety Scale-Extended
Was developed by Donal I Templer *et al*. It is a 51-item scale. This scale consists of the 15 Death Anxiety Scale items plus 36 new items which were generated on a rational basis that survived content validity ratings and correlated at the .001 level with three out of the four groups. The scale is correlated .81 with the Death Anxiety Scale. The 36 new items correlated .64 with Death Anxiety Scale and .97 with the Death Anxiety Scale-Extended. The Kuder-Richardson Formula 20 coefficients of internal consistency were .73 for the Death Anxiety Scale, .91 Death Anxiety Scale-New and .92 for the Death Anxiety Scale-Extended.

Procedure
Samples were identified through purposive sampling technique. Consent was taken from the

samples to be part of the study. Resilience Scale and Death Anxiety Scales were administered on the selected samples (N=75). Responses given by the samples were scored for further analysis.

ANALYSIS OF THE DATA
- Descriptive statistics and inferential statistics were used to analyse using SPSS version 16.0.

RESULTS AND ANALYSIS

People with greater resilience learn to survive and sustain environmental problems; they do not usually get frustrated in stressful situations, recover quickly and get stronger to handle troubles (Henderson & Milstein, 1996). Fear on the other side is an adaptable emotion that activates energy to deal with a potential threat. Anxiety could have been set individually and socially during pandemic. Covid-19 not only affects people's health and well-being, but also causes fear, stress and anxiety (Wang *et al.,* 2020). Present study attempts to know difference in resilience and death anxiety among covid positive people and negative people. The study also focuses on identifying the relationship between resilience and death anxiety among covid positive and negative people. Results of the study are as given below.

Table -1: Showing descriptive statistics of Resilience among Covid Positive and Covid Negative People

	Groups	N	Mean	Std. Deviation	Std. Error Mean
Resilience	1	45	68.36	10.329	1.540
	2	30	66.70	15.198	2.775

Table 1 shows the descriptive statistics of resilience among covid positive and covid negative people. For the research sample, covid positive people (M=68.36, SD=10.32, N=45) and covid negative people (M=66.70, SD=15.19, N=30). Mean value shows that samples have exhibited average resilience level.

Table-1a: Showing difference in Resilience between Covid Positive and Covid Negative People

		Levene's test		Independent Sample t test	
		F	Sig.	t	Sig. (2-tailed)
Resilience	Equal variance assumed	1.860	.177	.562	.576
	Equal variances not assumed			.522	.604

The Levene's Test *(Levene's Statistics = 1.860)* is not significant *(p=.177)* at p>0.05 level, which indicate that the variance of each group is not significantly different. Since p>0.05, it indicates that variances are equal. Hence the assumption of homogeneity of variance is not violated. For Independent Sample t test, results show that *(t=.522, p=.604)*. Analysis shows that p<0.05, hence *the null hypothesis H0 is accepted stating "There is no significant difference in the resilience among covid positive and covid negative people"*. Though the mean value shows average resilience level, statistical values do not show significant difference between covid positive and covid negative people. Resilience level is average among both the samples.

Table 2: Showing descriptive statistics of Death Anxiety among Covid Positive and Covid Negative People

	Groups	N	Mean	Std. Deviation	Std. Error Mean
Death Anxiety	1	45	82.02	11.470	1.710
	2	30	78.03	12.675	2.314

Table 2 shows the descriptive statistics of death anxiety among covid positive and covid negative people. For the research sample, covid positive people (M=82.02, SD=11.47, N=45) and covid negative people (M=78.03, SD=12.67, N=30). Mean value shows that samples have exhibited higher death anxiety.

Table 2a: Showing difference in Death Anxiety between Covid Positive and Covid Negative People

		Levene's test		Independent Sample t test	
		F	Sig.	t	Sig. (2-tailed)
Resilience	Equal variance assumed	.656	.421	1.415	.161
	Equal variances not assumed			1.386	.171

The Levene's Test *(Levene's Statistics = .656)* is not significant *(p=.421)* at p>0.05 level, which indicate that the variance of each group is not significantly different. Since p>0.05, it indicates that variances are equal. Hence the assumption of homogeneity of variance is not violated. For Independent Sample t test, results show that *(t=1.38,p=.171)*. Analysis shows that p<0.05, hence *the*

null hypothesis H1 is accepted stating "There is no significant difference in the death anxiety among covid positive and covid negative people". Though the mean value shows higher death anxiety, statistical values do not show significant difference between covid positive and covid negative people. Death anxiety level is higher among both the samples.

Table 3: Showing descriptive statistics of Resilience and Death Anxiety among Covid Positive People

	N	Mean	Std. Deviation
Resilience	45	68.36	10.329
Death Anxiety	45	82.02	11.470
Valid N (listwise)	45		

Table 3 shows the descriptive statistics of samples on resilience and death anxiety. For this research sample (N=45), resilience (M=68.36,

SD=10.32) and death anxiety (M= 82.02, SD= 11.47). Mean values show that resilience is average and death anxiety is higher among covid positive people.

Table 3a: Showing relationship between Resilience and Death Anxiety among Covid Positive People

Correlations		Resilience	Death Anxiety
Resilience	Pearson Correlation	1	.034
	Sig. (2-tailed)		.824
Death Anxiety	Pearson Correlation	.034	1
	Sig. (2-tailed)	.824	

Correlation analysis has been executed to know the relationship between resilience and death anxiety among covid positive people. The correlation between resilience and death anxiety is *(r=.03, p>0.05)*. Results show that, there is not significant relationship between resilience and death anxiety among covid positive people. Hence the *null hypothesis*

H2 has been accepted stating "There is no significant relationship between resilience and death anxiety among covid positive people". Though mean values show average resilience and higher death anxiety, statistical analysis does not show a significant relationship. Average resilience is trying to balance the higher death anxiety.

Table 4: Showing descriptive statistics of Resilience and Death Anxiety among Covid Negative People

	N	Mean	Std. Deviation
Resilience	30	66.70	15.198
Death Anxiety	30	78.03	12.675
Valid N (listwise)	30		

Table 4 shows the descriptive statistics of samples on resilience and death anxiety. For this research sample (N=30), resilience (M=66.70,

SD=15.19) and death anxiety (M= 78.03, SD= 12.67). Mean value show that resilience is average and less death anxiety.

Table-4a: Showing relationship between Resilience and Death Anxiety among Covid Negative People

Correlations		Resilience	Death Anxiety
Resilience	Pearson Correlation	1	.516[**]
	Sig. (2-tailed)		.004
Death Anxiety	Pearson Correlation	.516[**]	1
	Sig. (2-tailed)	.004	
**. Correlation is significant at the 0.01 level (2-tailed).			

Correlation analysis has been executed to know the relationship between resilience and death anxiety among covid negative people. The correlation between resilience and death anxiety is *(r=.51, p<0.05)*. Results show that, there is significant relationship between resilience and death anxiety among covid negative people. Hence the *null hypothesis H3 has been rejected and accepts the alternative hypothesis* stating *"There is significant relationship between resilience and death anxiety among covid negative people"*. Results explains that higher the resilience lesser the death anxiety.

DISCUSSION

Covid-19 Pandemic has affected the entire social, economic and psychological system in the world. Many people are affected by the pandemic condition. It's very important to identify the various factors related to psychological conditions of people being affected of covid-19. The present study highlights the importance of identifying the difference between resilience and death anxiety among covid positive and covid negative people. Results have shown that statistically there is no significant difference in resilience and death anxiety among covid positive and negative people. Resilience has been noticed among samples irrespective of affected by virus or not. It can be understood from the results that, pandemic has disturbed the conditions of people, whether affected by virus or not.

The will power to survive among covid positive people could have built in resilience level. If not greater, an average level of resilience has been noticed. On the other hand, covid negative people were affected by various other social, economic and psychological conditions. Adapting to new changes and holding on to the situations with the hope to get back to regular conditions of life would have built in resilience among covid negative people.

Fear of death has been seen higher among both covid positive and negative people. Being directly affected by the virus, the fear would have been higher due to medical conditions. Covid negative people have also exhibited higher death anxiety level. This could be due to fear of deaths seen in the society because of coronavirus. Uncertainty of their physical conditions and future could also increase fear for death.

The present study attempted to identify relationship between resilience and death anxiety between covid positive and covid negative people. Results show that there is no significant relationship between resilience and death anxiety among covid positive people. Average level of resilience among samples could have been supporting to handle death anxiety. Human instinct to force him/her to survive would have helped them to build resilience and handle death anxiety. Yet higher level of death anxiety has been noticed among covid positive people.

Statistically a significant relationship has been noticed between resilience and death anxiety among covid negative people. Results indicate that higher the resilience lesser the death anxiety. Covid negative people would have been maintaining health conditions as precautionary measures. This would build strength in them to face situation. Precautions build confidence to face tougher situations. Early precautions and interventions would have helped them to build resilience level. The confidence level in building immunity level in earlier stages could bring down the death anxiety. People not affected by Corona virus would feel safer in terms of not getting affected by virus. The body would allow for adaptations and provide opportunities to improve physical as well as mental health conditions. Hence resilience and death anxiety have shown relationship among covid negative people.

CONCLUSION

Results of the present study show that, statistically there is no significant difference in resilience between covid positive and covid negative people; there is no significant difference in death anxiety among covid negative people; there is no significant relationship between resilience and death anxiety among covid positive people; and there is significant relationship between resilience and death anxiety among covid negative people.

REFERENCES
- Azarian, A., Aghakhani, S., & Ashuri, A. (2016). Investigating the relationship between death anxiety and attitude towards life among university students. *International Journal of Medical Research & Health Sciences*, *5*(5), 233-238.
- Azeem, F., & Naz, M. A. (2015). Resilience, death anxiety, and depression among institutionalized and noninstitutionalized elderly. *Pakistan journal of psychological research*, 111-130.
- Greenberg, J., Pyszczynski, T., Solomon, S., Rosen blatt, A., Veeder, M., Kirkland, S., & Lyon, D. (1990). Evidence for terror management II: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldview. *Journal of Personality and Social Psychology*, *58*(2), 308–318.
- Helen, R. L., & Farchaus, K. S. (2009). Death Anxiety: An Analysis of an Evolving Concept. *Research and Theory for Nursing Practice: An International Journal*, 23(1).
- Herrman, H., Stewart, D., Diaz, N. G., Berger, E., Jackson, B., & Yuen, T. (2011). What Is Resilience. *La Revue canadienne de psychiatrie,* 56(5).

- Hoelterhoff, M., & Chung, M. C. (2013). Death anxiety and well-being; coping with life-threatening events. *Traumatology*, *19*(4), 280-291.
- 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.
- Petzold, M. B., Bendau, A., Plag, J., Pyrkosch, L., Mascarell Maricic, L., Betzler, F., ... & Ströhle, A. (2020). Risk, resilience, psychological distress, and anxiety at the beginning of the COVID- 19 pandemic in Germany. *Brain and behavior*, *10*(9), e01745.
- Rababa, M., Hayajneh, A. A., & Bani-Iss, W. (2021). Association of Death Anxiety with Spiritual Well-Being and Religious Coping in Older Adults During the COVID-19 Pandemic. *Journal of religion and health*, *60*(1), 50-63.
- Tansey, C. M., Louie, M., Loeb, M., Gold, W. L., Muller, M. P., de Jager, J., ... & Herridge, M. S. (2007). One-year outcomes and health care utilization in survivors of severe acute respiratory syndrome. *Archives of internal medicine*, *167*(12), 1312-1320.
- Windle, G. (2011). What is resilience? A review and concept analysis. *Reviews in Clinical Gerontology, 21*(02):152 – 169.
- Yavari, M. (2014). Comparison psychiatrics nurses burnout and general health with critical care (ICU) nurses.
- Yildirim, M., & Solmaz, F. (2020). COVID-19 burnout, COVID-19 stress and resilience: Initial psychometric properties of COVID-19 Burnout Scale. https://doi.org/10.1080/07481187.2020.1818885.
- 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.