# Anatomizing the crux antecedents of Socio-Economic stress during Covid-19 lockdowns: A study among Entrepreneurs

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ABSTRACT: The declaration of Covid-19 lockdowns in the middle of March'2020 sounded like a death knell for 1.3 billion people in India. The landscape of Indian business took a massive nosedive due to all business operations remaining shut. The tough quarantines imposed among people was excruciating and the aftermath was a plummeted economic condition. Amidst this there has been prodigious stress experienced among all people and entrepreneurs are no different. In this light, it is highly relevant to explore the various determinants of stress among entrepreneurs. The current research delves into examining and analyzing the various factors of socio-economic stress among entrepreneurs of Kolkata. The survey has been conducted on a total of 110 entrepreneurs of Kolkata engaged in various types of business.

KEYWORDS: Socio-Economic Stress; Covid-19 lockdowns; Business; Entrepreneurs; Kolkata

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# I. INTRODUCTION

The global pandemic of Covid-19 Coronavirus still makes major headlines till the present date. The blood thirsty disease not only claimed lives of lacs of people across the world but also threw the global economy on the face of a major economic meltdown. The government of all countries declared major lockdowns to curtail the menacing virus which forced major sectors to shut down and compelled the people to stay at home. The long quarantines and bubbles left people eviscerated. The boisterous pandemic sent the economy and the modus vivendi of people into a ramshackle and since then, people have been reeling to fight the situations regarding their economic conditions as well as social life. Entrepreneurs of Kolkata have experienced a tough reality which proved to be ominous for them. During the quarantines they have been exposed to gargantuan amount of stress be it physically, psychologically, economically or socially. Entrepreneurship in India has grown in leaps and bound and almost 40% people in India have a strong penchant towards entrepreneurship as a career choice when compared to other BRICS nations (Global Entrepreneurship Monitor (GEM). Since, the emergence and potential outbreak of the pandemic has not only affected entrepreneurship but also left entrepreneurs mired in stress, the study of which is the need of the hour and a significant area of research. The present research endeavour is attempted towards investigating the various factors of socio-economic stress among entrepreneurs of Kolkata.

# II. LITERATURE REVIEW

The existent literature blending the keywords of entrepreneurship and Covid-19 is extremely rare. There lies an enormous amount of challenge trying to find out the socio-economic stress among entrepreneurs during the pandemic, let alone, doing an empirical study. Quite a few researches in the past have tried to blend quintessential factors of socio-economic stress before but talking in the light of Covid-19 it is hard to integrate such factors completely. A closer introspection of available literature is very rare and hence it is a grueling challenge to do such an in-depth research. Nevertheless, an intimate analysis of present articles on stress during quarantines have given us a fair idea of integrating socio-economic stress amongst entrepreneurs. The term "stress" has actually been borrowed from the discipline of physics. Stress basically means pressure (Cox 1978). As per Moorhead & Griffin (2001), stress is triggered by a stimulus which can be either physical or psychological and there are various ways by which an individual reacts to it. In the words of Salami (2010), occupational stress is the experience of unpleasant negative emotions such as tension, anxiety, frustration, anger and depression resulting from aspects of work. The quarantines and self-isolation, though taken as a precautionary measure the blunt the menacing pandemic of Covid-19, has resulted in some adverse effects like fear, anxiety and uncertainty among people. The economic blight have further put more pressure on businesses, particularly entrepreneurship (Subedi & Poudel, 2020). According to

Fore School of Management, New Delhi (2020), some of the major factors of economic stress for entrepreneurs during lockdowns are declining profits and savings, other financial expenses like high tax rates, education of children, household expenses, etc. Entrepreneurs and lack of adaptable environment are the all-time major challenges for entrepreneurship business. The harsh quarantines imposed has reduced physical methods of social interaction. Furthermore, the self-isolations have totally have left entrepreneurs strangled in an unhealthy mindset (Erin Joy, 2020).

## III. OBJECTIVES OF THE STUDY

- To explore the most dominant factors of socio- economic stress among entrepreneurs of Kolkata.
- To examine if socio-economic stress is related to demographic variables.

#### IV. DATA AND METHODOLOGY

Both secondary as well as primary data has been used for the purpose of our study. It was essential to build a strong theoretical base of the study for which an extensive study has been done on previous researches emphasizing on stress and various sources and factors of stress. Such secondary sources of data has been collected from various authentic and reliable websites and databases like JStor, BASE, INFLIBNET, Google Scholar, etc. For the purpose of primary data collection, a closed-ended questionnaire has been used. The questionnaire is moderately long one. Most of the questions contained in the questionnaire are self-made by authors albeit few questions have been drafted from previous research studies. Almost all the questionnaires have been randomly administered to the respondents who are entrepreneurs based in Kolkata. Few questionnaires have also been mailed. A Five-Point Likert scale has been used to measure the concepts, where 1=Highly unimportant/highly ineffective and 5=Highly important/highly effective. The data collected has been meticulously processed by using IBM's SPSS 23.0.

## V. ANALYSIS OF DATA

## • Demographic Profiling

We have analyzed and presented the data in the form of a table displayed below.

Population Demographic Construct Classification Percentage Statistics Male 102 0.93 Gender Female 8 0.07 TOTAL 110 1.00 18-25 4 0.04 26-35 19 0.17 36-45 0.35 Age 39 46-55 31 0.28 Above 55 17 0.16 TOTAL 110 1.00 Below 1 Lac 21 0.19 1-5 Lacs 50 0.45 27 0.25 Monthly Income 6-10 Lacs 12 Above 10 Lacs 0.11 TOTAL 110 1.00

 Table 1: Demographic Statistics

As we can see, the table represents the demographic statistics of the respondents. There are a total of 110 respondents surveyed belonging to various age group and various levels of income. The male respondents exceed the female respondents by a mammoth proportion. Most of our respondents belong to the age bar of 36-45 years and 45-55 years. A major chunk of the population has an income well perched around 1 lac to 5 lacs.

# • KMO Bartlett's Test of Sphericity

Since the first objective of our study is to prune out the most dominant factors of socio-economic stress, we have to conduct a factor analysis. But to make sure that the Factor Analysis conducted is worthwhile as well as to check the adequacy of our sample size we have also conducted a KMO Bartlett's Test. The results of the test have been represented below.

Table 2: KMO Bartlett's Test of Sphericity
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.780
Bartlett's Test of Sphericity	Approx. Chi-Square	852.134
	df	9
	Sig.	.000

As is evidenced from the table above, we see that the KMO value is 0.780 which is greater than the acceptable value of 0.6. We also observe the significance level is less than 0.05 (p=0.000). This confirms that it is ideal to run a Factor Analysis.

#### Factor Analysis

We have conducted a Factor Analysis to find out the most dominant factors of socio-economic stress among entrepreneurs during the Coronavirus lockdown. The results have been displayed below.

**Table 3:** Results of Factor Analysis

Component Tot		Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	4.101	42.690	42.690	4.101	42.690	42.690	
2	1.113	11.400	54.090	1.113	11.400	54.090	
3	0.874	9.115	63.205				
4	0.755	8.226	71.431				
5	0.649	7.508	78.939				
6	0.564	6.728	85.667				
7	0.437	5.814	91.481				
8	0.321	4.707	96.188				
9	0.186	3.812	100.000				

Extraction Method: Principal Component Analysis.

As is observed from the above table, we have obtained a TVE (Total Variance Explained). According to TVE, the results will show the number of factors obtained provided that Eigen values are greater than 1 (Eigen value>1). It is proof of the fact that Factor (Component 1) explains 42.69% of the variance and (Component 2) accounts for 11.40% of the total variance explained. Principal Component Analysis have helped us to extract the variable according to the fulfilled requisite that the Eigen values should be greater than 1 (Eigen values=>1). The two factors have a strong degree of interdependence and hence decrease moving downwards. As we move down, the Eigen value starts to decrease as are not reported thus.

Below is the Rotated Component Matrix, according to which the variables will get accommodated in the factor loadings, thus providing us with the final results.

Table 4: Results of Rotated Component Matrix

Rotated Component Matrix<sup>a</sup>

	Compo	Component		
	1	2		
F1	0.749	0.123		
F2	0.788	0.170		
F3	0.538	0.321		
F4	0.595	0.371		
F5	0.485	0.490		
F6	-0.004	0.870		
<b>F</b> 7	0.265	0.742		
F8	0.429	0.604		
F9	0.816	0.171		

Extraction Method: Principal Component Matrix Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

#### . Rotation Converged in 3 iterations

The 9 factors obtained can be disintegrated into 2 parts, where each factor will be a compilation of closely knitted variables. We can rename Component I as Economic Factor and Component II as Social Factor.

## • Reliability Statistics

In order to test whether the questionnaire is valid or not, we have used Cronbach's Alpha to analyze whether all questions or variables fit the existing model adequately. The table below shows the reliability statistics for all the 9 variables distributed in segments of Economic Stress and Social Stress.

**Table 5:** Reliability Statistics for All Variables (n=9)

Cronbach's Alpha	Cronbach's Alpha based on	N of items
	Standardized Items	
0.718	0.718	9

The standardized Cronbach's Alpha value is 0.718, which is more than the acceptable value of 0.6, showcasing that the questionnaire along with its variables fits perfectly into the proposed modelling.

#### Chi-Square Test

We have also conducted chi-square tests on 3 demographic variables of our research study which are gender, age and income to find their relationship with socio-economic stress.

Table 6: Gender and Socio-Economic Stress

	Value	df	Asymptotic Significance (2-tailed)
Pearson Chi-Square	2.331*	4	.782
Likelihood Ratio	2.377	4	.769
Linear-by-Linear Association	1.634	1	.843
N of Valid Classes	110		1.5457065

The above table is a representation of the results which indicate a relationship between gender and socio-economic stress. As observed, the value of Chi-Square is >0.05 (p=0.782), which means that there is no relationship between gender and socio-economic stress.

**Table 7:** Age and Socio-Economic Stress

	Value	df	Asymptotic Significance (2-tailed)
Pearson Chi-Square	21.933°	2	.000
Likelihood Ratio	27.616	2	.000
Linear-by-Linear Association	17.280	1	.000
N of Valid Classes	110		0.000

The above table is a representation of the results which indicate a relationship between age and socio-economic stress. As observed, the value of Chi-Square is <0.05 (p=0.000), which means that there is exists a relationship between age and socio-economic stress.

Table 8: Income and Socio-Economic Stress

	Value	df	Asymptotic Significance (2-tailed)
Pearson Chi-Square	16.372°	2	.000
Likelihood Ratio	17.823	2	.000
Linear-by-Linear Association	5.764	1	.000
N of Valid Classes	110		

The above table is a representation of the results which indicate a relationship between income and socioeconomic stress. As observed, the value of Chi-Square is <0.05 (p=0.000), which means that there exist a relationship between income and socio-economic stress.

#### VI. RESEARCH FINDINGS AND DISCUSSIONS

The current study is an important one taking into consideration the enormous amount of stress experienced by each and every individual during the Covid-19 lockdowns. The research study albeit done a mere 110 respondents has been instrumental in bringing to the forefront some of the most crucial determinants of socio-economic stress among entrepreneurs. Talking in the context of economic stress, the major factors were discovered to be reduced income, detoriation or loss of raw material/finished products, depletion of savings and insecurity regarding various financial expenses. The major factors social stress were explored to be lack of outdoor activities, miffed relationship with family members, relatives and friends, reduced social interactions, abiding to tough Covid-19 protocols and quality of life during quarantines. Reduction or stoppage in income, disintegration of raw materials or finished goods as a result of complete shutdown, diminishing savings and various other financial expenses requiring to be managed automatically would trigger gargantuan levels of socio-economic stress. Strict quarantines demand people to stay in bubbles which is physically and mentally tough. As a result, there has been complete restriction on outdoor movements of people, physical interactions in public places have also been prohibited creating a bridge between an individual and social circles, adherence to the tough protocols and norms of Covid-19 like social distancing, wearing of masks, continuous sanitizing of hands, etc. have brought about a dramatic change in the modus vivendi of people which has also created a lot of stress. In addition to this, the safety of oneself and family members also creates prodigious social stress. Amidst this, the social life of entrepreneurs seems to have been affected to a large extent. Our purported endeavour was attempted to find out whether the demographic variables had any relationship with socio-economic stress. As per our results, we have evidenced that there is no relationship between gender and socio-economic stress but there exists a relationship between demographic factors like age and income and socio- economic stress. A major chunk of the respondents belonging to the age group 46-55 and those above 55 were found to be rattled by socioeconomic stress. In this light, it can be opined that aged people feel more amount of stress than the young aged people. There was also a relationship between income and socio- economic stress. It was evidenced that those entrepreneurs with an income level below Rs.100000 experienced more stress. A reason for this might be that they feel more financially insecure due to the ramifications triggered by the quarantines. Thus, there are quite a few factors of socio-economic stress among entrepreneurs of Kolkata which have been explored in our present research endeavour.

# VII. CONCLUSION

A study in the ambit of stress during Covid-19 lockdown is a vital contribution in the domain of stress management. Even if an individual does not do any work or activity, he or she is till said to be strangled in diminutive amount of stress. The quarantines bears a strong testimony to this fact. Stress can be positive as well as negative. But it is usually the negative stress that is much talked about. In this study we have probed into the factors of socio-economic stress among entrepreneurs. Truth to be told, stress cannot be completely obliterated from our lives as each and every individual is said to experience some amount of stress. However, the levels of stress can be reduced by some ways like awareness campaigns related to stress, meditation, physical exercises, music and socializing with people. Nowadays, various organizations, institutions, agencies as well as individual experts are offering counselling programs in order to fight the menace of stress, which have proven to be quite effective. Talking in the light of socio-economic stress among entrepreneurs, the current research study has been fruitful in examining and analyzing the main factors of socio-economic stress among entrepreneurs during the Covid-19 lockdowns. However, such factors of stress might change more or less in the post Covid era, for which a further in-depth extension of the present research would be required.

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