

## Psychological impact of Covid-19 pandemic: Exploring the mediating role of age, gender and type of occupation

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### ABSTRACT

**Background:** The Covid 19 outbreak has been one of its kind in terms of the far reaching and widespread impact. The mental health effects of Covid 19 may shape the psychological framework of the population for many years. The present study aims to investigate the demographic determinants of age, gender and occupational type on the psychological impact of Covid 19 outbreak.

**Methodology:** Perceived Stress Scale (PSS) & Depression, Anxiety and Stress Scale (DASS-21) were used to study the psychological impact. Role of gender, age & type of occupation in perceived stress was also studied. Independent sample t test and Pearson correlation coefficient were performed to derive inferences from the data.

**Results:** Age, gender and type of occupation did not have much impact on the perceived stress level however the participants perceived stress level directly strongly correlates with experience of symptoms of depression, anxiety and stress.

**Conclusion:** Perceived stress was low in the initial phases of the pandemic and was not mediated by age, gender and type of occupation. The measures undertaken to curb the pandemic had a positive influence on mental health as it helped to keep perceived stress to be low. Perceived stress is directly correlated to actual experience of stress, depression & anxiety and hence avoiding sharing of stress inducing information is important. In this context, media coverage can play a part by focusing on positive news of recovery and discouraging stress triggering messages in order to keep perceived stress factor low.

**Keywords:** Perceived stress, depression, anxiety, covid 19, mental health.

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### INTRODUCTION

The Covid 19 epidemic has been identified as a public health emergency of international concern and challenges the psychological resilience and mental health wellbeing of the community as a whole. It is the first global pandemic to have had this kind of impact across the world. Although, physical spread of an epidemic could be restricted through expeditious use of quarantine and social distancing, the effect on public mental health in the long term is yet to be contended. As the Covid 19 pandemic swept across the world, it had caused widespread concern, fear and stress. This fear and stress was quite natural given the ever changing and unpredictable situation.

Covid 19 pandemic's typical uncertainty and the strict management policy of Social Isolation and Quarantine that followed as a consequence instigated a heightened risk for outbreak of public mental health crisis. The pandemic had brought immense changes in the lifestyle resulting drastic impact on the way we think about our lives. This serious health concern also had invoked negative impact on the economy, infrastructure and the work culture. The quarantine and social distancing principles had directly impacted the basic essence of human nature. This further resulted in intense and overwhelming anxiety and fear. The initial focus had been on saving lives and curbing the casualties of Covid 19 but the long-term mental health

consequences is equally important. It is hence necessary and of paramount importance to take the mental health implications into account in the best interest of public health. One study pointed that massive social media news on the COVID-19 outbreak affected the population's mental health and coping-appraisal process with unknown long-term psychological outcomes. Further the study mentioned that the impact was more prominent among patients with preexisting mood disorders who are at increased risk of hospitalization and mortality.[1]

As we realize the pandemic could have profound and long-term impacts on the mental health, there is a need to study the impact of Covid 19 on Mental Health. It is thus of great importance to gather empirical evidence to identify the psychological impacts during the epidemic and thereby find ways to reduce adverse effects on mental health. The mental health and psychosocial life during the COVID-19 pandemic should be considered as much as the clinical aspects. [2]

The aim of this study was to survey the general public in Mumbai Metropolitan region (MMR) to better understand their levels of psychological impact in response to the pandemic by measuring their levels of perceived stress, anxiety, depression, and stress during the initial stage of the COVID-19 outbreak. The study attempts to elicit the influence of age, gender and type of occupation on these psychological parameters in order to understand the perceived stress and experienced psychological distress.

## METHODOLOGY

The study used a cross sectional research design collecting data through online survey method. The questionnaire was anonymously distributed through various multimedia platforms using snowball sampling techniques. Informed consent was taken. The online survey collected information on demographic data specifically age, gender, occupational status and psychological impact as was assessed by the Perceived Stress Scale (PSS) & Depression, Anxiety and Stress Scale (DASS-21). Gender had two categories male and female, Age was divided into below 25years & above 25 years and type of occupation has self-employed and salaried categories. Independent sample t test and Pearson correlation coefficient were performed to derive inferences from the data.

### Tools:

- **The Perceived Stress Scale (PSS-14)** used is a classic stress assessment instrument. The mean PSS score was 19.25 (SD = 4.5) years. The scale's internal consistency, as determined by a Cronbach's alpha is 0.731. The Spearman-Brown split-half reliability coefficient is also adequate (0.71). Convergent validity was supported by expected relationships of PSS-10 scores to measures of anxiety and depression. [3]
- **DASS:** DASS-21 is a well-established instrument to measure symptoms of depression, anxiety and stress in both clinical and non-clinical samples of adults. DASS is another self-report questionnaire for assessing participants' mental health, made up of 21 items including three emotional states: Depression, anxiety, and stress, in which the Cronbach's alpha coefficients for three subscales were estimated as 0.93, 0.88, and 0.82, respectively, in a large sample in England. [4]

### Hypothesis

- Age will have an impact on perceived stress response to covid pandemic ie.: There will be significant difference in the PSS score of below 25 & above 25 participants.
- Gender will have an impact on perceived stress response stress to covid pandemic ie.: There will be significant difference in the PSS score of Male and Female participants.
- Type of occupation will have an impact on perceived stress response stress to covid pandemic ie.: There will be significant difference in the PSS score of self employed and salaried participants.
- Perceived stress is strongly correlated to experience of depression, anxiety and stress ie.: there will strong positive correlation between scores of PSS & DASS scale of participants.

## RESULTS & DISCUSSION

This study included 160 respondents from Mumbai Metropolitan city. Mean, SD and appropriate statistics were computed to study the hypothesis

**Table 1: Mean, SD and t-value (Male & Female) on PSS (N=160)**

Variables (Gender)	Mean	SD	t-value
Male	14.95	6.927	1.83
Female	16.92	6.348	Not significant (NS)

**Table 2: Mean, SD and t-value (Age) on PSS Scale (N=160)**

Variables (Age)	Mean	SD	t-value
Below 25	16.86	6.594	1.827NS
Above 25	14.85	6.506	

**Table 3: Mean, SD and t-value of (Type of occupation) on PSS Scale (N=160)**

Variables (Occupation)	Mean	SD	t-value
Self employed	15.34	6.787	0.99NS
Salaried	10.50	9.192	

**Table 4: Correlation between PSS & DASS (N=160)**

Variable	Mean	SD	Correlation
PSS	18.59	20.39	0.60**
DASS	16.20	6.61	

\*\*significant at 0.01 level

The overall perceived level of stress has been below the mean. We have to take into consideration that this study data was collected during the early periods of the pandemic, in which the general population had just been exposed to this new phenomenon and had little knowledge and experience with the newly imposed situations and hence the apparent low level perceived stress.

According to the data analysis, Table 1, Table 2 & Table 3 was computed to indicate that impact of age, gender and type of occupation on perceived stress response. As data in these tables reflect, hypothesis 1, 2 & 3 are rejected as there is no significant difference in the perceived stress scale score of different age groups, gender and type of occupation. This indicates that stress perceived in response to covid pandemic was not influenced by age, gender or type of occupation. Despite the difference being not statistically significant enough, a glance at the mean comparison of gender variables indicates females relatively perceived the situation more stressful. This reasonably goes with well with the understanding of female multitasking especially in work from home scenarios. The results were similar to another study in which male participants had a significantly higher resilience than female participants at the same time that stress perception was not significantly different between the gender.[5] Likewise, below 25 age group and self-employed category perceived more stress as compared to above 25 age group and salaried category respectively. A comparatively higher below 25 score reflect the anxiety related to their educational hindrances that occurred in response to covid pandemic. Student community experienced a lot of uncertainty with regards to their assessment pattern and continuation of their academic learning in the initial phases of the pandemic. In terms of occupational status, the relative mean differences in both categories are in accordance with the fact that self-employed category were most affected due to the stringent lockdown and safety measures thereby negatively impacting their income. This understanding is in tangent with their relatively higher score on PSS scale in comparison to salaried category participants.

Hypothesis 4 is accepted as there is significant correlation between scores on PSS & DASS scale indicating that perceived stress is positively correlated to experienced depression, anxiety & stress in participants. The

correlation indicates that there is significant influence of perceived stress response and measures on DASS indicative of the importance of keeping the perceived stress response in check. This further emphasizes on the need for handling the current pandemic focusing on positive news and discouraging panicky messages should be prioritized.

### CONCLUSION

In summary, the results indicate that age, gender and type of occupation differences did not have much impact on the perceived stress level however the participants perceived stress level directly correlates with experience of symptoms of depression, anxiety and stress. The results indicate the policies of lockdown and other stringent measure did not negatively impact on mental health rather helped the perceived stress to be low in the initial phases of the pandemic. This is in accordance with another study finding that suggested that depressive symptoms were significantly lower in countries with strict government policies. Facemasks and lockdown have been reported to have a protective effect on mental health during the COVID-19 pandemic.[6] Thus focusing on positive news about handling of the pandemic situation will help the perceived stress factor to remain low and media coverage can play an influential role in this context.

### REFERENCES

1. Wang C, Chudzicka-Czupala A, Tee ML, et al. A chain mediation model on COVID-19 symptoms and mental health outcomes in Americans, Asians and Europeans. *Sci Rep* 2021;11(6481):1-31.
2. Lenzo V, Quattropiani MC, Musetti A, et al. Resilience contributes to low emotional impact of the COVID-19 outbreak among the general population in Italy. *Front Psychol* 2020;11:1-24.
3. Huang F, Wang H, Wang Z, et al. Psychometric properties of the perceived stress scale in a community sample of Chinese. *BMC Psychiatry*. 2020;20:130.
4. Henry JD, Crawford JR. The short-form version of the depression anxiety stress scales (DASS-21): construct validity and normative data in a large non-clinical sample. *Br J Clin Psychol* 2005;44:227-39.
5. Parvar, S. Y., Ghamari, N., Pezeshkian, F., & Shahriarirad, R. Prevalence of anxiety, depression, stress, and perceived stress and their relation with resilience during the COVID-19 pandemic, a cross-sectional study. *Health Science Reports* 2022;5(1):e460-9.
6. Lee Y, Lui LMW, Chen-Li D, et al. Government response moderates the mental health impact of COVID-19: a systematic review and meta-analysis of depression outcomes across countries. *J Affect Disord* 2021;290:364-77.

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