



Original Study

## Are emerging adults more prone to COVID-associated psychological distress than their older adult counterparts? : A cross-sectional comparative study

Priya Kotwani<sup>1</sup>, Vaibhav Patwardhan<sup>2</sup>, Apurvakumar Pandya<sup>3</sup>

<sup>1,2</sup>Assistant Professor, Parul Institute of Public Health, Parul University, Waghodia, Vadodara, Gujarat, India.

<sup>3</sup>Psychologist and Economic Evaluation Specialist, Indian Institute of Public Health, Gandhinagar, Gujarat, India.

**Date of Submission :**

14 April 2021

**Date of Acceptance :**

19 May 2021

### Abstract

**Background:** Emerging adulthood is a critical stage of life with a feeling of ambiguity through their transition from adolescence to adulthood. The transition in this life stage poses various mental health challenges to the individuals. The mental health of the emerging adults may worsen in times of ongoing COVID-19 pandemic. The study aims to compare the COVID-19 and lockdown associated psychological distress among emerging adults and adults.

**Material and methods:** A cross-sectional, observational study was performed in India. We used the snowball sampling technique and the data was collected using an online self-designed semi-structured questionnaire and the findings from 112 emerging adults with 112 adults were compared.

**Results:** The mean score for psychological distress was 14.69 among emerging adults, while it was 11.12 for older adults. Emerging adults had a high level of psychological distress and the association between psychological distress and participants age group ( $p$ -value= 0.015) was statistically significant.

**Conclusion:** The findings suggest that emerging adults are more likely to experience psychological distress than older adults.

**Keywords:** Emerging adults, COVID-19, Lockdown, Psychological distress, Mental health

**Corresponding author:** Vaibhav Patwardhan

E-mail: [vebhavpatwardhan@gmail.com](mailto:vebhavpatwardhan@gmail.com)

**How to cite article:** Kotwani, P., Patwardhan, V., & Pandya, A. (2021). Are emerging adults more prone to COVID-associated psychological distress than their older adult counterparts? A cross-sectional comparative study. *Indian Journal of Health, Sexuality and Culture*, 7(Special), 60-66.

**DOI:** 10.5281/zenodo.5146434

This article is distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 License which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

### Introduction

As per World Health Organization, good mental health is decisive for favourable development among youth and young adults (Saxena, Funk & Chisholm, 2013). Young 'adulthood' is considered a life stage wherein the individuals try to explore one's individuality, face difficulty in dealing with

transitions in the responsibilities, and juggle between the feeling of adolescent and adult. However, individuals in this phase of human development are mostly ambiguous about their status as adults, and therefore Arnett J.J. in 2000 coined the term 'Emerging Adults' (Arnett, 2000). This period of life is considered critical in terms of social, cognitive, psychological, and brain development (Hochberg & Konner, 2019). Research demonstrates that this stage is characterized by a period of being independent, building new bonds and experiencing new relations, and taking up roles and responsibilities of an adult (Reifman et al., 2007; Seiter & Nelson, 2011; Wood et al., 2018; Zorotovich & Johnson, 2019). Development of the emerging adults can hugely be impacted by stress and mental health issues. (Matud et al, 2020; Wood et al, 2017). Wood and colleagues argue that adverse health conditions can cause difficulties in achieving self-reliance and achieving success either at school or at work. (Wood et al., 2017). This vulnerable age group has also demonstrated higher mental health issues and suicidal thoughts than older adults (Kessler et al., 2005; Wilson et al., 2011). Despite this, it has been observed that only one-fourth of the individual having diagnosable mental disorders have sought professional help (Kessler et al., 2005; Wilson et al., 2011). Limited studies have explored the prevalence and associated risk factors of mental ill health of emerging adult populations in the Indian context.

The mental health of emerging adults may worsen in the ongoing COVID-19 pandemic. Stringent counter measures like 'lockdown' were adopted by various governments to halt the non-essential parts of the economy for preventing the contagious spread of the virus. Various studies reveal the psychological impact of COVID-19 and lockdown measures (Roy et

al., 2020; Shen et al., 2020; Qiu et al., 2020; Xiang et al., 2020). The term 'psychological distress' can be defined as 'lack of enthusiasm, problems with sleep (trouble falling asleep or staying asleep), feeling downhearted, feeling hopeless, feeling emotional and feeling bored or a passing interest in things and thoughts of suicide' (Mabitsela, 2003).

Common psychological reactions reported to the pandemic, and the lockdown were stress, feeling of hopelessness, sleep problems, or feeling anxious. Lockdown has impacted people's usual activities, routines, and many people's livelihoods. These measures expectantly raised the feeling of solitude, leading to suicidal tendencies and behaviours instigating injury to oneself. Thus, it becomes crucial to understand how COVID-19 pandemic has affected the mental health of emerging adults and take appropriate and timely measures to guard their mental well-being.

The purpose of the study was to compare the psychological distress among the emerging adults and older adults during the nationwide lockdown due to the COVID-19 pandemic. To best of our knowledge, this study is the first to assess the COVID-19 associated psychological distress in the emerging adults in India.

## Materials and methods

This study is a part of a main study of 420 adult individuals across 21 states and 3 union territories of India. A cross-sectional, observational study was carried out. We used the snowball sampling technique and the data was collected using an online self-designed semi-structured questionnaire developed by using google forms. The details of the study were provided to the study participants along with informed consent. The link of the questionnaire was sent through various

digital modes of communication to the acquaintances of the researchers. Once participants agree to take the survey, they were requested to fill up their demographic information, following which participants had to answer few questions which came up consecutively for assessing their psychological distress. Furthermore, in the line of the sampling technique, the participants were also asked to share the survey link among their peers.

As this was an online study, participants with active internet connections with a basic understanding of the English language, those above the age of 18 years, and willingness to give their consent were able to participate. Based on the concept of emerging adults (Arnett, 2015), we categorized participants aged 19-29 as emerging adults and participants equal to or above the age of 30 up to 60 years as older adults from the main study. The main study had participants from 60 to 75 years, 30 to 60 years, and 19-29 years of age. For comparative analysis, we matched data for gender and age group. Total older adults came to 112 (56 males; 56 females) after matching the gender. We randomly ‘matched’ 112 emerging adults from the total emerging adults in the 19-29 age group. Thus, we included 112 responses from emerging adults and 112 responses of adult participants, ensuring an equal female to male ratio in both categories. In each category, we had responses from 47 females and 65 males.

The online self-reported questionnaire developed by the investigators collected socio-demographic data. After a comprehensive literature review, the items selected for assessing psychological distress among the study participants were selected. The list of items used are as follows:

1 I am able to concentrate on work, study,

or anything else that the individual is doing

- 2 I feel nervous or anxious
- 3 I am able to have a sound sleep
- 4 I am able to make any useful contribution in any form
- 5 I am able to make decisions
- 6 I am feeling of being under constant strain
- 7 I am facing difficulties to stop or control worrying about getting infected with COVID-19 disease or for the safety of my family
- 8 I am facing difficulties in relaxing
- 9 I am able to enjoy normal daily activities
- 10 I am feeling of restlessness making it hard to sit still
- 11 I am feeling unhappy or sad
- 12 I am feeling of losing confidence in myself
- 13 I am feeling worthless

This tool was reviewed by three mental health professionals (psychiatrist, clinical psychologist, and psychiatric social worker) to establish its validity and appropriateness. All the questions which assessed psychological distress were rated on a 4-point Likert scale where 0 means a good state of mental health and 3 means worst state of mental health. All 13 items of the tool were added to obtain the total score, making the score range 0-39. A mean score of 12.91 was considered as the cut-off, and all the participants with a score higher than the mean were considered cases of psychological distress.

Descriptive statistics were performed, and categorical variables were presented as frequencies with percentages (%) and continuous variables as mean. A Chi-square test was applied for comparing categorical variables. Approval was obtained from the Institution Ethics Committee of the Parul Institute of Medical Sciences and Research,

Parul University, Waghodia, Vadodara, Gujarat, India.

**Results**

The study included 224 participants, of which 112 were emerging adults of the age 19-29 years and 112 were older adult participants with age equal to or more than 30 years. Table 1 illustrates the demographic

details of our study participants. About 58% of the participants were males, and most of the participants had bachelor and higher education levels (92%). Our study population comprised students (33%) and service class individuals (54%). It was observed that around 17% of our respondents were residing away from their family during the nationwide lockdown imposed due to COVID-19.

**Table 1. Socio-demographic details of the study participants (n=224)**

Variables	Responses	Emerging adults (n=112)	Older adults (n=112)	Total
		Frequency (%)	Frequency (%)	
Gender	Female	47 (42)	47 (42)	94 (42)
	Male	65 (58)	65 (58)	130 (58)
Education level	Secondary (5 to 10 years of education)	1 (0.9)	0 (0)	1 (0.4)
	Higher Secondary/Diploma (11 to 12 years of education)	15 (13.4)	2 (1.8)	17 (7.6)
	Bachelors (15 years of education)	55 (49.1)	26 (23.2)	81 (36.2)
	Post-Graduate or above (17 years of education or more)	41 (36.6)	84 (75)	125 (55.8)
Occupation	Unemployed	5 (4.5)	1 (0.9)	6 (2.7)
	Housewife	0 (0)	5 (4.5)	5 (2.2)
	Student	69 (61.6)	5 (4.5)	74 (33)
	Service	33 (29.5)	88 (78.6)	121 (54)
	Business	5 (4.5)	13 (11.6)	18 (8)
Residence during lockdown	Staying with family	84 (75)	103 (92)	187 (83.7)
	Staying without family	28 (25)	9 (8)	37 (16.5)

The ongoing chaos of rapidly rising COVID-19 cases and inadequate health infrastructure to address the same lead to immense anxiety and psychological stress among the people. Our study revealed that 57% of all our study participants were worried and considered themselves at-risk of acquiring COVID-19 disease. Of the total, nearly 45% were screened positive for psychological distress propelled by the COVID-19 pandemic.

A pearson chi-square test was applied to assess the association between psychological distress with the participants' age group (Table 2), and a statistically significant association was found between the two variables (p-value= 0.015). The mean score for psychological distress was 14.69 among emerging adults, while it was 11.12 for older adults, suggesting emerging adults are more likely to suffer from psychological distress when compared to adults.

**Table 2. Relationship between participants age group and psychological distress**

		Psychological Distress		Pearson Chi-Square <i>p</i> -value*
		No	Yes	
Participants age group	Emerging Adults	52 (46.4)	60 (53.6)	0.015
	Older Adults	71 (63.4)	41 (36.6)	

\*at 5% level of significance ( $\alpha = 0.05$ )

**Discussion**

Our study attempted to assess, by an online survey, the psychological consequences of COVID-19 pandemic associated lockdown amongst 112 emerging adults and 112 adult population. The study findings suggest higher scores of pandemic-associated psychological distresses among the emerging adults as compared to the older adults. Similar findings were observed by Marchini and colleagues, which reported a rise in mental healthcare needs of emerging adults of Belgium and Italy by 5% during the lockdown (Marchini et al., 2021). Higher incidence of depression and anxiety during the pandemic were also reported among the emerging adults of Unites States (Kujawa et al., 2020).

The higher levels of psychological distress among emerging adults can be because of loneliness due to social isolation imposed during the lockdown (Marchini et al., 2021). The COVID-19 pandemic could be perceived as a state of a medical emergency, but the lockdown levied to halt the spread of the coronavirus also leads to various disruptions such as inadequate availability of supplies and interruptions in planned events, loss of jobs, etc. These situations were common for all the age groups; however, the emerging adults were more vulnerable to developing psychological distress, and this could be because of lesser resilience in this age group. Resilience enables individuals to adapt to critical circumstances and protect

mental health (Connor& Davidson, 2003). Li and colleagues reported that emerging adults had lesser resilience than older adults (Li et al., 2021).

In the first wave of the pandemic, experts underscored that emerging adults were less likely to get infected with COVID-19 disease. (Germani at al., 2020; Liao et al., 2020). As a result, emerging adults were less prioritized than others for COVID-19 response (Barari et al., 2020; Germani et al., 2020). These led to emerging adults not following COVID-19 appropriate behaviour with many flouted safety guidelines (Press Trust of India, 2021). In the second wave, the younger population has been increasingly affected by the virus (Press Trust of India, 2021). This result echoes findings from other countries (Italy, UK & China), which reported significantly higher anxiety levels among emerging adults than older adults (Germani et al., 2020; Huang & Zhao, 2020; Osuch et al., 2021). The messaging for awareness generation and encouraging COVID-19 safety measures executed by all institutions and media, not focusing on emerging adults, have affected this population adversely in the second wave.

In the prevailing scenario, it is not only necessary to deliver health services to the COVID-19 patients but also to take appropriate actions to deal with the negative consequences of the COVID-19 pandemic. Emerging adulthood marks a critical stage of life transitioning from dependence in childhood to independence (Wood et al.,

2017). This stage witnesses the loss of support from schools and families, and how the individuals traverse through this stage decides their trajectory for their future (Wood et al., 2017). Considering the sensitive age, coupled with stressful experiences brought about by this pandemic, can lead an individual to endure a negative trajectory in various spheres of life such as education, relationship, health status, etc. Peer social support groups benefit emerging adults in strengthening resilience (Lan & Wang, 2019). It renders protective effect to psychological distress, hopelessness and anxiety (Li et al., 2021).

### **Recommendations for future research and practice**

Limited studies exist on emerging adulthood, especially in the context of COVID-19 pandemic. More on the impact of COVID-19 on the mental health, associated modifiable and non-modifiable risk factors of mental health in this special group, their coping strategies, and the approaches the academic institutions have taken so far. Higher education institutions should strategize for students' mental health and well-being (Pandya and Lodha, 2021). The University Grants Commission (UGC) has indicated academic institutions to promote positive mental health through various strategies such as a campaign focused on positive mental health, promoting healthy digital habits, weekly recreational or stress management classes; and counselling services to help students access appropriate levels of care and foster their mental health (UGC, 2021). To decrease psychological maladjustment in emerging adulthood, apart from educational institutions, individuals' collectivistic cultural orientation such as protecting self and others from COVID-19, adhering to COVID safety measures, interdependence, and virtual sociability, need to be emphasized and promoted as

protective factors (Germani et al., 2020). At the same time, resources on digital health literacy and healthy digital habits should be made available to facilitate informed decisions. Further, adopting a three-tiered mental healthcare system can be advantageous for addressing the mental health issues of this unique group (Pandya et al., 2020). Limited studies on emerging adults in India accentuate the pressing need to understand their mental health concerns and promote positive mental health.

**Acknowledgments:** None

**Declaration of interests:** None

### **References**

- Arnett. (2015). *Emerging adulthood: The winding road from the late teens through the twenties*. New York; Oxford University Press.
- Arnett, J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 469-480.
- Barari, S., Caria, S., Davola, A., Falco, P., Fiorin, S., Hensel, L., et al. (2020). Evaluating COVID-19 public health messaging in Italy: self-reported compliance and growing mental health concerns. medRxiv [Preprint].
- Connor, K. M., and Davidson, J. R. T. (2003). Development of a new Resilience scale: The Connor-Davidson Resilience scale (CD-RISC), Depression and Anxiety. *Depress Anxiety*, 18(2), 76-82.
- Germani, A., Buratta, L., Delvecchio, E. and Mazzeschi, C. (2020a). 'Emerging adults and COVID-19: the role of individualism-collectivism on perceived risks and psychological maladjustment.' *International Journal of Environmental Research and Public Health*, 17(10), 3497.
- Germani, A., Buratta, L., Delvecchio, E., Gizzi, G. and Mazzeschi, C. (2020b). Anxiety severity, perceived risk of COVID-19, and individual functioning in emerging adults facing the pandemic. *Frontiers in Psychology*, 11.

- Huang, Y., and Zhao, N. (2020). Generalized anxiety disorder, depressive symptoms, and sleep quality during COVID-19 epidemic in China: a web-based cross-sectional survey. medRxiv [Preprint].
- Kessler, R. C. et al. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. *Archives of General Psychiatry*, American Medical Association, 593-602.
- Kujawa, A. et al. (2020). Exposure to COVID-19 pandemic stress: Associations with depression and anxiety in emerging adults in the United States. *Depression, and Anxiety*. Blackwell Publishing Inc., 37(12), pp. 1280-1288.
- Li, F. et al. (2021). Effects of sources of social support and resilience on the mental health of different age groups during the COVID-19 pandemic. *BMC Psychiatry*, BioMed Central Ltd, 21(1).
- Liao, J., Fan, S., Chen, J., Wu, J., Xu, S., Guo, Y., et al. (2020). Epidemiological and clinical characteristics of COVID-19 in adolescents and young adults. medRxiv [Preprint].
- Marchini, S. et al. (2021). Study of resilience and loneliness in youth (18-25 years old) during the COVID-19 pandemic lockdown measures. *Journal of Community Psychology*. Wiley-Liss Inc., 49(2), 468-480.
- Osuch, E., Demy, J., Wammes, M., Tremblay, P., Vingilis, E. and Carter, C. (2021). Monitoring the effects of COVID-19 in emerging adults with pre-existing mood and anxiety disorders. *Early Intervention in Psychiatry*. First published: 03 March 2021.
- Pandya, A. et al. (2020). Three-tier mental health-care service delivery during COVID-19 pandemic in India. *Journal of Mental Health and Human Behaviour*, 25(2), 143.
- Psychological Distress: Socially Prevailing Phenomenon (no date). Available at: <https://repository.up.ac.za/bitstream/handle/2263/30114/02chapter2.pdf?sequence=3&isAllowed=y> (Accessed 13 May 2020).
- Qiu, J. et al. (2020). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: Implications and policy recommendations. *General Psychiatry*, 33(2), e100213.
- Roy, D. et al. (2020). Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. *Asian Journal of Psychiatry*, 51, 102083.
- Saxena, S., Funk, M. and Chisholm, D. (2013). World health assembly adopts comprehensive mental health action plan 2013-2020. *The Lancet*, 1970-1971.
- Wilson, C. J. et al. (2011). The effects of need for autonomy and preference for seeking help from informal sources on emerging adults intentions to access mental health services for common mental disorders and suicidal thoughts. *Advances in Mental Health*. eContent Management Pty Ltd, 10(1), 29-38.
- Wood, D. et al. (2017). Emerging adulthood as a critical stage in the life course, in *Handbook of Life Course Health Development*. Springer International Publishing, 123-143.
- Xiang, Y.-T. et al. (2020). Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. *The Lancet Psychiatry*, 7(3), 228-229.