Chapter 15
COVID-19 and Mental Health of Indian Youth: Association with Background Variables and Stress

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Abstract The coronavirus has become a public health concern of the decade, affecting the economic, social, and psychological stability of the whole world. Having understood the detrimental impact of the pandemic to the mental health of people of all age groups, youth is understood to be the most vulnerable population who receives its direct impact. The broad objective was to study the mental health status of Indian youth and its association with various demographic variables. Psychological stress and mental health was another relationship that was explored. A group of 317 participants between the age group of 19 to 29 voluntarily took part in the online survey. Gender was found to be associated with overall mental health status ($p < 0.01$) as well its correlates, namely anxiety ($p < 0.05$), depression ($p < 0.05$), and loss of behavioral control ($p < 0.01$). Association between age and loss of positive affect ($p < 0.05$), number of siblings and loss of behavioral control ($p < 0.01$), and family environment and overall mental health scores ($p < 0.001$) were found. Similarly, feeling of restlessness during lockdown ($p < 0.001$), availability of support ($p < 0.001$), and feeling the need to consult a mental health professional were associated with the overall mental health score as well as all its sub-scales. Further, there were strong negative correlations between psychological stress and overall mental health

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S. Deb and B. A. Gerrard (eds.), *Handbook of Health and Well-Being*,
https://doi.org/10.1007/978-981-16-8263-6_15

scores, as well as that of anxiety, depression, and loss of behavioral control and positive affect sub-scales. The study highlighted the need for psychological support services for the youth population of the country to cope with and adapt to the new situation.

Keywords Mental health · Stress · Youth · India · Demographic variables: COVID-19

Introduction

Rapid spreading and unprecedented emergence of infectious diseases have become a major public health concern of the twenty-first century (Mak et al., 2010); the torrential impact of epidemics like SARS (2003), novel Influenza A H1N1 (2009), and Ebola (2014) on the physical and mental health of people is understood to be its key characteristics (Xiang et al., 2014). Soon after its outbreak in late December 2019, followed by its uncontrollable spreading, the World Health Organisation (WHO, 2020) declared the new coronavirus (2019-nCoV) as a public health emergency of international concern (PHEIC). Adding to medical emergency, the pandemic has severely affected the economic, social, and psychological well-being of the whole world (Viswanath, 2020). Many studies have established the detrimental effect of such epidemics on the public mental health, in the form of post-traumatic stress disorder, depression, and anxiety (Shultz et al., 2015). Commonly reported mental health issues in India additionally included insomnia, denial, anger, and fear as well (Roy et al., 2020). Consequently, youth population is assumed to be severely affected by and is vulnerable to develop such psychological problems: A recent China-based cross-sectional study on the impact of COVID-19 pandemic found that nearly 40.4% its youth have high proneness to psychological problems (Liang et al., 2020). However, most of the studies have restricted their investigation to the children, adolescents, pregnant women, and geriatric population only, thereby leaving the youth mental health status unexplored.

COVID-19 in India

The detrimental impact of 2019-nCoV in India aggregated even further due to factors such as high population density, limited medical care facilities, high illiteracy rates, and social misconception about the pandemic. In India, the first case was reported in January 30, 2020, and had immediately underwent a series of nationwide lockdown. By September 2020, the per-day cases in India had peaked due to heightened community transmission and had continued to spread in alarming rates of 90,000 cases every day. The repercussion of this was reflected on all sectors including, but not limited to education, economy, transportation, employment, entertainment,

tourism, and commercial establishments. Food insecurity, interstate migration of laborers, unemployment, and economic instability further aggravated the condition. The second wave of COVID-19 sometime in the end of March 2021 badly affected the Indian population. The number of detected COVID-19 positive cases based on people who came forward for testing is increasing rapidly. Every day is breaking the record of previous day. As of today (May 1, 2021), more than four lakhs (401,993) new COVID-19 cases and 3523 deaths in the last 24 h reported in India (https://economictimes.indiatimes.com). Non-availability of oxygen cylinder and medical facilities across the country caused lives of lot of people affected by COVID-19. Perhaps elections in four states and in one Union Territory in India and Kumbh Mela—a spiritual gathering held in Haridwar contributed significantly for faster spread of COVID-19.

In addition, the youth of the country have specific concerns in the job market, such as lay-off, salary-cut, ineffective working from home setup, and financial insecurity. Youth, who are found to be working in unorganized sectors, such as frontline workers, and among the ones who had to rejoin on-site when economic unlocking is declared in the country are facing the pressure of being susceptible to nCoV. While the possible concerns of youth in education could be non-working of academic institutions, fear of losing a year of study, delayed entry into job markets, ineffectiveness of online classes and poor economic conditions, and unwelcoming career prospects. Readily available pandemic-related information such as its spread and death rates, updates about the time-consuming vaccine development procedures, news of people committing suicide and similar disturbing information could affect the youth more than any other population. COVID-related protocols such as isolation, home and institutional quarantine, and movement restriction have also definitely contributed to the poor psychological functioning of the youth (NIMHANS, 2020).

Therefore, in this study, we aim to examine the general status of mental health of youth with special reference to depression, anxiety, and loss of behavioral control and positive affect. The association of youth mental health with background variables such as age, gender, level of education, parents' education, family type, sibling, family income, family environment, support facilities, feeling of restlessness, and worry is further explored. In addition, the impact of psychological stress on mental health of youth is evaluated. Therefore, the study hypothesizes that the status of mental health of male and female youth does not differ significantly (H1), there exists an association between mental health of youth and background variables such as age, gender, level of education, parents' education, family type, sibling, family income, family environment, presence of support, restlessness, and the feeling of seeking mental health support during lockdown (H2), and there exists an association between stress and mental health of youth with special reference to depression, anxiety, and loss of behavioral control and positive affect (H3).

Materials and Methods

A cross-sectional online survey conducted among Indian youth between June 3, 2020, and August 3, 2020, during COVID-19 pandemic in the country.

The participants of the study were Indian youth aged between 16 and 29 (n = 317). Three study tools which were used for data collection are as follows:

(i) Background Information Schedule (BIS, Deb, 2020): The schedule particularly designed for this study aimed to collect the background information of the participants, has two brad sessions: first session with 15 questions related to demographic and socioeconomic background of the participants and second session with five questions related to online mode of study, which is not made to use in the current study. In all the questions, responses are captured in the form of either "Yes" or "No".

(ii) Mental Health Inventory (MHI-18, Veit & Wear, 1983): This is an 18-item questionnaire which is used to assess the mental health status of the tested through four sub-scale named (a) Anxiety, (b) Depression, (c) Loss of behavioral control, and (d) Loss of positive affect. Some of the items of MHI-18 include (*i) Did you feel depressed? (ii) Have you felt calm and peaceful? (iii) Have you been moody? (iv) Were you a happy person? (v) Were you able to relax without difficulty?* There is evidence for high psychometric support of the constructs of the Mental Health Inventory (Veit & Wear, 1983). Reliability was achieved using a representative sample of 5089 respondents in the RAND Health Insurance Experiment. The overall Mental Health score was 0.64 (McDowell, 2006). Subjects were asked to answer every question based on how you feel, and how things have been for you during the past four weeks. If you are not sure which answer to select, please choose the one answer that comes closest to describing you. The response ranges from 1 = all of the time to 6 = none of the time. The higher score indicates the negative states of mental health. A recent Kashmir-based study among the youth has ascertained the Cronbach alpha coefficient to be 0.72. The Cronbach alpha for the present sample was found to be 0.909.

(iii) The Perceived Stress Scale (PSS) (Cohen et al., 1983): It is a widely used psychological instrument that consists of ten items measuring the perceived stress over the past month. It is a measure of the degree up to which situations in one's life are appraised as stressful. Items were designed to tap how unpredictable, uncontrollable, and overloaded respondents find their lives. For example, *(i) In the last month, how often have you been upset because of something that happened unexpectedly? (ii) In the last month, how often have you felt nervous and "stressed"? (iii) In the last month, how often have you been able to control irritations in your life?* and *(iv) In the last month, how often have you been angered because of things that were outside of your control?*. In this ten-item scale, *p*ositively stated items number 4, 5, 7, and 8 are reversed scored and summed across all the items. Andreou et al. (2011) ascertained the psychometric properties of PPS-10 in general population and

found the Cronbach's alpha value as 0.82. Perera et al. (2017) estimated the internal consistency to range from 0.68 to 0.78. Reliability analysis of the PSS, using Cronbach alpha, was done for the present study subjects, and it was found to be 0.772.

Procedure for Data Collection: An online survey by using the above questionnaires in English among the Indian youth aged between 16 and 29 years was conducted using a non-probability convenient sampling. The survey link was provided in the Web site of the Rajiv Gandhi National Institute of Youth Development, Ministry of Youth Affairs and Sports, Government of India, and information about the online survey was shared with the youth through various social network sites for voluntary participation. A total of 317 samples participated in the study voluntarily from different parts of the country.

Data Analysis: Statistical analysis was performed using the Statistical Package for the Social Sciences (SPSS) version 22.0 software. Both descriptive and inferential statistics (independent T-test, one-way ANOVA, Chi-square tests, and correlation) were done to assess the relationship between the variables. Significance level of $\alpha = 0.05$ was applied for all statistical tests.

Findings

Table 15.1 provides the demographic and socioeconomic particulars of the study participants, referring to which it can be seen that nearly equal proportion of male and female individuals participated in the study along with one third gender individual. Half (49.8%) the study sample belonged to the age group of 19–22 years, 32.5% were aged between 23 and 26, 11.7% were above 27 years, and 6% were less than 18 years. Incidentally, all the participants were students, among whom, 54.6% were postgraduate students, 22.7% were graduate students, 15.5% were pregraduation students, and 7.3% were Ph.D. Scholars. Considering the educational level of the parents, only 15.5% participants had fathers who were postgraduates and above, and 16.1% had their mothers qualified as postgraduates and above. The third quarter hailed from nuclear families with varying proportions of single child (12.6%), one sibling (45.4%), two siblings (22.7%), and three siblings and above (19.2%). Nearly half the population had their monthly family income to be less than 25,000 INR, while 9.1% had more than one lakh INR. 77.9% identified their family environment to be congenial. Interestingly, equal proportion of participants reported their restlessness and absence of restlessness in relation to the lockdown. 85.5% reported to be worried about their exams and future career, and 33.4% felt the need to consult a mental health professional for support. 73.8% of the participants reported to be backed up by someone to share their personal feelings and emotions.

Table 15.2 depicts the relationships between background characteristics and mental health status of the participants. Gender was found to be associated with overall mental health status ($p < 0.01$) as well as its correlates, namely anxiety (p

Table 15.1 Background information

Characteristics		N (%)
• Gender	Male Female 3rd Gender	160 (50.5) 156 (49.2) 1 (0.3)
• Age	< 18 years 19–22 years 23–26 years ≥ 27 years	19 (6.0) 158 (49.8) 103 (32.5) 37 (11.7)
• Education	< Graduate Graduate student Postgraduate students Ph.D. Scholar	49 (15.5) 72 (22.7) 173 (54.6) 23 (7.3)
• Father's education	Studied up to class 10 Studied up to class 12 Graduate Postgraduate and above	120 (37.9) 59 (18.6) 89 (28.1) 49 (15.5)
• Mother's education	Studied up to class 10 Studied up to class 12 Graduate Postgraduate and above	143 (45.1) 64 (20.2) 59 (18.6) 51 (16.1)
• Family type	Nuclear Joint	237 (74.8) 80 (25.2)
• Sibling	Single child One sibling Two siblings Three and above	40 (12.6) 144 (45.4) 72 (22.7) 61 (19.2)
• Family income (per month)	< 25,000 25,001–50,000 50,001–100,000 > 100,000	152 (47.9) 90 (28.4) 46 (14.5) 29 (9.1)
• Family environment	Congenial Not congenial	247 (77.9) 70 (22.1)
• Are you feeling restless because of lockdown?	Yes No	161 (50.8) 156 (49.2)
• Are you worried about exam and future career?	Yes No	271 (85.5) 46 (14.5)
• Is there anybody with whom you can share your personal feelings/emotions?	Yes No	234 (73.8) 83 (26.2)
• Do you feel like to consult a psychologist/counsellor for mental health support?	Yes No	106 (33.4) 211(66.6)

Table 15.2 Relationship between background characteristics and the mental health status of the participant

Characteristics	MHI_ Anxiety Mean ± SD	*p* value	MHI_Depression Mean ± SD	p-value	MHI_Loss of behavioral control Mean ± SD	*p* value	MHI_Loss of positive affect Mean ± SD	*p* value	Total MHI Mean ± SD	*p* value
Gender Male Female	19.92 ± 4.88 18.46 ± 5.79	0.016*	16.03 ± 4.22 14.84 ± 4.59	0.019*	16.26 ± 3.88 14.97 ± 4.33	0.006**	18.81 ± 5.12 17.86 ± 5.03	0.098	70.75 ± 14.88 65.89 ± 17.41	0.009**
Age < 18 years 19–22 years 23–26 years ≥ 27 years	19.11 ± 6.57 19.37 ± 5.16 18.80 ± 5.70 19.73 ± 4.86	0.779	16.00 ± 5.46 15.47 ± 4.50 15.15 ± 4.51 16.14 ± 3.65	0.667	15.47 ± 3.36 15.75 ± 4.21 15.52 ± 4.42 15.65 ± 3.80	0.976	[1]21.16 ± 5.11 18.61 ± 4.97 17.80 ± 5.431* 17.49 ± 4.36	0.037*	71.22 ± 16.73 68.94 ± 15.68 67.02 ± 17.94 68.89 ± 14.88	0.698
Education < Graduate Graduate student Postgraduate students Ph.D. Scholar	19.06 ± 6.11 19.77 ± 5.21 18.97 ± 5.28 19.57 ± 5.29	0.741	15.40 ± 4.63 15.87 ± 5.10 15.27 ± 4.12 15.86 ± 4.60	0.784	15.39 ± 3.71 15.81 ± 4.60 15.54 ± 4.14 16.48 ± 4.07	0.728	18.67 ± 4.96 19.28 ± 5.21 18.08 ± 5.10 17.04 ± 4.99	0.208	68.27 ± 16.03 70.77 ± 16.65 67.45 ± 16.32 68.91 ± 17.32	0.569
Father's education Studied up to class 10 Studied up to class 12 Graduate ≥ Postgraduate	19.27 ± 5.29 20.17 ± 4.79 18.76 ± 5.65 18.71 ± 5.80	0.407	15.50 ± 3.96 16.13 ± 4.25 14.88 ± 4.56 15.69 ± 5.56	0.424	15.78 ± 3.75 15.78 ± 3.97 15.53 ± 4.38 15.39 ± 5.02	0.934	18.08 ± 5.01 19.10 ± 4.71 18.27 ± 5.22 18.37 ± 5.65	0.656	68.26 ± 14.68 70.84 ± 15.65 67.39 ± 17.15 67.90 ± 19.75	0.658

(continued)

Table 15.2 (continued)

Characteristics	MHI_ Anxiety Mean ± SD	*p* value	MHI_Depression Mean ± SD	p-value	MHI_Loss of behavioral control Mean ± SD	*p* value	MHI_Loss of positive affect Mean ± SD	*p* value	Total MHI Mean ± SD	*p* value
Mother's education Studied up to class 10 Studied up to class 12 Graduate ≥ Postgraduate	19.48 ± 5.12 19.61 ± 5.16 18.32 ± 5.18 18.96 ± 6.56	0.490	15.66 ± 4.16 15.82 ± 4.33 15.13 ± 4.34 14.90 ± 5.55	0.626	16.11 ± 3.59 15.63 ± 4.53 15.12 ± 3.93 14.98 ± 5.31	0.259	18.32 ± 6.01 18.67 ± 4.94 17.69 ± 4.64 18.90 ± 6.09	0.613	69.39 ± 14.56 69.15 ± 16.59 66.05 ± 16.17 67.52 ± 21.07	0.592
Family type Single Joint	19.23 ± 5.63 19.14 ± 4.61	0.880	15.48 ± 4.45 15.46 ± 4.53	0.973	15.60 ± 4.15 15.79 ± 4.25	0.727	18.21 ± 4.99 18.85 ± 5.45	0.331	68.15 ± 16.76 69.23 ± 15.37	0.617
Sibling Single child One sibling Two sibling ≥ Three	17.85 ± 6.20 19.08 ± 5.71 19.76 ± 4.68 19.74 ± 4.71	0.264	13.73 ± 5.06 15.56 ± 4.72 15.96 ± 3.64 15.80 ± 4.14	0.078	[1]14.15 ± 5.02 15.47 ± 4.15[1*] 15.60 ± 3.58 17.11 ± 3.90[1*]	0.004**	17.60 ± 5.61 18.44 ± 5.11 18.18 ± 4.57 18.92 ± 5.41	0.630	62.16 ± 20.05 68.57 ± 16.55 69.06 ± 13.83 71.32 ± 15.59	0.061
Family income (per month) < 25,000 25,001–50,000 50,001–100,000 > 100,000	19.23 ± 4.90 18.90 ± 5.29 19.76 ± 6.81 19.17 ± 5.80	0.855	15.70 ± 4.11 14.89 ± 4.40 15.80 ± 5.23 15.50 ± 5.22	0.566	15.71 ± 3.76 15.56 ± 4.40 15.74 ± 4.45 15.45 ± 5.12	0.983	18.27 ± 4.53 18.51 ± 5.57 18.96 ± 5.98 17.52 ± 5.16	0.675	68.78 ± 13.74 67.86 ± 17.66 69.43 ± 20.66 67.11 ± 18.68	0.921

(continued)

Table 15.2 (continued)

Characteristics	MHI_ Anxiety Mean ± SD	*p* value	MHI_Depression Mean ± SD	p-value	MHI_Loss of behavioral control Mean ± SD	*p* value	MHI_Loss of positive affect Mean ± SD	*p* value	Total MHI Mean ± SD	*p* value
Family environment Congenial Not congenial	19.80 ± 5.14 17.10 ± 5.75	0.000***	15.92 ± 4.25 13.87 ± 4.84	0.001**	16.28 ± 3.84 13.43 ± 4.55	0.000***	19.20 ± 4.76 15.43 ± 5.24	0.000***	70.99 ± 15.43 59.17 ± 16.57	0.000***
Are you feeling restless because of lockdown? Yes No	17.06 ± 4.76 21.42 ± 5.09	0.000***	13.69 ± 4.22 17.37 ± 3.91	0.000***	14.10 ± 3.95 17.24 ± 3.78	0.000***	16.78 ± 4.86 20.01 ± 4.85	0.000***	61.57 ± 14.46 75.71 ± 15.18	0.000***
Are you worried about exam and future career? Yes No	18.67 ± 5.20 22.39 ± 5.40	0.000***	15.01 ± 4.35 18.28 ± 4.15	0.000***	15.16 ± 4.04 18.50 ± 3.82	0.000***	17.85 ± 4.92 21.43 ± 5.19	0.000***	66.48 ± 15.62 80.30 ± 16.19	0.000***
Is there anybody with whom you can share your personal feelings/emotions? Yes No	20.09 ± 5.03 16.73 ± 5.59	0.000***	16.13 ± 4.28 13.60 ± 4.46	0.000***	16.42 ± 3.82 13.46 ± 4.37	0.000***	19.26 ± 4.80 15.87 ± 5.16	0.000***	71.76 ± 15.06 59.09 ± 16.48	0.000***

(continued)

Table 15.2 (continued)

Characteristics	MHI_ Anxiety Mean ± SD	*p* value	MHI_Depression Mean ± SD	p-value	MHI_Loss of behavioral control Mean ± SD	*p* value	MHI_Loss of positive affect Mean ± SD	*p* value	Total MHI Mean ± SD	*p* value
Do you feel the need to visit a mental health professional for support? Yes No	16.69 ± 5.17 20.46 ± 5.05	0.000***	13.38 ± 4.20 16.56 ± 4.21	0.000***	13.58 ± 3.94 16.68 ± 3.90	0.000***	15.90 ± 4.80 19.61 ± 4.81	0.000***	59.60 ± 14.71 73.00 ± 15.35	0.000***

Note *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$; SD: Standard deviation

< 0.05), depression ($p < 0.05$), and loss of behavioral control ($p < 0.01$). However, female participants had lower scores on overall mental health as well as the three aforesaid sub-scales as compared to their male counterparts. An interesting association was observed between age and loss of positive affect ($p < 0.05$) wherein the increase of age witnessed decreases in the loss of positive affect; participants below the age of 18 have lesser loss of positive affect than their older counterparts. A significant association was found between number of siblings and loss of behavioral control ($p < 0.01$) wherein scores tend to increase as the number of siblings increase. Single children secured the least scores on this sub-scale, while those with three or more siblings scored the highest. Family environment was associated with the overall mental health scores ($p < 0.001$) as well as all the sub-scales of mental health inventory, namely anxiety ($p < 0.001$), depression ($p < 0.01$), and loss of behavioral control ($p < 0.001$) and positive affect ($p < 0.001$); participants from congenial family environments secured better scores on all these components. Similarly, feeling of restlessness during lockdown ($p < 0.001$), availability of support ($p < 0.001$), and feeling the need to consult a mental health professional were associated with the overall mental health score as well as all its sub-scales. Participants who felt restless during that time, who did not have someone to share their feelings/emotions as well as who needed to seek the help of a mental health professional, scored poorly in all the sub-scales and the total score of the mental health inventory, as compared to their counterparts.

Hence, hypothesis 2, which states that "*there exists an association between mental health of youth and background variables*", is retained in relation to age, gender, family environment, presence of support, restlessness, and feeling of seeking mental health support during the lockdown.

Table 15.3 provides the association between stress and mental health status of the youth with special reference to the four sub-scales, viz. anxiety, depression, loss of behavioral control, and loss of positive affect. Significant relationships were found between overall psychological stress and the status of mental health. There were strong negative correlations between psychological stress and overall mental health scores as well as that of anxiety, depression, and loss of behavioral control and positive affect sub-scales. This means, as scores on the mental health inventory decrease, psychological stress increases.

In light of this finding, hypothesis 3 stating that "*there exists an association between stress and mental health of youth with special reference to depression, anxiety, and loss of behavioral control and positive affect*" is retained.

Discussion

The study that intended to explore the mental health status of the youth in relation to stress and demographic details during the phase of COVID-19 pandemic yielded relevant findings.

Table 15.3 Association between stress and mental health of youth with special reference to depression, anxiety, and loss of behavioral control and positive affect

	Psychological stress items	MHI—Anxiety *r* value	MHI—Depression *r* value	MHI—Loss of behavioral control *r* value	MHI—Loss of positive affect *r* value	Total MHI *r* value
1	In the last month, how often have you been upset because of something that happened unexpectedly?	−0.389***	−0.441***	−0.365***	−0.426***	−0.470***
2	In the last month, how often have you felt that you were unable to control the important things in your life?	−0.422***	−0.433***	−0.455***	−0.418***	−0.502***
3	In the last month, how often have you felt nervous and "stressed"?	−0.526***	−0.570***	−0.459***	−0.455***	−0.584***
4	In the last month, how often have you felt confident about your ability to handle your personal problems?	−0.323***	−0.299***	−0.437***	−0.407***	−0.416***
5	In the last month, how often have you felt that things were going your way?	−0.316***	−0.309***	−0.384***	−0.318***	−0.383***

(continued)

Table 15.3 (continued)

	Psychological stress items	MHI—Anxiety *r* value	MHI—Depression *r* value	MHI—Loss of behavioral control *r* value	MHI—Loss of positive affect *r* value	Total MHI *r* value
6	In the last month, how often have you found that you could not cope with all the things that you had to do?	−0.335***	−0.348***	−0.303***	−0.267***	−0.362***
7	In the last month, how often have you been able to control irritations in your life?	−0.275***	−0.251***	−0.340***	0.294***	−0.321***
8	In the last month, how often have you felt that you were on top of things?	−0.226***	−0.195**	−0.280***	−0.283***	−0.283***
9	In the last month, how often have you been angered because of things that were outside of your control?	−0.471***	−0.519***	−0.378***	−0.439**	−0.525***
10	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	−0.576***	−0.546***	−0.495***	0.495***	−0.621***
	Total psychological stress	−0.660***	−0.692***	−0.637***	−0.669***	−0.764***

Note *$p < 0.05$; **$p < 0.001$; ***$p < 0.001$; r = Pearson correlation coefficient

The demographic variable gender was found to have a significant association with the mental health status wherein women were found to obtain lower scores in the overall mental health status as well as its sub-scales, namely anxiety, depression, and loss of behavioral control and positive affect. Strong evidence of gender difference in the prevalence of anxiety and depression is found wherein higher proneness was found among girls and women. Lack of autonomy, socially determined roles and responsibilities and norms (WHO, 2002) coupled with occurrence of uncontrollable events such as COVID-19 seemed to be affecting their mental health. It was also the time when working women had struggled to balance between working from home as well as their household chores and they have a huge increase in their workload to meet the demand of everyone at home.

Age had a significant association with the loss of positive affect. The scores on the sub-scale loss of positive affect took a decelerating trajectory with increasing age. That is, participants below the age of 18 showed better mental health, followed by age group of 19–22 and 23–26; the oldest group of participants in the present study scored the lowest among the lot, to indicate their poor mental health in terms of losing positive affect. Interpreting this finding in the light of COVID-19 would urge one to link this with the economic repercussions of the pandemic that has led to loss of jobs and poor career prospects for the youth in the country. Association between poor mental health and job insecurity (Wilson et al., 2020) and the associated psychological threat during the pandemic (Viswanath, 2020) among the youth worldwide have been a proven understanding. Their overall proneness toward developing psychological problems during COVID-19, as assumed by Liang et al. (2020), could be linked to this pattern seen in the population with age. The significant form taken by the scores on behavioral control sub-scale with the number of siblings was such that behavioral control seemed to be better as number of siblings increased. Therefore, single children have highest loss of behavioral control, while those with three or more siblings had the better behavioral control. Poor emotional regulation and self-control is found among only-children as compared to children with siblings during the pandemic (Yang et al., 2017). The absence of a support figure from one's own generation as a support system could be influencing the loss of behavioral control among them. This finding implies the scope of further research on the coping mechanism and regulatory behavior among the group of study during such crisis situations.

Congenial family environment revealed its positive association with the overall mental health of the study participants. Significant association was seen with all the sub-scale, viz. anxiety, depression, and loss of behavioral control and positive affect, to indicate that congenial family environment has a strong influence on the better mental health of youth in the country. Several studies have proven that strong nurturing capacity of good family environment (Kaur, 2017), the backing of a strong support system, and feeling of togetherness during a crisis situation would facilitate the overall mental health of the family. This factor becomes particularly relevant during the lockdown in the country where individuals were confined only to their homes from where the youth manages their studies and work. Supportive family environment would have provided financial, emotional, and psychological backup,

thereby decreasing their vulnerability to psychological distress. The same point is proven again in this study in yet another manner wherein participants who did not have a support system to share their troubling thoughts and emotions depicted a significant negative relationship with the overall mental health scores as well as with its sub-scales. Evident results such as significant association between feeling of restlessness as well as the need to consult a mental health professional were found to be significantly associated with poor mental health scores.

Further, there were strong negative correlations between psychological stress and overall mental health scores as well as that of anxiety, depression, and loss of behavioral control and positive affect sub-scales. As scores on the mental health inventory increase, psychological stress also increases. An Indian study conducted by Dangi et al. (2020) assessed the COVID stress during the 21-day lockdown (March 24 to April 14, 2020) among the youth to find severe stress for nearly 73.26% of the youth after 15 days and 80.86% of youth after 21 days. This unprecedented lockdown, which continued for months beyond the speculated time, is assumed to have torrential impact on the youth. Fear of getting infected, tremendously increasing death rates, unfamiliar quarantine and social distancing rules, restrictions and newly imposed regulations on movement and transportation, shortage in food supply, inability to reach families, loss of job, and the combination of various such factors would have amplified the stress level, thereby curtailing the mental health.

The study implied that women are higher proneness to poor mental health during the nCov'19 and so stressed on their need for additional care and support. The vulnerability of youth in the country was also found to be increasing with their age. Further implications included the importance of maintaining congenial family environment and other support systems to navigate through the pressing times.

Conclusion and Recommendations

Demographic variables such as gender, age, and number of siblings were found to be associated with the mental health of the youth. In comparison to their male counterparts, women had poor mental health outcomes. Mental health outcomes became poorer as one age and as the number of siblings reduces. Congenial family environment and availability of support enhanced mental health while feeling of restlessness and the need to consult a mental health professional curtailed mental health. Stress was negatively correlated to mental health wherein, with increasing stress, proneness to and incidence of anxiety, depression, and loss of behavioral control and positive affect increased.

Increasing awareness regarding COVID stress has to be disseminated across all age groups and gender to gain insight on the support services to be provided to the vulnerable. This should be targeted to make attitudinal and behavioral changes in the public toward youth who are anxious about their future due to job insecurity and lack

of entitlement, toward women who are struggling to balance between the demand of their work and household chores, and toward families who are troubled by the repercussions of the pandemic to emphasize on the need of togetherness to navigate through the pandemic.

Youth should be motivated to utilize their time during lockdown to equip themselves with the needed skills as expertise, targeting for a prospective career start or growth. They can make use of online classes/training and indulge in productive discussions to keep them productively occupied. Involvement in recreational activities and physical exercises, nurturing of hobbies or learning new skills could be some ways to enhance mental health and psychological fitness.

Limitations of the Study Since the study utilized online mode of conduction, cross-checking of the data and ensuring full involvement of the participants were very little. Size of the sample was very small compared to the youth population in the country, and therefore, the findings cannot be generalized. Furthermore, there was only one participant to represent the third gender community, whose information could not be amply utilized due to poor representation size.

Ethical Issues The present study was subjected to ethical approval and obtained the clearance (Ref. No. RGNIYD/ADMIN/20–21/SEC/001). All procedures performed in collecting data from the participants were in accordance with the ethical standards of the institution and/or national research committee and with the 1964 Helsinki declaration in mind. Participation in the study was voluntary, and participants were ensured about confidentiality of information.

Conflict of Interest Authors declare no conflict of interest in the publication of this research. All authors read and approved the final version of the manuscript.

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