



# IMPACT OF COVID-19 PANDEMIC ON THE MENTAL HEALTH AND WELLBEING OF SCHOOL-GOING ADOLESCENTS

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**Abstract:** Coronavirus has impacted lives all around the world. The child population is possibly most vulnerable to its adverse psychosocial impact. Almost all countries have imposed the rule of ‘Social Distancing’, and as a result, the educational institutions are conducting virtual classes. The interaction between lifestyle changes and psychosocial stress caused by home confinement could further aggravate the detrimental effects on a child’s mental health (#IndiaFightsCorona COVID-19, 2020; Dalton et. al., 2020; Lancker & Parolin, 2020; Golberstein et al., 2020; Wang et.al., 2020). The current study focuses on the psychosocial impact of these ongoing changes on adolescents. The data was collected from 114 students, between 12 to 18 years of age. A Survey-based exploratory design was used. The findings suggest that more than half of the population in the current study experienced loneliness. They had difficulty with change and experienced feelings of entrapment. Roughly half of the population experienced feelings of increased frustration among peers/siblings, Parents, and self. They also experienced being unhappy and underwent uncertainty-related stress. Students perceived themselves to be in significantly better general health before the pandemic. They experienced significantly less social dysfunction and a lack of self-confidence before. Higher age groups and females were seen to be more impacted and disturbed due to the impact of the pandemic. Those who felt that the changes in their lifestyle were significant; And those who felt more irritable than before, experienced a higher amount of social dysfunction, anxiety, lack of self-confidence, and deteriorating General Health.

**Index Terms - Mental Health, Adolescents, coronavirus, home confinement, Coping styles.**

## I. INTRODUCTION

The Novel Coronavirus (COVID-19) was affirmed to be a pandemic in March 2020, by World Health Organization. On August 4th, 2021, India reported 3,17,26,507 total people impacted, and 4,25,195 deaths (#IndiaFightsCorona COVID-19, 2020).

For the cessation of COVID-19 transmission, and to ease the burden on the underprepared healthcare systems, almost all countries have imposed the rule of ‘Social Distancing’, as a result of which, the educational institutions have opted for home-based distance-learning models (Dalton, Rapa, & Stein, 2020; Lancker & Parolin, 2020; Golberstein et al., 2020); The interaction between lifestyle changes and psychosocial stress caused by home confinement could further aggravate the detrimental effects on a child’s physical and mental health (Wang, Zhang, Zhao, Zhang, & Jiang, 2020).

### 1.1 Age

Children of different age groups are impacted differently due to the pandemic. Children of 3 to 6 years are more likely to exhibit traits of cleanliness and the fear of family members being infected. Whereas, younger children were more likely to become inattentive and persistently inquisitive about the virus. Grave psychological distresses - increased irritability, difficulty with attention, and changing behavior remain across all age groups. Long-term disruption in the routine has triggered attention-seeking behavior and increased dependence on the parents (Singh et al., 2021; Viner et al., 2020; Lee, 2020; Liu et al., 2020; Zhai and Du, 2020, Jiao et al., 2020). The youth view social distancing primarily as a social responsibility rather than a difficulty. If they are motivated to prevent others from getting sick by pro-social factors, it is followed more sincerely (Oosterhoff et al., 2020).

## 1.2 Gender

The confirmed cases of Covid-19 show an inconsistency between the affected males( 61.14%) and females(38.86%)(The Sex, Gender and Covid-19 Project, 2021). Literature highlights that women have been at greater risk for poor mental health due to the absence of experiences of self-worth, competence, autonomy, adequate income, and a sense of physical, sexual, and psychological safety and security(Afifi, 2007). Women present greater sensitivity in symptoms of anxiety depression and acute stress as emotional responses to COVID-19. Loneliness and violence worsen emotional state in women(García-Fernández et al., 2020, Hou et al., 2020). With changing times, the impact of social media also adds to the list of concerns, especially since education is now online. Kim et. al., 2014 report that females' academic performances were more likely to be influenced by the use of social media than males.

## 1.3 Coping

An expanding body of literature suggests that inadequate responses to coping with stress in children of school age contribute to a range of psychosocial problems, including problems with academic performance, conduct, anxiety, eating disorders, violence, depression, and suicide (Kovacs, 1997; Matheny et al., 1993). Adolescence is a crucial stage for the formation of identity (Allen and McKenzie, 2015; Crocetti, 2017) where teenagers seek mastery and autonomy (Featherman et al., 2019), singularize from their parents (Levpuseck, 2006), and precipitate toward their peer groups such that their social and esteem needs are met (Allen and Loeb, 2015). The pandemic has drastically shortened the conditions for teens to meet their developmental needs (Loades et al., 2020). Gou et al. (2020, p. 2) argue that adolescents are more susceptible than adults to mental health issues, especially during a lockdown since they are in a transitory phase; with the rising importance of peers, and dealing with their often brittle self-esteem."Chandra(2020) E-connecting with others, has become a very common way to cope with academic stress for students. (Chandra, Y., 2020). Labrague, L (2020) suggests that students endured fatigue during the mandatory lockdown period.

## 1.4 Mental health

The Psychosocial Impact of the Coronavirus Pandemic hems in an alarming negative impact on mental health at a community level. The measures of social distancing, as an imperative step to stop the spread of the virus, however, has seen to instigate an increase in the likelihood for mental health concerns such as loneliness, isolation, anxiety; which may lead to an impairment in the functioning of an individual and induce fear and stress(Lima et al., 2020; Jiang et al., 2020). Center for Disease Control and Prevention [CDC], 2020 and The American Academy of Pediatrics [AAP] (2020) reassured caregivers to set up managed phone calls and video calls for their children and their friends/peers. Playing outside while maintaining social distancing was recommended, so that they could move around and explore their environment. A study on Health Behaviors and Wellbeing During COVID-19 reports a high percentage of respondents to have experienced a depressed mood, anxious feelings, hypochondria, and insomnia. Wang et al. (2020) concluded that emotional disturbance was evident during the pandemic, inclusive of depression, stress, and anxiety. Additionally, the need for social distancing hampers access to a competent coping strategy; social support. Support provided by others can help individuals cope with stress, regulate emotions, attain informational and practical assistance, and remain resilient during difficult times (Greenglass, 1993; Jetten et al., 2017; Williams et al., 2018). In a study on mental health and wellbeing during the COVID-19 pandemic, O'Connor et.al., 2021 found that younger adults were more likely to have suicidal ideation as compared to individuals of the above age groups. Women, in the study, reported higher levels of depression. Young adults were also found to have higher levels of anxiety. Females and young adults reported higher levels of defeat, along with higher levels of entrapment and loneliness.

The focus of the current study specifically lies on the school-going population, as they are easily affected, and eventually will become adults in the society who are expected to be productive on a mental, social, and occupational level.

## II. METHOD

### 2.1 DESIGN

The current study was Survey Research. It has an exploratory and descriptive design.

### 2.2 Sample

The sample for the study was collected from Students of 8th 9th 10th 11th and 12th standard of Dayanand Anglo-Vedic International School, Ahmedabad. The sample consisted of 114 individuals.

The age range of 12 to 18 years. 2.6 %(n=3) of the population was 12 years and below. 10.3% (n=12) of the population was 13 years of age, 22.4% (n=26) of individuals for 14 years of age. 16.4% (n=19) of individuals fill into the category of 15 years. The maximum number of individuals in the sample, 27.6% (n=32) belong to 16 years of age. In the age group of 17 years, there were 18.1% (n=21) of individuals. And only 2.6 %(n=3) of individuals belong to the category of 18 years and above. the sample consisted of 46.6% (n=54) of males and 53.4% (n=62) of females. Therefore it can be seen that the female population is slightly more than the male population however the data seems to be quite evenly distributed in this regard.

### 2.3 Tools

#### 2.3.1 Consent form:

This form was to ensure that proper consent was given by the participant, and they were briefed regarding the purpose of the study before moving forward.

### 2.3.2 Questionnaire survey of psychosocial Information:

The survey questions include sociodemographic information. The other questions consisted of information concerning psychosocial factors such as loneliness, entrapment, irritability, coping strategies, etc.

### 2.3.3 Flourishing scale:(Diener et al., 2010)

The scale includes eight items, scored between 1–7, 1 indicating strong disagreement and 7 indicating strong agreement. The items are all positively worded. A high score indicates a positive view of.

### 2.3.4 General Health Questionnaire (GHQ12) (Anwar et. al.,2013):

The scale consists of 12 items, assessing the severity of a mental problem using a 4-point scale (from 0 to 3). Higher scores indicate worse conditions.

## III. RESULTS

<u>Variable</u>	<u>Frequency</u>	<u>Percent %</u>
<u>Age</u>		
12-15 years	40	35.1
16- 18+ years	74	64.9

**Table 3.1- Descriptive Statistics , Age**

### 3.1 Age

The age groups of 16 to 18 years experienced more loneliness as compared to the age groups below them. The older age groups were also found to view change as more difficult in comparison to the children of lower age groups. They were also seen to experience more uncertainty and feelings of entrapment. There was also a significant difference in the aspects of general health, well-being, social dysfunction, anxiety/ depression, and self-confidence across the age groups of 15 years and below, and 16 years and above.

<u>Variable</u>	<u>Frequency</u>	<u>Percent %</u>
<u>Gender</u>		
Male	52	45.6
Female	62	54.4

**Table 3.2- Descriptive Statistics , Gender**

### 3.2 Gender:

Females seemed to be experiencing more loneliness as compared to males during the lockdown. Females have also been finding this change difficult, as compared to males, although almost none of the males have also been finding it difficult. It was seen that more than half of the males were feeling uncertain about the future. However, slightly more women were seen to be feeling uncertain as compared to men. (Table 4.2) shows that there was a significant difference between the aspects of general health, well-being, social dysfunction, anxiety/ depression, and self-confidence across genders.

<u>Variable</u>	<u>Frequency</u>	<u>Percent %</u>
<u>Loneliness</u>		
Yes	42	36.8
No	72	63.2
<u>Change</u>		
Difficult	65	57
Not Difficult	49	43

**Table 3.3- Descriptive Statistics , Loneliness and Change**

### 3.3 Loneliness and change:

More than half of the population in the current study experienced loneliness. The majority of individuals felt that life has changed and become more difficult in this duration of the pandemic. Individuals finding change to be difficult were also seen to be struggling with general health, social dysfunction, anxiety/ depression, and self-confidence significantly.

<u>Variable</u>	<u>Frequency</u>	<u>Percent %</u>
<u>Uncertainty</u>		
Very Slightly or Not at all	37	32.5
Slightly	28	24.6
Moderately	31	27.2
Quite a Bit	18	15.8

**Table 3.4- Descriptive Statistics , Uncertainty**

### 3.4 Uncertainty:

With respect to uncertainty, it can be seen that 32.5%(n=37) of individuals were very slightly or not at all stressed due to the uncertainty that the covid-19 pandemic brings about. 24.6% (n=28)of the participants were seen to be slightly stressed due to this uncertainty, whereas 27.2% (n=31) were moderately stressed. 15.8% (n=18) were quite stressed and only 5.2 % (n=6) of the individuals were extremely stressed because of this uncertainty.

<u>Variable</u>	<u>Frequency</u>	<u>Percent %</u>
<u>Feelings</u>		
Good/ Happy	52	63.41
Bad/ Sad	30	36.58

**Table 3.5- Descriptive Statistics, Feelings**

### 3.5 Feelings during the pandemic

Although roughly half of the population reported feeling good, one-fourth of them reported feeling unhappy and sad. The data also revealed that the elder age groups were more likely to experience feelings of sadness as compared to the younger age groups.

<u>Variable</u>	<u>Frequency</u>	<u>Percent %</u>
<u>Entrapment</u>		
Yes	62	54.4
No	52	45.6

**Table 3.6- Descriptive Statistics , Entrapment**

### 3.6 Feelings of entrapment(Being 'stuck')

More than half of the population in the current study recorded feelings of being entrapped. children in the age group 16 to 18 years found themselves to be feeling more stuck as compared to children of the younger age group. It was also seen that more females than males felt stuck.

<u>Variable</u>	<u>Frequency</u>	<u>Percent %</u>
<u>Aggression(Self)</u>		
Yes	54	47.4
No	60	52.6
<u>Aggression(friends/siblings)</u>		
No	80	70.2
<u>Aggression(Parents)</u>		
Yes	32	28.1
No	82	71.9

**Table 3.7- Descriptive Statistics , Feelings of frustration self, siblings and parents**

### 3.7 Feelings of increased frustration among peers/siblings, Parents and self.

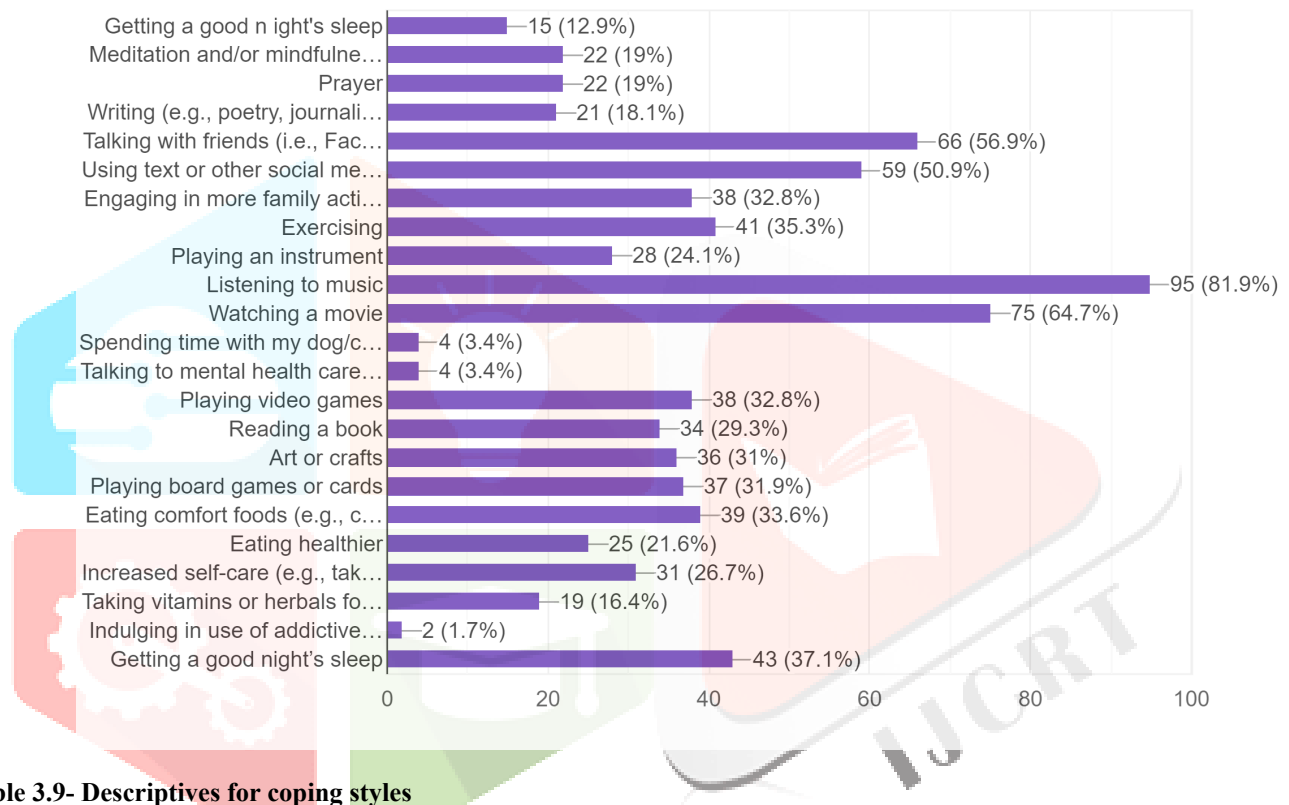
From the data, it was found that more than one-fourth of the population believed that their friends/siblings, and parents had become more aggressive and irritable than before. Although roughly half of the population believe that they had become more aggressive and irritable during the pandemic. Those who felt more irritable were seen to experiencing significantly deteriorating general health and showed issues as social dysfunction, anxiety/ depression, and issues with self-confidence.(Table 4.5)

<u>Variable</u>	<u>Frequency</u>	<u>Percent %</u>
<b><u>Attitude towards Lockdown</u></b>		
<b>I think the restrictions are not strict enough</b>	<b>23</b>	<b>20.2</b>
<b>I think the restrictions are too strict</b>	<b>4</b>	<b>3.5</b>
<b>I think the restrictions are good</b>	<b>87</b>	<b>76.3</b>

**Table 3.8- Descriptive Statistics , Perception about restrictions and social responsibility**

### 3.8 Perception about restrictions and social responsibility

From the current data it was that the majority of the population believes that the restrictions were valid and good for the population.



**Table 3.9- Descriptives for coping styles**

### 3.9 Coping styles

Males and females both were seen to indulge most in watching movies and listening to music, Apart from that, talking with friends, Getting a good night's sleep were a few others that were popular and common. Playing video games was a coping style seen to be popular among males. whereas, exercising, and indulging in arts and crafts were coping styles seen to be more popular among females.

The most common coping style for individuals who experienced more irritability was listening to music and using text or social media. whereas individuals who felt the same as before were more likely to indulge in getting a good night's sleep watching a movie listening to music talking with friends and so on

Individuals experiencing difficulty with change were majorly seen to use listening to music and watching movies as a coping strategy. Other methods were seen to be talking to friends, and majorly using social media to do so. Seeking mental health was the least used method among individuals who did experience difficulty with change.

Individuals who had no difficulty with change, or didn't find the change significant enough, on the other hand, were seen to indulge in multiple coping methods, as compared to individuals who found change difficult. Listening to music as an overlapping coping style between the two groups. They also showed healthy coping styles such as getting a good night's sleep and communicating with friends.

	Before and after the Pandemic							t test
	Before			After				
	N	Mean	Std. Deviation	N	Mean	Std. Deviation		
General health	114	12.4035	7.72963	114	8.9386	5.25338	-5.162**	
Well being	114	7.0263	4.1487	114	39.5789	11.34409	-6.611**	
Social dysfunction	114	1.5351	1.68901	114	4.3596	2.97817	-6.565**	
Anxiety/Depression	114	50.7982	19.12612	114	3.4474	2.2463	-0.929	
Self-confidence	114	3.7368	2.89355	114	1.1316	1.50817	-3.01**	

**Table 3.10- t test between the 'before' and 'after' of General health , Social Dysfunction, Anxiety/ Depression & Self-Confidence and Well-Being**

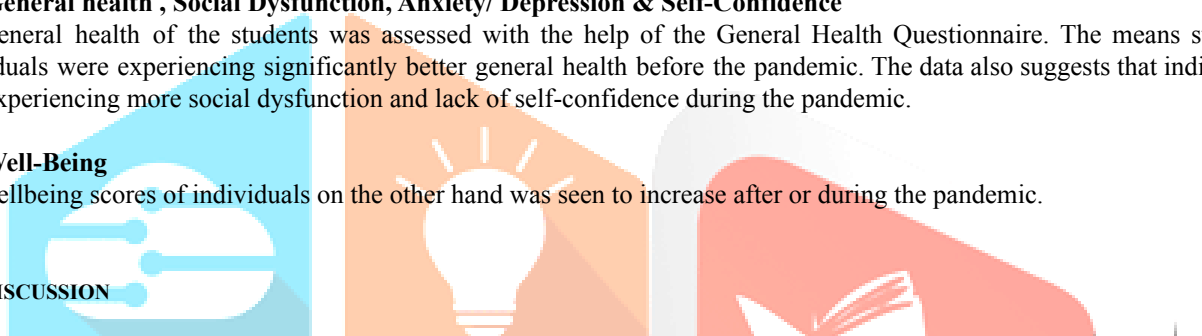
### 3.10 General health , Social Dysfunction, Anxiety/ Depression & Self-Confidence

The general health of the students was assessed with the help of the General Health Questionnaire. The means suggest that individuals were experiencing significantly better general health before the pandemic. The data also suggests that individuals are now experiencing more social dysfunction and lack of self-confidence during the pandemic.

### 3.11 Well-Being

The wellbeing scores of individuals on the other hand was seen to increase after or during the pandemic.

## IV. DISCUSSION



	Age							t test
	12& below to 15 years			16 years to 18& above				
	N	Mean	Std. Deviation	N	Mean	Std. Deviation		
General health	40	9.95	6.54354	74	13.7297	8.03298	-2.552**	
Well being	40	44.225	9.9137	74	54.3514	21.84656	-2.777**	
Social dysfunction	40	6.15	4.12963	74	7.5	4.10896	-1.671*	
Anxiety/Depression	40	2.825	2.12298	74	4.3919	3.17446	-2.799**	
Self-confidence	40	0.975	1.49336	74	1.8378	1.72036	-2.673**	

**Table 4.1 t test of age between ages 12-15 years and 16 and above on the basis of the 'After' scores**

	Gender						t test
	Male			Female			
	N	Mean	Std. Deviation	N	Mean	Std. Deviation	
General health	52	9.8654	6.92828	62	14.5323	7.77494	-3.353**
Well being	52	5.8846	4.23178	62	7.9839	3.85598	-2.246*
Social dysfunction	52	1.0577	1.44729	62	1.9355	1.78216	-2.769**
Anxiety/Depression	52	46.4808	11.25722	62	54.4194	23.29114	-3.180**
Self-confidence	52	2.9231	2.22152	62	4.6129	3.24596	-2.850*

Table 4.2 t test of Genders on the basis of the 'After' scores

	Perception towards change						t test
	Yes, change is difficult			No, not difficult or no change			
	N	Mean	Std. Deviation	N	Mean	Std. Deviation	
General health	65	14.9077	7.81969	49	9.0816	6.27441	4.278**
Well being	65	53.4615	22.18535	49	47.2653	13.51199	1.727
Social dysfunction	65	8.3385	4.09373	49	5.2857	3.57071	4.161**
Anxiety/Depression	65	4.5846	3.00984	49	2.8571	2.54951	3.236*
Self-confidence	65	1.9846	1.80704	49	0.9388	1.31352	3.425**

Table 4.3 t test of 'Perception towards change' on the basis of the 'After' scores

	Entrapment						t test
	Experiencing Entrapment			Not Experiencing Entrapment			
	N	Mean	Std. Deviation	N	Mean	Std. Deviation	
General health	62	14.4194	7.83759	52	10	6.93386	4.278**
Well being	62	52.3548	22.46607	52	48.9423	14.15518	1.727
Social dysfunction	62	7.9677	4.13291	52	5.9038	3.91708	4.161**
Anxiety/Depression	62	4.5323	3.08735	52	3.0192	2.5398	3.236*
Self-confidence	62	1.9194	1.83141	52	1.0769	1.38403	3.425**

Table 4.4 t test of Feelings of 'Entrapment' on the basis of the 'After' scores

	Irritability						t test
	Irritable			Not irritable			
	N	Mean	Std. Deviation	N	Mean	Std. Deviation	
General health	54	16.2407	7.34573	60	8.95	6.35243	5.682**
Well being	54	55.3333	24.9369	60	46.7167	10.3073	2.455*
Social dysfunction	54	9	3.78677	60	5.25	3.64819	5.382**
Anxiety/Depression	54	4.9815	3.1771	60	2.8167	2.28103	4.209**
Self-confidence	54	2.2593	1.87521	60	0.8833	1.18023	4.737**

Table 4.5 t test of Feelings of 'Irritability' on the basis of the 'After' scores

The first preventive procedures taken by responsible authorities with respect to the pandemic were the closing of schools. This has had consequences for the mental health of school students, due to the experience of loneliness (Bu et al., 2020; Groarke et al., 2020). Wickens, McDonald, Elton-Marshall, Wells, Nigatu, Jankowicz, & Hamilton 2021, found similar results in their study. Loneliness was seen to be higher in higher age groups, and so was difficulty change. Wickens et al., 2021, attributed the findings with respect to age; to the differences in how satisfaction is derived from social relationships. Young adults value the size of their social networks and the number of interactions (Nicolaisen and Thorsen, 2017). Females were more vulnerable to loneliness. They were also more likely to experience difficulty with change, and feeling uncertain. Females rely more extensively than men on social support and emotion-focused coping when faced with a stressor (Ptacek et al., 1994; Rosario et al., 1988). Limited access to friends and family during the crisis may be impeding strategies used predominantly by females to cope with the isolation imposed by the pandemic. A study by Giannotti, Mazzoni, Bentenuto, Venuti, and de Falco (2021) confirmed the detrimental effect of pandemic restrictions on family adjustment, showing an increase of psychological distress in both parents and children.

Postigo-Zegarra, Julián, Schoeps, & Montoya-Castilla, 2021 Found that adolescents felt maladjusted, or felt like they were not dealing well with this change in their life due to the lock-down, academic overload, fear of infection, social isolation or feeling locked where major factors that seem to impact these young individuals. In a study by Postigo-Zegarra, Julián, Schoeps, & Montoya-Castilla, 2021, On Psychological adjustment of Spanish adolescents during lockdown It was found that the individuals who were maladjusted found two difficulties- Interruption in normality and feeling uncertainty. They attributed it to academic



overload, fear of infection, social isolation, or feeling locked. Literature also shows that feelings of entrapment were higher in women than men, and that young adults were more likely to experience feelings of entrapment more than any other age groups (O'Connor et al., 2020). The fear of COVID-19 predicts a student's psychological disposition of increased irritability, poor sleep quality, and intention to quit school (De Los Santos, Labrague, & Falguera, 2021).

The current study found that the children felt that they were in significantly better general health before the pandemic, they experienced significantly less social dysfunction and lack of self-confidence before the pandemic. Significant deterioration in General Health and self confidence, along with an increase in Social Dysfunction and Anxiety/ Depression were seen to increase in students struggling with aspects such as change, feelings of entrapment and irritability. Studies show the detrimental impact of the Covid 19 pandemic on children's life. Viner et al., 2020, revealed that grave psychological distresses such as increased irritability, difficulty with attention, and changing behavior were seen across all age groups. Jiao et al., 2020, talk about how children experienced sleep disturbances, loss of appetite, agitation, lack of attention, and anxiety related to separation during this period. The absence of structure due to the social distancing norms has positively resulted in the disruption of the daily routine of the child, and increased experiences of boredom. (Lee, 2020; Liu et al., 2020; Zhai et al., 2020).

Contrary to the literature, The well-being of the children, in the current study seems to have increased significantly in this lockdown. This might be due to the lack of academic overload and increased time for personal exploration.

The students, in the current study, found themselves to be more irritable. This can be attributed to the high energy, freshness, drive, inquisitiveness and eagerness that makes it hard to isolate at home. The hormonal changes accompanying puberty in relation with adolescent sociodynamics makes the teens remarkably conscious of their social standing, peer groups, and relationships. They may feel distressed, worried, disconnected and wistful, because of social distancing during this pandemic. Younger children, on the other hand, may start showing typical regressive behaviours such as becoming clingy and demanding, and having problems sleeping. (Castañeda, 2020).

With respect to social responsibility, the current data shows that the majority of the population believes that the restrictions were valid and good for the population. A study on "Adolescents' Motivations to Engage in Social Distancing During the COVID-19 Pandemic: Associations With Mental and Social Health" found that the most common motivations for social responsibility were not wanting others to get sick. Greater social distancing was associated with motivations touching state or city lockdowns, parental regulations, and social responsibility. Whereas less social distancing was associated with motivations related to no alternatives. Specific motivations for social distancing, according to Oosterhoff et al., 2020, were found to be differentially associated with adolescents' feelings of burdensomeness, and belongingness, anxiety and depressive symptoms.

## V. CONCLUSION

The findings of the study point our attention towards the magnitude of impact the pandemic has had on young minds. It outlines not only the impact and the contrast with respect to different age groups along with gender, but also highlights the vulnerability of school going children. The need to focus on mental health at this stage is imperative. The children are experiencing a significant deterioration in General health. Social Dysfunction, Anxiety/ Depression & low Self-Confidence were also seen to be aspects impacting these children. The study also highlights the importance of coping styles. The findings of the study could play a vital role in targeted intervention to cater to the specific needs of the students in the post lockdown era, thus preventing major mental health crises.

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