STUDY OF ADAPTABILITY AND IMPACT OF PERSONALITY ON ADAPTABILITY OF ADOLESCENTS DURING COVID-19 PANDEMIC

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Abstract

The present study intends to find the impact of personality on the adaptability of adolescentsduring the COVID-19 pandemic. The objective was to study how the adolescents adapted in terms of academic, social, psychological, and personal health and hygiene factors and also find a significant difference in the adaptability of introverts and extroverts. A sample of 137 adolescents was taken from secondary schools inTri-city of Chandigarh. Data was collected through Google forms using the snowball sampling technique. The data wereanalyzed using one-way ANOVA. The results indicated that around 38% of adolescents adapted on academic factors but around 36% couldn't adapt academically, 48% could adapt socially but around 28% couldn't, 49% could adapt psychologically but around 32% couldn't, and around 55% adapted to personal health and hygiene factors but around 27% couldn't. Moreover, during this period of COVID-19, introverts and extroverts have not shown any significant difference in their adaptability.

Keywords:

Adaptability, personality, academic adaptability, social adaptability, psychological adaptability, and personal health and hygiene adaptability.

Introduction

In December 2019, the first-ever cases of a new contagious disease were found in Wuhan city, capital of Hubei Province, China. What started off as a cluster of pneumonia cases soon became a widespread lethal disease with a death toll of more than 500000 in a matter of months. Eventually, the novel disease was named coronavirus disease 2019 (COVID-19), and the new virus was identified as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

In March 2020, the COVID 19 outbreak was declared a global pandemic by WHO.Countries across the globe went into nationwide lockdowns and to contain the lethal

outbreak, governments imposed self-quarantine on all their citizens. Daily life came to an immediate standstill. Owing to its novel nature it wasn't until 2021 that scientists were able to come up with a vaccine. Hence, lockdowns were still under effect in most countries. The prolonged lockdown forced people to make habitual changes in their life. Schools, colleges, workplaces, and markets were all shut down. All non-essential activities were now conducted virtually. Students studied through online classes and adults were working from home. This led to unavoidable prolonged screen time with no recreational relief.

Therefore, every individual had to not only deal with the stress and anxiety that these unprecedented times invoked but also had to adapt to the complete shift of lifestyle from offline to online.

To understand the nature of Coronavirus, researchers all over the world started doing research in every aspect related to COVID-19. Since COVID-19 affected every sphere of life, so,the researches ranged from the medical field to the social, economic, psychological, scientific, education field, etc. The Psychology of the people was hit badly. Some were able to adapt to the new situation created by the pandemic but some are still fighting to adapt to this situation. Since survival in such a situation is largely dependent on adapting to the new conditions, so investigators tried to study the adaptation of adolescents during this pandemic. As far as various researchers are concerned, they defined adaptability in their own terms.

Adaptability has been conceptualised and defined as, "the capacity to constructively regulate psycho- behaviorial functions in response to new, changing, and/or uncertain circumstances, conditions and situations."Martin et.al.(2013).

Adaptability is defined as the capacity to modify one's cognition, affect, and behavior constructively, reflecting an individual difference in the way that one responds to changing, new, and uncertain conditions (VandenBos, 2007; Martin et al., 2012).

Researches also showed that adaptability to COVID-19 also varied as per the personality traits of the people. Besser et.al.(2020)found that adaptability was predicted by students' personality traits. All five of the big five personality traits significantly predicted adaptability to the COVID-19 pandemic. Extraversion, openness, agreeableness, and conscientiousness were positively associated with adaptability, and neuroticism was negatively associated.

Review of Related Literature

Besser' Flett, & Zeigler-Hill (2020) studied the relationship among adaptability to a pandemic, personality, and learning experiences for 1217 college students from Israel. It

linked the 5-factor trait model of personality with perceived adaptability to the pandemic. It also studied the affective cognitive and behavioural reaction to the new online learning format. It found that, the participants experienced online learning as substantially less positive in all aspects of learning experiences. Also, adaptability during COVID is significantly associated with both personality and learning experiences. Adaptability is associated in a predictable manner (i.e., lower neuroticism and higher levels of conscientiousness, openness, agreeableness, and extraversion) and the students who are higher in adaptability are both less upset and more positive when asked to evaluate this transition in learning conditions.

Gubler, Makowski, Troche et.al.(2020) studied the relation of different personality type characteristics like extraversion, neuroticism, and emotional regulation with loneliness and wellbeing during COVID on 466 participants in Switzerland. They found that neuroticism was strongly related to loneliness and reduced wellbeing. But no significant relationship was found for extraversionand the possible interpretation may be the compromise of mentalhealth during drastic restrictions and loss of sociallife. So the extroverts may feel burdened and lonelier during COVID. It reduced their psychological well-being also.

Branovački, Sadiković, Smederevac, Mitrović, &Pajić (2021) studied the relation between personality traits and reaction to COVID 19 using person-centred approach using a sample size of 471 Serbian citizens. The individual differences lead to different emotional and psychological adaptive practices during COVID-19. Emotional reactions relevant to pandemics like fear, worry, anxiety, boredom, and anger, etc. were included. Apart from this cognitive and behavioral responses according to individual differences were also included. It found that people's reactions to pandemics can be differentiated on 4 main dimensions, that is, level of fear & worry, level of adherence to rules set by the government, capability to structure free time to avoid boredom, and maintain communication with friends & family. On the basis of these dimensions, human behaviour can be classified into three clusters. Adapted, antagonistic and passive. These clusters explain individual differences in pandemic coping strategies which are predominantly shaped by emotional reactions & stable personality traits. The Adapted cluster in the study matches up with the resilient prototype, described by low neuroticism and the average level of the other Big Five dimensions. The Antagonized cluster is similar to undercontrolled prototype, described by low Conscientiousness and Agreeableness, while Passive cluster resemblesovercontrolled prototype, described with high Neuroticism and low Extroversion.

Han, Jang, Cho, &Choi (2021) studied the influence of individual differences on responses of COVID-19 crisis and found that maladaptive personality traits (e.g. Negative, affectiveness, detachment) had a positive correlation with depressive and anxiety symptoms, suicide risk,and COVID-19 symptoms. The five-factor personality traits (e.g. Agreeableness, consciousness had a positive correlation with preventive behaviour.

Present Study

The present study aims at studying how adolescence have adapted during COVID. To study the adaptability of the adolescents, the adaptability scale was constructed by the investigators keeping in view the four major areas that affect the life of adolescents, that is, academic, social, psychological, and personal health and hygiene. Academic adaptability is important because there was a complete shift of education from offline to online mode during the onset of COVID-19 and emerged as a new phenomenon. School and coaching classes and other online activities increased the screen time of adolescents many folds. This led many adolescents to struggle to adapt to this new normal. The adolescents were forced to remain at home all the time. Attending parties, meeting with friends and other social activities were nowhere to be seen.So there was a big challenge to adapt socially. Feeling of loneliness, impaired social interactions, and fear of health-related issues were increasing the anxiety level of adolescents. Different children dealt with these issues differently. Some used this time of restricted social interaction as the time to introspect,whereas, others fail to manage their anxiety and showed a lack of emotional support. COVID has induced a major shift in the mindset when it comes to health and hygiene. Including exercise in the daily routine, personal hygiene like washing hands, and maintaining a good sleep schedule came up on the priority list.It was interesting to see in the present study how these adolescents could catch up with these changes. Adaptability, in general, is considered to be related to personality types. So the researches tried to relate the adaptation during covid with extroversion and introversion.

Objectives

The objectives of the present study are:

- To study the adaptability of adolescents during the COVID-19 pandemic.
- To study the impact of Personality on the mean scores of adaptability of adolescents during the COVID-19 pandemic.

Hypotheses

The hypothesis of the study is:

- There is no significant impact of Personality on the total mean scores of adaptability of adolescents duringthe COVID-19 pandemic.

Delimitation

The study was delimited to adolescent students studying in classes IX-XII of various public and private schools of Tricity of Chandigarh.

Methodology

Sample of the Study

The population of the study was the adolescent students studying in different private and public schools of Tricity of Chandigarh. A sample of 137 secondary level students was drawn out from the population by online mode through Google forms using a snowball sampling technique.

Tools used for the Study

The investigators used the following scales to collect the data.

1.   Personality inventory by Eysenck& Eysenck (1964)
2.   Scale of Adaptability during COVID-19constructed by investigators.

Design of the Study

One way factorial design was used to study the impact of personality on the adaptability of adolescents during COVID-19.

Procedure

The purpose of the research was to study the adaptability of adolescent students during COVID-19 and to see the difference in the adaptability of introvert and extrovert personality types. Investigators constructed and validated the scale of adaptability. The descriptive survey method was used to collect the data. Personality inventory and scale of Adaptability were employed on the sample drawn out from the said population. The raw data was tabulated and scores were calculated. The obtained scores were subjected to analysis by using one-way ANOVA through SPSS. Finally, the results were obtained and discussed.

Statistical Tools used

Descriptive statistics, such as mean, median, standard deviation, percentage and inferential statistics, such as one- way ANOVA was used to analyze the data.

Analysis of Data

Table 1: Percentage of Sample Students showing Adaptability during COVID-19

| Compo-	S.No.	Statements	Strongly	Agree	Undecided	Disagree	Strongly

nents			Agree (5)	(4)	(3)	(2)	Disagree(1)
Acad-emic	1.	I could easily switch to online classes conducted by my school.	17.5	31.4	28.5	14.6	8
	2.	I learned new skills in the past 8-10 months.	24.8	27	25.5	16.7	5.8
	3.	I could interact with my friends during online classes just as I did during offline school.	9.5	8	19.7	25.5	37.2
	4.	I would prefer to take tests online rather than offline.	10.2	11	17.5	12.4	49
	5.	I found online projects and assignments more interesting	23.4	16.1	30.7	11	19
	6.	I found that teachers were more student-friendly during online classes as compared to offline school.	14.6	13.9	35.0	19.7	16.8
	7.	I managed to sit in front of the laptop or mobile screen all thetime .	24.8	33.6	25.6	10.2	5.8
Average			17.8	20.1	26.1	15.7	20.2
Social	8.	I was able to enjoy festivities during COVID.	13.86	16.06	24.82	24.82	20.44
	9.	I was happy to spend time with my family during COVID.	46.7	27.7	19.7	4.4	1.5
	10.	I enjoyed virtual parties /birthday celebrations with my friends during the past 8-10 months.	15.3	12.4	23.4	15.3	33.6
	11.	I reconnected with my old friends using social media.	21.2	23.4	25.6	16.8	13.1
	12.	Every trip i took outside my house became a special experience.	33.6	31.4	26.3	4.4	4.4
Average			26.1	22.2	24	13.1	14.60
Psycho-logical	13.	Coping with stress during covid made me strong.	21.9	27	30.7	12.4	8.0
	14.	I believed everything would come back to normal in a few months.	39.4	21.2	25.6	8.0	5.8
	15.	The little to no social interaction during lockdown made me happy as it gave me time to introspect.	28.5	16.1	30.7	16.1	8.8
	16.	I did not experience anxiety about many things during covid.	24.8	27	19	13.1	16.1
	17.	I was hopeful that covidwill go away in the future .	14.6	19.7	23.4	21.9	20.4
	18.	I never felt a lack of emotional support during the lockdown period.	27.7	22.6	20.4	16.8	12.4
Average			26.2	22.3	25	14.7	17
	19.	I was able to exercise regularly during covid.	15.3	17.5	30.7	22.6	13.9
	20.	I could maintain my sleep schedule during the	10.2	9.5	13.9	29.2	37.2

Personal Health & Hygiene		lockdown period.					
	21	Washing hands frequently has become a habit for me.	38	37.2	17.5	5.1	2.2
	22.	There was enough time for me to pursue my hobbies during these quarantine months.	32.1	32.9	21.9	8.8	4.4
	23.	I think sanitation will be important in public places even post-covid.	73.7	24.1	1.4	0	0
	24.	My physical health has improved during the lockdown.	17.5	21.9	27	16.8	16.8
Average			31.5	23.9	18.7	13.8	13.1

The above table highlights how adolescents showed adaptability during COVID-19 in four different areas- Academic, Social, Psychological, and Personal.

Academic adaptability

As the teaching-learning during COVID-19 shifted completely to online mode, 17.5% and 31.4% of adolescents could easily switch to online classes, 10.2% and 11% preferred on-line tests over offline tests. 23.36% and 16.1% found online projects and assignments more interesting, 14.5% and 13.9% of adolescents found teachers more student-friendly, 24.8% and33.6% managed to sit in front of laptop or mobile screen all the time. 24.8% and 27% could learn new skills during the past 8-10 months of COVID-19. But only 9.5% and 8% of adolescents could interact with their friends as they used to do during off-line school, 37.2% and 25.5% of adolescents could not interact with their friends as before, whereas 19.7% were undecided about it. 48.9% and 12.4% missed on-line tests whereas 17.5% were undecided about their preference. Only a small percentage, that is, 8% and 14.6% could not shift to online classes easily. 5.8% and 16.7% disagree that they learn new skills during this period. Even 16.8% and 19.7% have not found teachers' student friendly during online classes. 10.2% and 5.8% found it difficult to sit in front of the laptop or mobile screen during online classes.

**Percentage Adolescents showing Academic Adaptability**
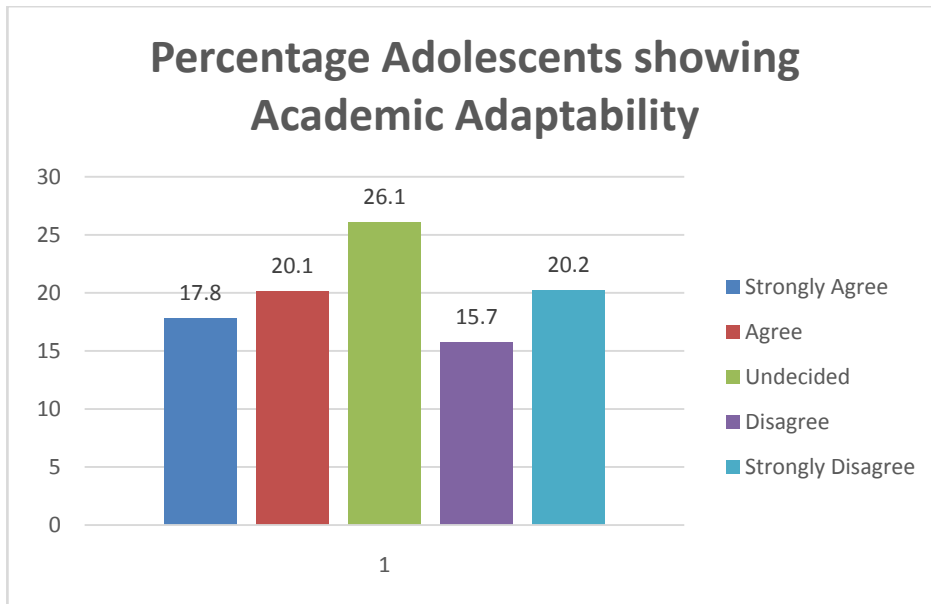
On average, it has been found that 17.8% and 20.1% adapted academically to the online mode of the school system whereas 20.2% and 15.7% have not shown academic adaptation during this period and 26% of adolescents were not clear about their academic adaptation.

Social adaptability

Social adaptability was measured using the five statements.

13.9% and 16.1% of adolescents enjoyed festivities during COVID but 20.4% and 24.8% showed their inability to enjoy festivities during this period and 24.8% were neutral. The majority of the adolescents, that is, 46.7% and 27.7% were happy to spend time with their family during COVID and only 1.5% and 4.4% were unhappy. 19.7% were undecided.15.3% and 12.4% enjoyed virtual parties with their friends,21.2% and 23.4% reconnected with their old friends using social media, whereas 33.6% and 15.3% did not enjoy virtual parties and also 13.1% and 16.8% failed to reconnect with their old friends on social media. The majority of the adolescents, 33.6% and 31.4% found every trip outside the house during COVID, a special experience, but 26.3% were undecided about such feeling, whereas 4.4% and 4.4% disagreed with this notion.

Percentage Adolescents showing Social Adaptability
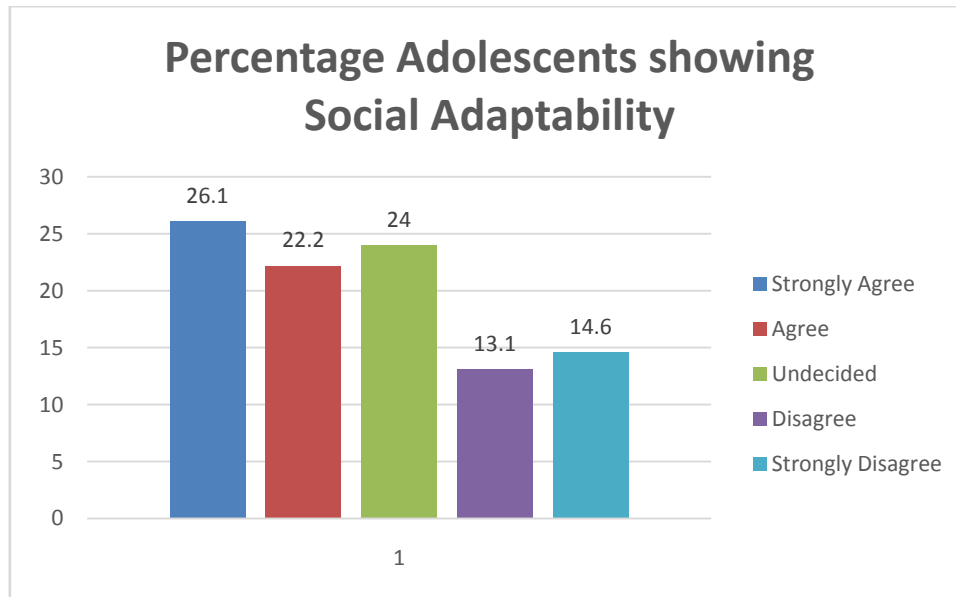
On average, 26.1% and 22.2% adapted socially during COVID but 14.6% and 13.1% could not, whereas 23.9% were undecided.

Psychological adaptability

Due to COVID-19, people faced the number of psychological problems. This part of the scale tries to look, how adolescents adapted to the situation during COVID.21.9% and 27% of adolescents agreed that coping with stress during COVID made them stronger, whereas 8%+12.4% were not of the same view. 39.4%+21.2% believed that everything would come back to normal in a few months. 28.5%+16.1% agreed that the little to no social interaction during lockdown made them happy as it gave them time to introspect whereas 8.8%+16.1% did not agree with this statement. 24.8% and 27% agreed that they didn't experience anxiety during COVID while 16.1%and 13.1% of adolescents felt that they had experienced anxiety during this period. 14.6% +19.7% were optimistic that COVID will go away in future while 20.4% and 21.9% were pessimistic. 27.7% and 22.6% agreed that they got emotional support during the lockdown period while 12.4%and 16.8% viewed that they felt a lack of emotional support during this period.

Percentage Adolescents showing Psychological Adaptability
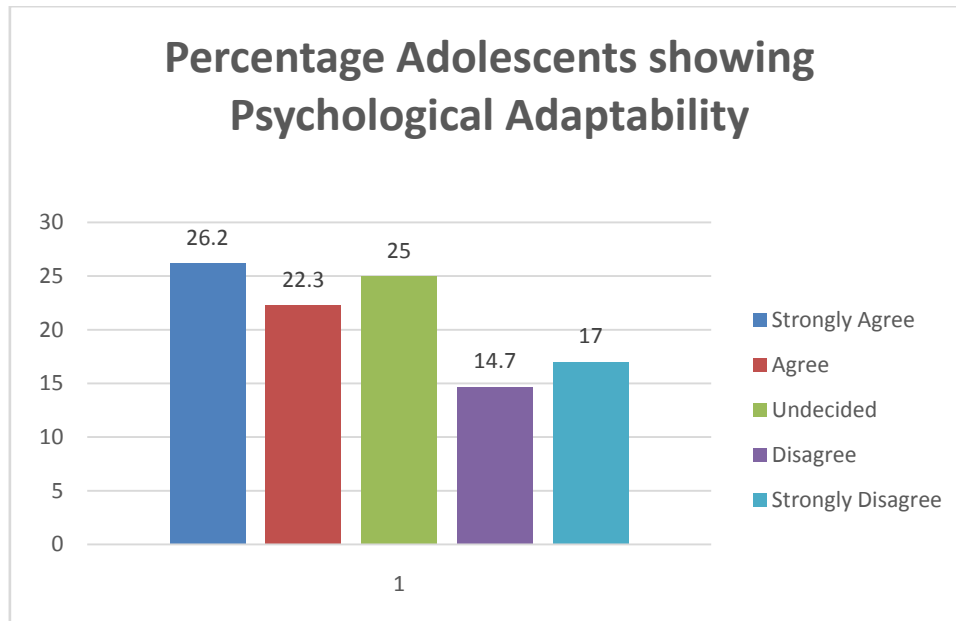
Finally, 26.2% and 22.3% showed psychological adaptability while 14.7% and 17.0% had not adapted psychologically during the COVID-19 period.

Personal health and hygiene related adaptability

15.3% and 17.5% were able to exercise regularly during COVID while 13.9% and 22.6% were not regular on their exercise or they never did the exercise. 37.2% and 29.2% felt that they could not maintain their sleep schedule during the lockdown period. The majority of the adolescents, that is, 38% and 37.2% agreed that washing hands frequently became a habit for them during the lockdown period of COVID. 32.1% and 32.9% agreed that there was enough time for them to pursue their hobbies during the COVID. 73.7% and 24.1% agreed that sanitation will be important in public places even Post-COVID. Only 17.5% and 21.9% agreed that their physical health improved during the lockdown whereas 16.8% and 16.8% were not of this view.

Percentage Adolescents showing Personal Health & Hygiene Adaptability
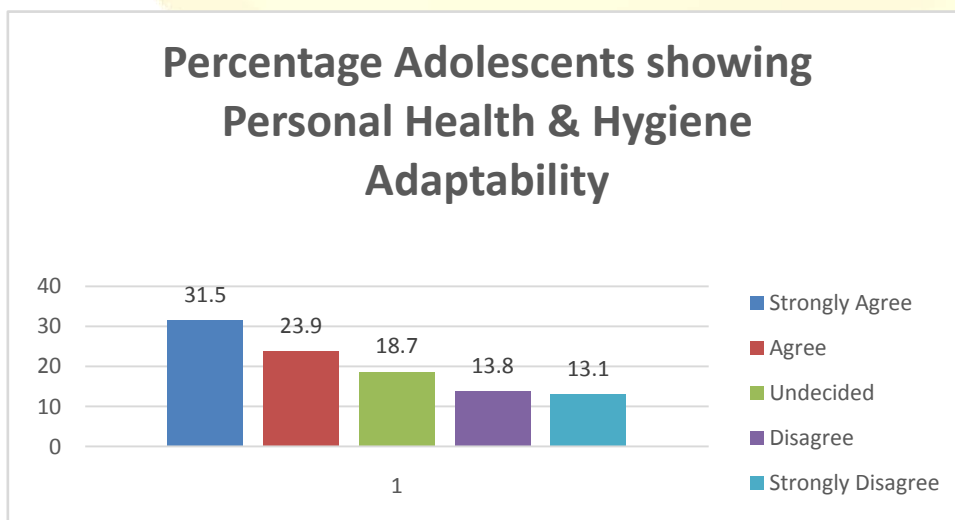
Taking into view the personal habits and hygiene, on average, 31.5% and 23.9% of adolescents adapted during COVID, and only 13.1 and 13.8% had not shown adaptability to health and hygiene.

One way ANOVA

Table 2:One way ANOVA

Personality	N	M	SD	SEm
Introvert	40	77.53	10.617	1.679
Ambivert	68	77.87	12.838	1.557
Extrovert	29	77.21	9.664	1.794
TOTAL	137	77.63	11.524	0.985

	Sum of Squares	Df	Mean sq.	F	Level of Significance
Between groups	9.472	2	4.736	.035	NS-0.965
Within groups	18052.542	134	134.720		
Total	18062.015	136			

The mean value of scores of adaptability of introverts, ambiverts, and extroverts as shown in Table 1 are 77.53, 77.87, and 77.21 respectively. The F- value found through one-way ANOVA, that is, 0.035, is not significant at 0.05 levels of significance. Hence, the hypothesis, 'there is no significant impact of Personality on the total mean scores of adaptability of adolescents during COVID-19 pandemic', has been accepted.

Discussion

As found in the analysis, only a little more than 1/3rd (38% could adapt academically but 36% couldn't. If we look deeper into it, the major factor contributing to it is that they could switch to online classes and managed to sit in front of the screen but, around 63% (37.2+25.5) of adolescents missed face to face interactions with their friends and peers. The majority of them, that is, 61.3% were maladaptive to the online evaluation and tests. These results also highlighted the importance of face-to-face communication for the teaching-learning process. Similarly, for social adaptation, though the majority were happy to spend time with their family, around 50% were missing celebration and parties with their friends. As everything was closed, simple outings for any reason became a special experience for them. The pace of life slowed down due to COVID and everyone was sitting at home, so social media proved to be a boon, and they could easily connect with their old friends.

Further, around 50% could adapt psychologically, and also around 30% couldn't. Though the majority were hopeful that everything would come back to normal in few months but a large percentage of adolescents, that is, 42% felt that COVID will not go away in the future. Around 30% faced anxiety issues and around 29% felt lack of emotional support.

Around 55% adolescents were conscious about their health during COVID-19 and followed SOPs issued by the government and showed adaptability towards health and hygiene during this period. 25% sample lacked the adaptability to adjust to health and hygiene protocols.

The results also showed that the personality type, that is, introvert and extrovert of adolescents has not affected their adaptability during COVID-19. The result was supported by the study of Gubler, Makowski, Troche et.al.(2020) where no significant relationship was found for extroversion and adaptability and the possible interpretation may be a compromise of mentalhealth during drastic restrictions and loss of sociallife. So the extroverts may feel burdened and lonelier during COVID. It reduced their psychological well-being.

The present results deviate from the results found byBesser' Flett, & Zeigler-Hill (2020) that adaptability during COVID is significantly associated with both personality and learning experiences. Han, Jang, Cho, &Choi (2021) also found a direct relationship of personality with adaptability.

Since all the people were locked down in their homes due to pandemics, so the effect of extroversion almost died out. The difference in the personality of extroverts and introverts had not been seen in this study.

Results and Conclusion

The present research studied the adaptability of adolescents during COVID-19 in terms of Academic factors, Social factors, psychological factors, and personal health and hygiene. The study also highlighted the relationship of personality with adaptability. The results indicated that during the pandemic around 38% of adolescents adapted on academic factors but around 36% couldn't adapt academically, 48% could adapt socially but around 28% couldn't, 49% could adapt psychologically but around 32% couldn't, and around 55% adapted to personal health and hygiene factors but around 27% couldn't. Moreover, during this period of COVID-19, introverts and extroverts have not shown any significant difference in their adaptability. The closing down of every activity during the period of a pandemic may have affected the social and psychological health of the adolescents.

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