ONLINE LEARNING DURING LOCKDOWN: EFFECT ON MENTAL HEALTH OF HIGHER EDUCATION STUDENTS

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Abstract

COVID-19 pandemic has influenced every aspect of human life including Education and Mental Health of the learners. Thus, the present study was aimed at assessing the status of online learning and mental health of online learners and to investigate the relationship between the two variables. The descriptive survey method was adopted for the present study and the collected data analysed quantitatively. For collection of the data two self-made tools were used namely Status of Online Learning Scale for Learners and Mental Health Assessment Scale for Learners. The tools were administered on 140 students. The tabulated data was analysed through the Mean, Standard Deviation, correlation and t test. The results revealed that learners are moderately active in online learning. Mental health of the online learners is moderately stable. Online learning is negatively affecting the mental health of the online learners and there was no significant difference found between the mental health of online learners in terms of the gender and the locality.

Keywords: mental health, online learning, lockdown, higher education

Introduction & Background

This COVID-19 pandemic has resulted in educational institutions shut all across the world. According to UNESCO,

> *"Since the outbreak of COVID-19 began, some 1.37 billion students in 138 countries worldwide have been affected by school and university closures. Nearly 60.2 million school teachers and university lecturers are no longer in the classroom.[1]"*

And this is the reason behind the dramatic change in the education system. Suddenly the digital platform of education got popular in which the whole teaching activity is taken remotely.

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[1] https://en.unesco.org/news/137-billion-students-now-home-covid-19-school-closures-expand-ministers-scale-multimedia

Educating the children at their pace was always a challenging task for teachers. Although online learning is not a new concept, full implementation of online learning seems impossible because of so many barriers such as unavailable of resources, digital divide among learners and poor network coverage etc. but during this outbreak of COVID-19 when the whole country was under lockdown, the whole education system forcefully shifted into the virtual mode. These days attending online classes have become so normal for students during this lockdown, and now it has become a part of students' new lives which was never expected before. Because of this online platform, the flow of education did not break and many of the institutions became able to take timely steps towards educating, assessing and promoting the students to the next higher class. Another merit of this platform is that learners don't have to do any physical activity. They will be more engaged with mental activity and able to stay more academic-oriented. But these sudden changes in the educational system also come with a lot of problems. In a report issued by UNESCO on April 21 stated that,

> *"Half of the total number of learners, some 826 million (82.6 crores) students kept out of the classroom by the COVID-19 pandemic, do not have access to a household computer and 43 percent (706 million or 70.6 crores) have no internet at home, at a time when digitally-based distance learning is used to ensure educational continuity in the vast majority of countries.[2]"*

Many of the teachers and students have a lacking of digital knowledge. It was very challenging for teachers in adapting this technique of online classes and the use of digital instruments as most of them have never used this platform before. Internet accessibility is also the biggest challenge for students and teachers as well in countries like India. It is also discussed in the NITI Aayog report of Strategy for New India @75 that,

> *"The quality and reliability of the internet is a major bottleneck. It also pointed out that 55,000 villages in the country are without mobile network coverage.[3]"*

Especially students from rural backgrounds are going under these connectivity issues and are not able to participate in the online class, evaluation, assignment. *The University of Hyderabad conducted an in-house survey with 2500 students, 90% of them have mobile phones but only 63% of students were able to access online classes. In this study when the children are already*

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[2] https://en.unesco.org/news/startling-digital-divides-distance-learning-emerge
[3] https://government.economictimes.indiatimes.com/news/education/how-lockdown-reveals-actual-state-of-e-education-in-india/75803841

struggling with mental health issues during this lockdown period, are they able to deal with these problems regarding online classes, and how these online classes are also affecting their mental health are focused.[4]

Online Learning

Online learning refers to technology-based education by using World Wide Web, email, text, multimedia, voice, and video conferencing. It is always available for the learner, so the learner learns at his own pace and convenience. It can be availed at any time at the learner's own convenience by purchasing the subscriptions of different platforms or logging in to access the courses (Colchester et al., 2017). It hugely promotes self-learning methods and teachers act like facilitators. E-learning is helpful in optimising the learning outcomes at the same time it makes the learning process more interesting as learners are able to learn from different sources. Fully online learning is a form of distance education in which all instruction and assessment are carried out using online, Internet-based delivery (Picciano and Seaman 2009; & U.S. Department of Education, 2007).

Mental Health

Adler's theory of individual psychology: mental health means having goals in life, having a solid philosophy for living, family and social relationships, optimal and sustainable benefit for fellows, courage, decisiveness, having control over emotions, goal the final realization of accomplishment and self-acceptance problems and try to solve possible errors (Kord, T., & Mohammady, F., 2009). Basically, mental health refers to satisfaction, sustainable mind state. A good mental state helps in adapting and adjusting with the current situation.

Reviews of Related Literature

Status of Online Learning

Microsoft has recorded the number of users increased when on 10th march it was 750 and by 24th march it became 13,698. (OECD, 2020). And also zoom has extended its time limits in certain countries on a request (Rani, M. 2020). There has been a huge change in methods of online methods of teaching and learning in global level. (Basilaia, et al., 2020). The Government of Georgian has started an educational programme named "Teleskola" for better understanding of lessons (Govt of Georgia, 2020). Giorgi Basilaia and David kvavadze (2020) in his case study of private schools of Georgia explains about successful implementation of online learning and these experiences can be used in future. G-suite and Edu-page are the

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[4] http://herald.uohyd.ac.in/proposal-for-online-classes-elicits-mixed-responses-from-uoh-students-survey/

platforms used in the educational process (Google, 2020; & Edupage, 2020). Edu-page cloud-based portal unity and mobile app have been used by 150000 schools in 173 countries for management of education. It is user friendly and freely accessible (Edupage, 2020). E-learning platform has given scope of full much flexibility you can access and use according to your convenience. It is available according to the needs of the learners (Colchester et al., 2017). E-learning promotes self-learning by providing a broad area of scope of accessing materials which covers learners' doubts and topics as well (Bajaj and Sharma, 2018). The government of India MHRD and UGC has been giving instructions to universities for online teaching-learning mode of instruction. Same types of actions are taken by the Chinese government also by the policy "suspending classes without stopping learning" (Zhang, Wang, Yang, & Wang, 2020). Dr. Wahab Ali in his exploratory study is suggesting the use of technology by the staff members and online teaching is really necessary in lockdown. Surakhasubedi et al., (2020) has discussed the challenges faced by teachers and learners due to electricity problem, internet problem, data pack, and unavailability of resources.

Mental Health during Lockdown

K . Schafera, et al., (2020) found in the study "impact of COVID on public mental health and buffering effect of a sense of coherence" about no change in psychopathological symptoms. Some people have experienced clinically significant increases in psychopathological symptoms and some are facing COVID related traumatic distress. Syed Sajid, & Husain Kazmi (2020) discusses that depression is found to be more prevalent in the age group of 15-35 years. Anxiety and stress level is also found high among 21-25 years.

Mental Health and Learning

In the study of the "students' mental health status" YaghoobNami et al.(2013) found 37.37% of the students are suspected of having mental disorders by studying from the perspective of gender. Kshripa Moghel et al. (2020) during this pandemic break there is an increase of awareness about mental health among the student population and family became the source of support. In the study of "mental health problems in university students" Sadia Saleem and Zahid Mahmood, (2013) explains students fall in a very severe category of being dysfunctional, loss of confidence, lack of self-regulation, anxiety process.

Rationale of the Study

Because of the outbreak of COVID-19 schools, colleges, and universities have to suspend their institutions. And during these tough situations, teachers have been trying to teach several

platforms for the continuation of education as; Education is one of the key factors in building a good nation (Baiyere et al., 2016). Basically, the teachers are using the online platforms for conducting teaching-learning practices, sharing views, giving feedback, assigning homework, and contacting stakeholders. This virtual mode of education has brought a lot of changes in the whole education process by changing the teaching-learning process, pedagogic style. Many online applications and software are being used by the teachers, Lectures have been also taken through We Chat, by sharing audio-visual videos through e-mails, by different online teaching apps like Voov, Zoom, Superstar, g-suite cloud meeting and so on (Felix, (2020). But after all the benefits online learning has created so many challenges and so many barriers for the learners. Brazendale, (2017) has mentioned some of these challenges which are created because of online learning like "lack of online teaching skills in educators, online preparation of lesson plans as it is very time-consuming, lack of appropriate support from the technical teams, and traffic overload in online educational platforms.

Not only the teachers but the students are also facing challenges due to their deficiency of proper learning attitude, lack of suitable materials for learning, more involvement in classroom learning, incapability of self- discipline, and the inadequate learning environment at some of their homes during self-isolation". Again, some other studies have also discussed other challenges about online learning such as "students are facing low internet connectivity issues majorly in few places of the world like India, Iraq, Iran, Syria, Africa etc. Due to lack of motivation and shaky mental health issues, E-learning is not able to be succeeded". (Jimoyiannis & Gravani, 2011; & Khalid et al., 2016). If these challenges of online learning will be analysed, students are the most sufferers. So, in this study the focus is to find out the relationship between the online learning and mental health of the learners. As during this lockdown period of covid-19 whole world was discussing the significance of mental health as quarantine has affected very much to the people's activities, routine, and lifestyles as a result chance of depression, loneliness, drug use, suicidal behaviour has increased.

According to the Indian Psychiatry Society "there was a 20% rise in the number of cases of mental illness at the end of March 2020".[5] UNESCO suggested that students are in need of mental health support because the cope up is very necessary especially for the students. As the

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[5] https://www.indianjpsychiatry.org/article.asp?issn=0019-5545;year=2020;volume=62;issue=4;spage=354;epage=362;aulast=Grover;aid=IndianJPsychiatry_2020_62_4_354_286222

COVID-19 pandemic has hugely affected the mental health of every human being, the researcher decided to study whether the mental health of the students is affected or not because of these drastic changes in the educational process. Researcher tries to focus on studying acceptance levels and the reaction of the students towards this virtual mode of education.

Objectives of the Study

1. To investigate the status of the online learning of students during the lockdown.

2. To explore the mental health of online learners during the lockdown.

3. To find out the effects of online learning on mental health.

Hypotheses of the Study

1. Learning through online mode is highly followed by learners during the lockdown.

2. Learners learning through online mode are mentally healthy.

3. Learning through online mode affects mental health positively.

4. There is no significant difference between the mental healths of online learners with reference to gender.

5. There is no significant difference between the mental healths of online learners with reference to the locality.

Research Approach and Design

Descriptive survey research design was used in the present study for knowing the status of online learning and the mental health of the learners during lockdown and to find out the relationship between the both.

Variables of the Study

| **Criterion Variables** | 1. Online Learning | 2. Mental Health |
| **Background Variables** | 1. Gender (Male and Female) | 2. (Rural and Urban) |

Population and Sample

Target population comprised learners studying in higher educational institutions and part of the online classes during this pandemic lockdown period. 140 samples are selected by using stratified random sampling. Rural and urban strata are the first two strata under higher education students, then again male and female strata are divided under existing strategies i.e. rural and urban.

Process of the Tool Construction

Researcher has used two tools for this study

1. Status of Online Learning Scale for Learners

The tool was a five points rating for each item, i.e. Strongly Agree(5), Agree(4), Neutral(3), Disagree(2), Strongly Disagree(1) and have 25 items in it.

The dimensions of the tool were, Content, Assessment procedure, Feedback, Classroom Discussion, E-Reading, Time management, Availability of network, Motivation and effectiveness, Personal guidance, Availability of resources, & Satisfaction of the learner.

2. Mental Health Assessment Scale for Learners

Similarly, Mental Health Assessment Scale also has five points but researchers have used different points for different categories. Points are mentioned respectively category wise1) Excellent, very good, good, poor, worst, 2) Not sure, never, rarely, often, very often, 3) Not at all, little, occasionally, often, very much, 4) All of the time, most of the time, half of the time, some of the time, at no time, 5) Never, rarely, sometime, often, very often, 6) Never, rarely, sometime, often, always, 7) very satisfied, satisfied, I am ok , dissatisfied, very satisfied and have 35 items in it.

The dimensions of the tool were; General Health, Psychosomatic Health Complaints, Perceived Burden, WHO Wellbeing Indexes, Perceived Stress, Depressive Symptoms, & Satisfaction.

Validation of the Tools by Experts

Both the tools were validated by the experts in terms of the following dimensions and after that the researcher conducted a pilot study to validate the tools

1. Sentences should be shorter and more specific
2. Repetition of items should be avoided
3. Grammatical error must be avoided
4. Name and mail id should not be mandatorily filled
5. Items should be presented to the respondent category wise.

Pilot Study of the Tools

Researchers converted the tools into Google form for better collection of data through online mode. Then Google form was sent to 50 online learners through emails and WhatsApp for pilot study. Then researchers applied a split half method for knowing the internal consistency or reliability of both the tools. Reliability of the first tool on status of online learning was 0.7289 and reliability of the second tool which is on mental health was 0.7122. After establishing reliability and validity of the tools, tools were arranged in Google form section wise i.e. 1) General information, 2) scale on status of online learning, 3) mental health scale.

Analysis and Interpretation

1. **Status of Learners Learning through Online Mode**

Table 1: Mean Score of Learners Learning through online Mode

#	Male	Female	Total
Rural	76.97	76.77	(Rural) 76.87
Urban	74.54	78.00	(Urban) 76.27
Total	(Male) 75.76	(Female) 77.38	#

The maximum and minimum score possible in the test was 125 and 25 respectively.

It was inferred from the above table that the mean of Rural Male and Rural female are 76.97 and 76.77 respectively and similarly the mean of Urban Male and Urban female are 74.54 and 78.00 respectively. The total mean of Male and Female found that 75.76 and 77.38, similarly the total mean of Rural and Urban found that 76.87 and 76.27 respectively.

2. **Mental Health of Learners Learning through Online Mode**

Table 2: Mental Health of Learners Learning through Online Mode

#	Male	Female	Total
Rural	112.02	119.8	(Rural) 115.91
Urban	105.6	112.83	(Urban) 109.22
Total	(Male) 108.81	(Female) 116.32	

The maximum & minimum score possible in the test was 175 & 35 respectively.

It was inferred from the above table that the mean of Rural Male, Rural female are 112.02 and 119.8 respectively and similarly the mean of Urban Male and Urban female are 105.6 and 112.83 respectively. The total mean of Male and Female found that 108.81 and 116.32, similarly the total mean of Rural and Urban found that 115.91 and 109.22 respectively.

3. **Learners learning through Online Mode affects the Mental Health**

By analysing the product moment correlation between online learning and mental health of the students the result found **-0.054.** It was revealed from the result that online learning hampers the mental health of higher education students, but the result also revealed that the degree is very low.

4. **Difference between Means of Mental Health of Learners with Respect to Gender**

Table 3: Difference between Means of Mental Health of Learners with Respect to Gender[6]

Gender	N	Mean	SD	T ratio	Df	P value	Remark
Male	70	108.81	13.9737	3.0	138	2.65 & 1.97	S
Female	70	116.32	15.5900				

It is inferred from the above table that the calculated t value was higher than that of the table value at both the 0.95 and 0.99 confidence levels. Hence the null hypothesis, there is no significant difference between Mental Health of male and female online learners was rejected and the alternative hypothesis there is significant difference found between Male and Female Higher Education Online Learners in their Mental Health was accepted.

5. **Difference between Means of Mental Health of Learners with Respect to Locality**

Table 4: Difference between Means of Mental Health of Learners with Respect to Locality[7]

Locality	N	Mean	SD	T ratio	Df	P value	Remark
Rural	70	115.91	15.6597	1.2468	138	2.60 & 1.97	NS
Urban	70	112.83	13.5935				
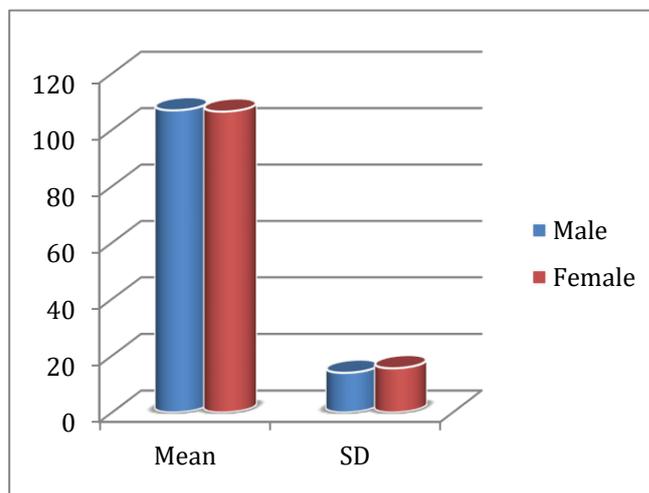
Figure 1

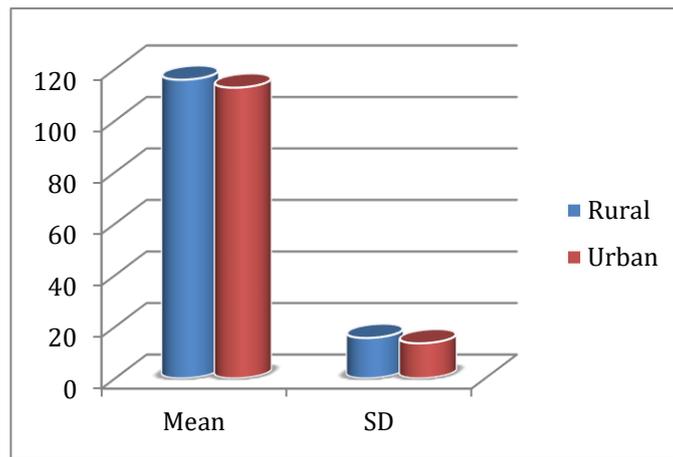**Difference between Means of Mental Health of Learners with Respect to Gender**

Figure 2

Difference between Means of Mental Health of Learners with Respect to Locality

From the above table it was inferred that the t value was less than that of the table value at both the 0.95 and 0.99 confident levels. Hence the null hypothesis there is no significant difference between Mental Health of rural and urban online learners was accepted.

Major Findings of the Study

1. The entire rural male, rural female, urban male and urban female higher education learners were (mean= 76.97, 76.77, 74.54, and 78.00 respectively) moderately active in learning through online mode and the urban females are more active in online learning than urban males similarly Rural males were more active than rural females.

2. Female higher education learners (77.38) were more active in online learning than males (75.76) and rural online learners (76.87) were more active in online learning than Urban online learners (76.27).Higher education learners are moderately active in online learning as they scored between 61-90.

3. The mental health of rural females (119.8) was better than rural males (112.02) and mental health of urban females (112.83) was also better than that of urban males (105.6).

4. Female online learners (116.32) were in a better mental health condition in comparison to males (108.81) and mental health of rural learners (115.91) were better than to urban learners (109.22) in higher education.

5. Higher education learners have a moderate mental health as they scored in between 91-130 which refers to moderate mental health.

6. The correlation between online learning and mental health found that -0.054 means that online learning hampers the mental health of higher education learners but the degree of influence of online learning on mental health was found to be very low.

7. There was a significant difference found between Male and Female Higher Education Online Learners in their Mental Health.

8. There was no significant difference found between Mental Health of rural and urban higher education online learners.

Conclusion

The results of the study revealed that online learning has affected the mental health of the learners of higher education during this lockdown period of covid-19. Students' mental health situation is not stable, maybe because they are away from their peer group or maybe, they are facing so many problems regarding theses online learning but not able to share with their peer group or any of their teachers. Some students are not able to cope up with this situation. People staying in village areas have network issues and not an appropriate environment for study purposes. It indirectly affects the mental state of learners. Students are having very little study material as they are not able to access everything online. Male learners are facing more mental health problems in comparison to female learners. Students may not have enough ideas about usability of an online platform so that has an impact on their mind.

Educational Implications

1. **Implications for Learners**

Students should understand the situation of the COVID so for the continuation of the learning process they have to cope up with the online learning conditions. They should not be affected mentally because of learning burdens. They should explore online learning resources. They must try to cooperate with the teacher and try to explain to them about their situations. And they should be in touch with their peer groups through text or calling.

2. **Implication for the Teachers**

Teachers should adopt and explore various learning methods and pedagogy by which learners should not feel the absence of face-to-face classes. They must have understood the situations of the learners and try to guide them in coping with these situations. Homework, assignment and test burden on students should be considered by the teachers.

Suggestion for Further Research

1. The present study is conducted on higher education only, other educational areas like primary and secondary can be considered.

2. Other variables can be considered like hostellers, and non-hostellers, and low socio-economic status and high economic status learners.

3. Other methodologies can be followed by other quantitative analysis.

4. A large sample can be taken for in-depth study.

5. Perception of teachers can be included in the study.

6. Present study has taken into consideration the views of urban and rural females, from the age group of above 16. More demographic attributes can be studied i.e. married, unmarried, employed, house makers.

7. Impact of lockdown on school education of girls can be considered.

8. In this study only learners are included; teachers can be taken as samples.

9. Purely qualitative methods can be followed for in-depth study.

10. Interviews can be conducted by using other tools like observation, interviews.

11. A large sample can be taken for collecting rich data.

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