

# Psychological Impact Of E-Learning Among Students: A Survey

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## **ABSTRACT:**

**Aim:** This study is conducted to know the psychological impact of e – learning among the students.

**Background:** From the time of very first beginning of civilization to modern days before corona pandemic situation, most of the students of India are very much used to with the offline mode of learning. But now the situation is changed totally. They are getting themselves adapted to the online mode of learning as per need of time. In this changed scenario they are totally disconnected from their usual life with frames schools teachers and society. This situation wreaks havoc to their psychology.

**Methodology:** This study is conducted with primary data in form of online survey. It was conducted with a pre formed questionnaire. 428 responses were collected for the present study. With advanced Excel software statistical analysis done.

**Outcomes:** Results show that students have shown negative impression on online learning and still they are not ready totally psychologically. Still positive answers show neck to neck result, which signifies increasing interest towards e learning. More practices and awareness required before further implementation.

**Keywords:** e learning, psychological condition, readiness among students, impact on psychology

## **1. INTRODUCTION:**

Use electronic technology in the field of education for the purpose of learning is called e-learning. It has many synonyms like electronic learning, online learning, internet learning etc. It is proven very efficient technique in case of distance education also. Any learning materials supplied or delivered with the aid of internet is called e-learning. E- Learning is very much popular in foreign countries but due poor infrastructure, and unavailability of e recourses in India, e-learning was not so familiar term till 2019. But the scenery was changed after 2020 February as CoVID 19 situation became worse, WHO declared it as pandemic situation. By the end of March Govt. declared total Lockdown. Due to maintain continuity in study in lock down and age of social distancing most of the Govt. and Non Govt. educational institutes

started online classes all of a sudden. Students who are the future of nation and who were not very used to with e-classes many of them may face difficulties as well as some of them may feel fun due to new situation. But due to continuous lock down and social isolation, everybody is passing through a psychological surge. Brain of youth is very much fluctuating. In present study we are going to measure if the students are ready or not psychologically to accept e-classes.

### **Types of e-learning**

Many scientists simply divided e-learning into major parts: Computer based and Internet based e-learning (Frasconi, Gori and Sperduti, 1997; Dietterich, 1998). But more clearly it was classified by Negash and Wilcox, 2008. They divided e-learning into 10 different categories:

- 1. Computer Managed Learning:** It is the process where the classes are managed and regulated by computers. This technique contain huge preloaded computer data base for the smooth implementation of the same. Student can access that data any time.
- 2. Computer Assisted Learning:** this technique is also called Computer assisted Instructions. It includes involvement of interactive software in field of education. It is the use of traditional teaching with the help of computer.
- 3. Synchronous Online Learning:** this technique involves engagement of a group of students at a common time from any place of the world into virtual classroom through a computer. Though this technique was not well accepted before because of its internet dependability, nowadays this technique is getting popular due to rapidly increasing internet availability.
- 4. Asynchronous Online Learning:** it is almost same as synchronous method, but here time is independent. This is more student centered technique, as they can control the timings of class. Before discovery of PLATO, this method was considered as most popular method among all e- learning techniques.
- 5. Fixed e- learning:** in this technique, the pre uploaded study material that cannot be changed as per need of the students. So, this method is called Fixed method.
- 6. Adaptive e-learning:** in this method the study materials are very much flexible for each of the students and can be changed easily as per the nature of learner. This is quite new and innovative techniques by which need based education can be established.
- 7. Linear e-learning:** In this method, students cannot get the chance for interactions with their teachers. It is like a television program, which can be seen only and cannot be controlled. In education sector, it's use is limited.
- 8. Interactive online learning:** this technique is almost opposite to linear method. This is a two way communication method where free interaction between students and teachers are always a positive point.
- 9. Individual Online Learning:** Emphasis on individual is given by this technique. It is personalized method of e-learning. Team work, collaborative work cannot be possible by this technique.

**10. Collaborative Online Learning:** a group of students can learn and achieve their learning goals together in form of a group by helping each other. It helps to expand the ideas concepts and visions of child. This is an innovative learning method. This technique is widely used in classrooms.

**Psychological indicators:**

Any fact or action affect human mind positively or negatively that can promote well being or psychological disturbance (Nur and Hadi, 2013). Chapnick(2000) mentioned various factors to measure readiness for implementation of e-learning. These are - "1. Psychological, 2. Sociological, 3. Environmental, 4. Human resources, 5. Financial readiness, 6. Technological skill, 7. Equipment and 8. Content readiness. "E. Heim (2008) discovered some coping strategies of students which can be helpful in cognitive emotional and behavioral adaptations of them. These strategies include three kinds of domains namely:

**Cognitive coping strategies:** it includes ignoring, humility, dissimulation, self control, analysis of problem, relativity, religiousness, confusion, seeking of sense, determination of own value, pace etc.

**Emotional coping strategies:** includes protest, emotional release, suppression of emotions, optimism, passive co operation, obedience, self accusation, aggressiveness etc.

**Behavioral coping strategies:** includes distraction, altruism, active avoiding, compensation, retarding, co operation, appealing etc.

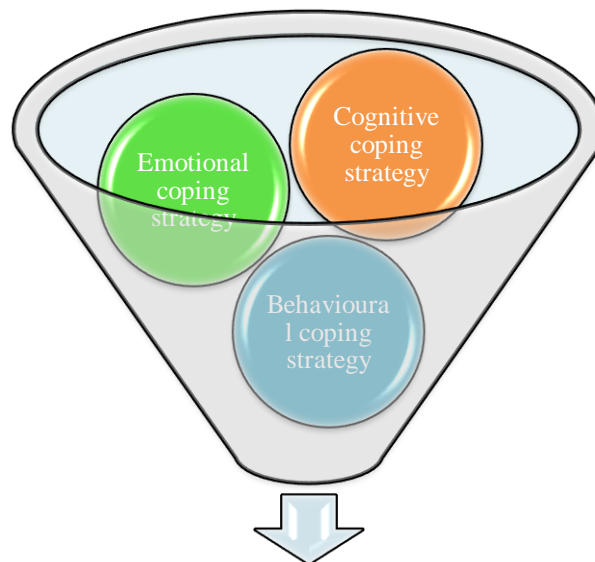


Fig 1: Psychological coping (Heim, 2008)

## 2. REVIEW OF LITERATURE

E learning shown its potential already, so, many developed countries adapting e-learning as their mode of study from past 10 years. In India the reflection are also seen. E learning includes wide range of processes and its applications designed as per the individual need of the students. Thus e-learning is going to change the definition of education system in

near future (Ouma, 2013). E learning was first elected by University of Illinois in form of PLATO in 1926. Almost 16 lacs students enrolled in e-courses in India in the year 2016 and expected to grow before corona pandemic 96 lacs by the end of 2021 (Srivastava, 2019).

Chapnick, 2000 told that It is very important to have proper infrastructure and hardware to successful implementation of e-learning and students and teachers should be prepared psychologically and mentally to accept the challenge for successful integration of e-learning in their institutions ( Borotis and Poulymenakou, 2004).

Driscoll (2002) conducted a study with nursing students to check their motivation level and Blended learning was taken as e-learning methods. He found this technique proven worthy for them who are more easily motivated and loves self paced learning. They prefer face to face and e-classes both. Students who used their e-classes properly in their studies found more positive results in achievement tests also (Ollermann, 2014).

Valk et. al (2010) conducted a study on mobile phone related e learning that is m-learning in many developing countries like Philippines Mongolia Thailand Bangladesh and India, the found important evidence of increasing mobile phone uses but this study lacks the clarity that if there exist any role of m- learning in promoting new learning or not.

Coopasami et. al (2017) conducted study on psychological readiness among nursing students and found e-learning proved worthy (almost 72%) in psychological readiness among nursing students in Durban University and predicted that technologies involved in e-classes adapted by them helped students to build conception and motivated them positively towards e-Learning.

### **Research Question:**

- Are the students of rural India psychologically ready to take burden of e-classes?
- Are the students feeling psychologically positive during CoVid 19 lock down?

### **Objectives:**

- To study the psychological readiness towards e-learning among the students in India
- To study the psychological state of students after strict implementation of e-learning strictly.
- To study the effect of e- learning among male and female students of India.

### **Sample of questionnaire circulated:**

**Psychological readiness indicators:** Self accusation, confusion, pace, optimism, adaption, suppression of emotion, obedience, cooperation, problem solving, distraction are the indicators chosen as per need of study.

#### **Demographic Information:**

- Name of the Respondent:
- Age:
- Sex:
- Standard:

Q. Choose the correct option where some topics are given about your experience in e classes

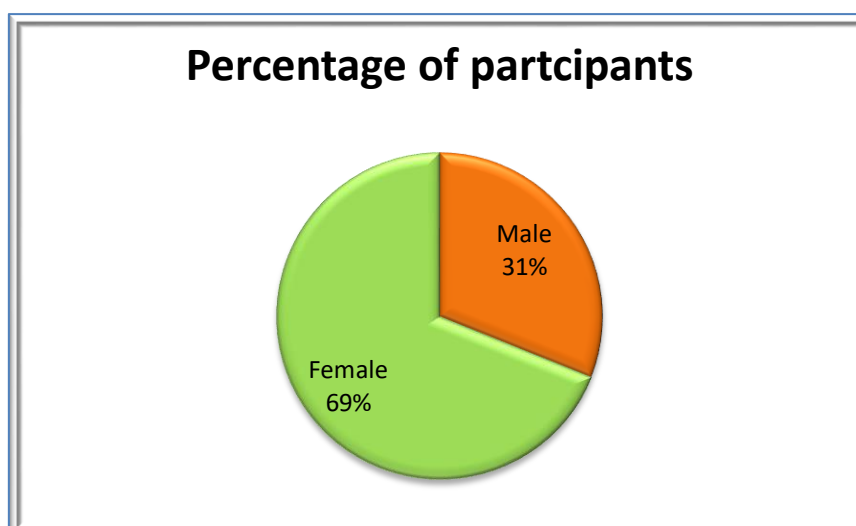
1 to 4 markings are given 4 for your very good experience and one will be given for very bad

(Psychological readiness indicators)

Psychological Variables	Very Good	Good	Very Bad	Bad
	4	3	2	1
a) Self accusation				
b) Confusion				
c) Pace				
d) Optimism				
e) Adaptation				
f) Suppression of emotion				
g) Obedience				
h) Cooperation				
i) Analysis of problem				
k) Distraction				

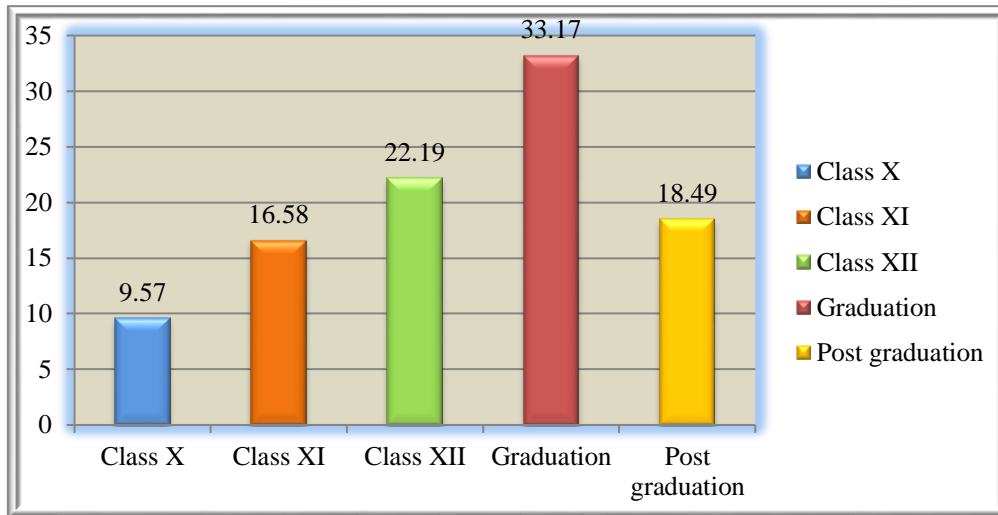
#### Analysis of collected data:

- Total 428 responses were collected from all over the India. Of them 295 female and 133 were male
- It can be inferred from this data that of total population 68.93% are female and 31.07% are male.
- So it can be said that most of the respondents are female in this study.

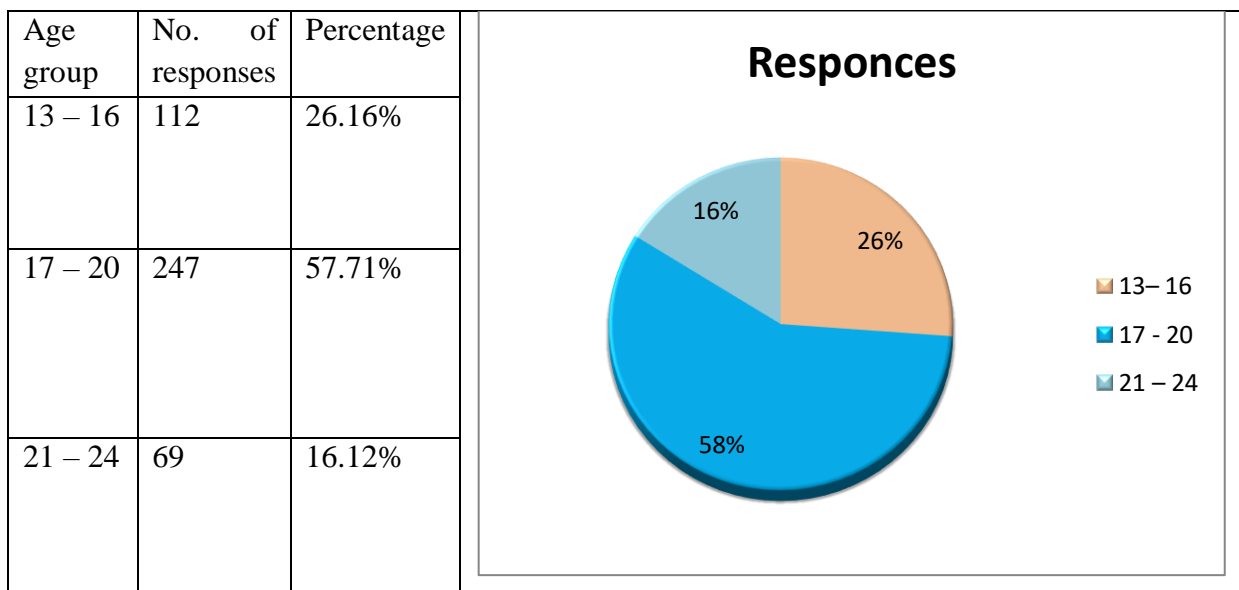


- Responses came from
  - Post Graduate level – 79 responses – 18.49%
  - Graduate level – 142 responses – 33.17%
  - Class XII level – 95 responses – 22.19%

- Class XI level – 71 responses – 16.58%
- Class X – 41 responses – 9.57%
  
- Maximum numbers of participants contribution by graduation students (142)
- Least numbers of responses came from X<sup>th</sup> standard students (41).



- Respondents are from different age group
  - Most of the responses come from the age group 17 – 20 (57%). Least responses come from above 21 - 24 age groups (16.12%).
  - So it can be said from these responses, that students of 17 – 20 age group have the most interest and affinity towards mobile and internet usage in comparison to other age groups.



**Analysis of data collected in response to psychological indicators**

Psychological Variables	Very Good		Good		Very Bad		Bad	
	R*	P**	R	P	R	P	R	P
i) Self accusation	70	16.355140	13	32.009345	14	32.943925	80	18.691588
		2	7	8	1	2		8
ii) Confusion	62	14.485981	99	23.130841	12	30.140186	13	32.242990
		3		1	9	9	8	7
iii) Pace	54	12.616822	14	33.644859	14	34.813084	81	18.925233
		4	4	8	9	1		6
iv) Optimism	98	22.897196	12	29.205607	79	18.457943	12	29.439252
		3	5	5		9	6	3
v) Adaptation	90	21.028037	12	30.140186	11	26.635514	95	22.196261
		4	9	9	4			7
vi) Suppression of emotion	11	26.168224	50	11.682243	11	27.336448	14	34.813084
	2	3			7	6	9	1
vii) Obedience	14	33.878504	12	28.037383	66	15.420560	97	22.663551
	5	7	0	2		7		4
viii) Cooperation	94	21.962616	88	20.560747	12	28.271028	12	29.205607
		8		7	1		5	5
ix) Analysis of problem	80	18.691588	88	20.560747	11	26.168224	14	34.579439
		8		7	2	3	8	3
x) Distraction	78	18.224299	15	35.514018	10	23.598130	97	22.663551
		1	2	7	1	8		4

**Where****R\* - No. of responses came****P\*\* - Percentage of Response**

Psychological Variable	Very Good	Good	Bad	Very Bad	Mean	Standard Deviation
i) Self accusation	16.35	32.01	<b>32.94</b>	18.69	2.46	2.13
ii) Confusion	14.48	23.13	30.14	<b>32.24</b>	2.19	1.93
iii) Pace	12.61	33.64	<b>34.81</b>	18.92	2.40	2.05
iv) Optimism	22.89	29.20	18.45	<b>29.44</b>	2.45	2.20
v) Adaptation	21.02	<b>30.14</b>	26.63	22.2	2.5	2.20
vi) Suppression of emotion	26.16	11.68	27.33	<b>34.81</b>	2.29	2.09
vii) Obedience	<b>33.87</b>	28.03	15.42	22.66	2.73	2.46
viii) Cooperation	21.96	20.56	28.27	<b>29.20</b>	2.35	2.10

ix) Analysis of problem	18.69	20.56	26.16	<b>34.57</b>	2.23	2
x) Distraction	18.22	<b>35.51</b>	23.59	22.66	2.49	2.18

**i) Self accusation:** Highest percent of response found bad category, i.e. **32.94**; and lowest percent of response found very good category, i.e. 16.35 with a mean score 2.4 and Standard deviation 2.13. It shows the trends towards negativity of the response

**ii) Confusion:** Highest percent of response found very bad category, i.e. **32.24** and lowest percent of response found very bad category, i.e. 14.48, with a mean score 2.19 and Standard deviation 1.93. It shows trends towards negativity.

**iii) Pace:** Highest percent of response found bad category, i.e. **34.81** and lowest percent of response found very good category, i.e. 12.61, with a mean score .2.40 and Standard deviation 2.05 It shows trends towards negativity.

**iv) Optimism:** Highest percent of response found very bad category, i.e. **29.44** and lowest percent of response found bad category, i.e. 18.45 with a mean score 2.45 and Standard deviation 2.20.

**v) Adaptation:** Highest percent of response found good category, i.e. **30.14** and lowest percent of response found very good category, i.e. 21.02 very good with a mean score 2.5 and Standard deviation 2.20. It shows positive attitude towards this indicator.

**vi) Suppression of emotion:** Highest percent of response found very bad category, i.e. **34.81** and lowest percent of response found good category, i.e. 11.68 with a mean score 2.29 and Standard deviation 2.09 It shows trends towards negativity.

**vii) Obedience:** Highest percent of response found very good category, i.e. **33.87** and lowest percent of response found bad category, i.e. 15.42 with a mean score 2.73 and Standard deviation 2.46 It shows trend towards positivity.

**viii) Cooperation:** Highest percent of response found very bad category, i.e. 29.20 and lowest percent of response found good category, i.e. 20.5 with a mean score 2.35 and Standard deviation 2.10. It shows trends towards negativity.

**ix) Analysis of problem:** Highest percent of response found bad category, i.e. 34.57 and lowest percent of response found very good category, i.e. 18.7 with a mean score 2.23 and Standard deviation 2. It shows trends towards negativity.

**x) Distraction:** Highest percent of response found good category, i.e. 35.51 and lowest percent of response found in very good category, i.e. 18.22 with a mean score 2.49 and Standard deviation 2.18. It shows trends towards positive response.

### 3. CONCLUSION:

Students of present study were shown mixed result in their psychological readiness towards e-Learning. In self accusation, confusion clearance, keep pace in learning, optimism towards e-Learning shown negative attitude where as they have shown positive attitude towards adaptation in e classes. This shown promising expectancy regarding the future towards e-Learning in India. They also express that their obedience towards their teachers remains very good. Chance of analysis of problem gets lowers usually in e-classes and cooperation with each other cannot be done adequately in comparison to conventional



classes. But it has to be noted that e-classes distract them from their studies in a very good amount, which may cause lack of interest and attention towards class among students. Emotional exposures of students are getting suppressed by e classes. Overall e- learning leaves a trend towards negativity in rural India. Though it has shown some good and positive aspects towards e-learning also. It is also very important that students are showing very much attraction towards use of gadgets and Technology. Due to lock down situation it is quite impossible to go outside from home right now. It is a good sign to get result like increasing interest towards technology, which could be a sign of prospective future of e-learning in India.

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