



Comparative Study on Effectiveness of Online & Offline Learning among Higher Education Students in Kashmir.

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ABSTRACT

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After Covid-19 Pandemic all Educational institutions were enforced to cancel the conventional talk and chalk approach and shift to online mode of learning. Online learning is being carried out to avoid face to face contact to prevent the spread of COVID-19.

Objectives: To Assess effectiveness of online learning and Assess effectiveness of offline learning

Material and methods: Study was conducted among Higher education students. The Sample Size consists of 550 Higher education students who were selected on the basis of random sampling technique. Online Survey method via Google form was adopted in order to collect data from selected respondents with the help of Semi- Structured tool and demographic variables. Permission via email was taken from author for usage of tool. Data was collected for a period of two months from October 2021 to December 2021. Data analysis was performed using SV26|IBM SPSS Statistics 26. Data was analysed in terms of frequency and percentage

Results: According to results, maximum (38.2%) respondents disagree with this fact that, Online Learning via Internet is same as Offline Learning in classroom are same & 42.7% of the respondents face technical problem during online learning. Only 25% agree on "Online Learning Tools help to improve student's academic performance. Maximum (41.3%) believe that online learning saves time and 53.3% respondents prefer online learning during current situation of Covid-19 pandemic. 46.5% of respondents strongly agree that students will be more focused in offline than online learning. 42.2% of the students agree that students are guided directly through offline class compared to online learning. 38.9% agree that offline learning makes students to learn more than online learning. 45.1% of students believe that offline learning is less disruptive than online learning.

Conclusion: It was concluded that Offline learning is more focussed, less interrupted, more reliable, more interactive and keep students attentive. Online learning may not be same as offline learning, but during current situation of Covid-19 pandemic, it provides benefits to the students, save their time and Improve their academic performance.

Keyword Online learning, Offline learning, Covid-19 pandemic

1. Background

After Covid-19 Pandemic all Educational institutions face challenges in fulfilling their goals & Objective (1). This Pandemic enforced education system across globe to cancel the conventional talk and chalk approach and convert it into a different strategy of learning (2). So across the world after closure of schools, colleges and universities for an indefinite time, a common policy of teaching online was framed (3). In our Country Educational institutions also made a shift to Online Learning soon after Union Government imposed the decision of nation-wide lock-down in 2020 (4). With advancement of new technologies, It is obvious that online Learning brings a lot of flexibility compared to offline Learning (5).

Online learning made a pedagogical switch from traditional mode to modern approach of learning, from classroom to Google meet, from actual to virtual and from workshops to webinars. Earlier, online learning was a part of informal education but as of now, it seems that it would gradually replace the formal education system if the circumstances enduringly persist over the time(6). “Online learning is having many benefits like flexibility, availability of plenty of options, cost effective, comfortable as per environment, foster once career while one is at work etc.”(7).

Since years, researchers have argued upon the primacy of the two readily used modes of learning, both of which have their own opportunities and obstacles. However, due to direct teacher-student interaction it is a well-established postulation that no pedagogical approach can replace the crest position of traditional face to face learning (6). “Classroom teaching enhances students’ critical thinking skills and provides an opportunity for students to engage in live discussions”.

Present study aims to assess the effectiveness of online and offline learning among Higher Education students.

1.1 Literature review:

Padmalini Singh et al 2021, conducted a study among 100 respondents regarding Comparative Study on Effectiveness of Online and Offline Learning in Higher Education in India, Indonesia and Malaysia. The results of the study revealed that offline learning is effective than online learning (8).

Dr. Debasish Biswas, Chanchal Dey 2021 conducted a study on online vs offline education, Opportunities and Challenges in Indian context. It is not possible to identify the better alternative of the two because each one has got distinct advantages and disadvantages over the other. Traditional educational systems through offline based face to face classrooms cannot be replaced. Online education is good for specific courses and can act as a supplement to the education process to make it more interactive and interesting. As soon as we return back to normalcy post Covid-19 era, we should move back to offline education.(5)

Preethi Sheba Hepsiba Darius 2021 conducted a survey among 450 students, on the Effectiveness of Online Teaching–Learning Methods for University and College Students. It was found that online learning is effective, when we use methods like animations, PPTs, video lectures.(9)

Atika Qazi et al 2020 conducted a cross-sectional study among 320 students regarding Conventional to online education during COVID-19 pandemic. The study suggested that it is crucial for the government and other policymakers worldwide to address access and use of online learning resources of their populace amid pandemic(1)

Abhilasha nagpal 2018, According to the survey results, an overwhelming majority of 70.4% affirmed to recommend e-learning methods to their acquaintances. On the whole online mode of learning was rated 4/5 whereas offline received a rating of 3/5 based on their overall effectiveness (10).

2. Methodology

(Study was conducted among Higher education students. The Sample Size consists of 550 Higher education students who were selected on the basis of random sampling technique. Online Survey method via Google form was adopted in order to collect data from selected respondents with the help of Semi-Structured tool and demographic variables(8). Permission via email was taken from author for usage of tool. Data was collected for a period of two months from October 2021 to December 2021. Data analysis was performed using SV26|IBM SPSS Statistics 26. Data was analyzed in terms of frequency and percentage.

PART A: Socio demographic profile.

PART B: Data will be collected by using semi-structured knowledge questionnaire regarding effectiveness of online and offline learning among Higher education students of Kashmir.

Sampling procedure:

Population:

- Target population:** Higher education Students of Kashmir.
- Accessible population:** All students studying in colleges and universities etc.

Sample Size: 550

Sampling technique: Convenient sampling is used for the selection of subject.

Analysis

Description of demographic variables: This section describes the characteristics of the study subjects in terms of demographic variables which include Age, Gender, Residence, Educational Qualification, Field of Study and has been presented in the form of frequency and percentage in the following tables and figures.

Table 1: Frequency and Percentage distribution of study subjects according to their age
N=550

Age	Frequency	Percentage
16-20	102	18.5
21-25	389	70.7
26-30	34	6.2
31-35	19	3.5
>35	5	0.9
Total	550	100

Table 2: Frequency and Percentage distribution of study subjects according to their Gender
N=550

Gender	Frequency	Percentage
Female	264	48.0
Male	284	51.6
Total	550	100.0

Table 3: Frequency and Percentage distribution of study subjects according to their Residence
N=550

Residence	Frequency	Percentage
Rural	394	71.6
Urban	155	28.2
Total	550	100.0

Table 4: Frequency and Percentage distribution of study subjects according to their Educational Qualification
N=550

Educational Qualification	Frequency	Percentage
Bachelor's Degree	367	66.7
Diploma	65	11.8
Masters	44	8.0
Others	48	8.7
PhD	25	4.5
Total	550	100.0

Table 5: Frequency and Percentage distribution of study subjects according to their Field of Study N=550

Field of Study	Frequency	Percentage
Arts	30	5.5
Commerce	2	.4
Engineering	139	25.3
Medical & Nursing	289	52.5
Others	18	3.3
Science	72	13.1
Total	550	100.0

Table 6: Summary of respondents; Effectiveness of Online Learning among Higher Education

Response	Frequency	Percentage
Online Learning via Internet is same as Offline Learning in classroom.		
Strongly Disagree	212	38.5
Disagree	210	38.2
Neutral	49	8.9
Agree	61	11.1
Strongly Agree	17	3.1
Learning on the Internet outside of class is more motivating than Offline class		
Strongly Disagree	166	30.2
Disagree	215	39.1
Neutral	65	11.8
Agree	73	13.3
Strongly Agree	29	5.3
I never face technical problems during online learning.		
Strongly Disagree	197	35.8
Disagree	235	42.7

Neutral	37	6.7
Agree	61	11.1
Strongly Agree	20	3.6
Online learning technologies provide benefits to the student		
Strongly Disagree	72	13.1
Disagree	120	21.8
Neutral	132	24.0
Agree	179	32.5
Strongly Agree	46	8.4
Online Learning Tools improve students' academic performance		
Strongly Disagree	69	16.7
Disagree	152	27.6
Neutral	122	22.2
Agree	138	25.1
Strongly Agree	42	7.6
Online Learning saves time while studying.		
Strongly Disagree	69	12.5
Disagree	100	18.2
Neutral	112	20.4
Agree	192	34.9
Strongly Agree	75	13.6
Students prefer online learning during the COVID-19 pandemic		
Strongly Disagree	18	3.3
Disagree	30	5.5
Neutral	60	10.9
Agree	293	53.3
Strongly Agree	147	26.7

Students prefer online lectures over physical lectures		
Strongly Disagree	113	20.5
Disagree	227	41.3
Neutral	71	12.9
Agree	86	15.6
Strongly Agree	50	9.1

Table 6: shows a summary of respondents' effectiveness of online learning among higher education students.

According to the data above, as much as 38.5% respondents chose strongly disagree, 38.2% respondents chose disagree compared to 11.1% of respondents who chose agree that "Online Learning via Internet is same as Offline Learning in classroom.". This indicates that there are maximum, 38.2% respondents who disagree and only 11.1% agree that Online Learning via Internet is same as Offline Learning in classroom are same.

For the second question, as much as 39.1% respondents chose disagree compared to 13.3% of respondents who chose agree that "Learning on the Internet outside of class is more motivating than Offline class". This indicates that there are maximum 39.1% of the respondents who believe that offline learning is more motivating than online learning

For third question; as much as 42.7% respondents chose disagree compared to 11% of respondents who chose agree that "I never face any technical problem in online learning". This indicates that there are maximum 42.7% of the respondents face technical problem during online learning.

For 4th question; as much as 32.5% respondents agree that online learning technologies provide benefits to the student compared to the 21.8% respondents who disagree that online learning technologies provide benefits to the student.

However, for the fifth question, as much as 22% students chose neutral, 27 % disagree and only 25% agree on "Online Learning Tools help to improve student's academic performance. According to the result of 6th question, as much as 41.3% of respondents agree that online learning tool help to save time in studying compared to the 15.6% respondents who disagree.

During current situation of Covid-19 pandemic, question Seven gave the answer that as much as 53.3% respondents prefer online learning. For the question eight, the result shows that there are 41.3% of respondents disagree and only 15.6 % agree that students prefer online learning over offline learning.

Table 7: Summary of respondents' Effectiveness of Offline Learning in Higher Education

Students are focused more during offline learning compare to online learning.		
Strongly Disagree	36	6.5
Disagree	38	6.9
Neutral	32	5.8
Agree	184	33.5
Strongly Agree	256	46.5
Students have more direct interaction in offline learning compare to online		
Strongly Disagree	23	4.2
Disagree	31	5.6
Neutral	26	4.7
Agree	208	37.8
Strongly Agree	258	46.9
Students feel free to interact during Offline learning compared to online learning		
Strongly Disagree	23	4.2
Disagree	57	10.4
Neutral	82	14.9
Agree	207	37.6
Strongly Agree	177	32.2
During offline learning Students are guided well compared to online learning		
Strongly Disagree	15	2.7
Disagree	31	5.6
Neutral	47	8.5
Agree	231	42.0
Strongly Agree	224	40.7

I feel that face-to-face contact with my instructor is necessary for learning to occur.		
Strongly Disagree	18	3.3
Disagree	24	4.4
Neutral	41	7.5
Agree	215	39.1
Strongly Agree	250	45.5
Offline learning engages students to learn more as compare to online learning.		
Strongly Disagree	17	3.1
Disagree	46	8.4
Neutral	44	8.0
Agree	214	38.9
Strongly Agree	226	41.1
Offline Examination is more reliable than online exams.		
Strongly Disagree	43	7.8
Disagree	36	6.5
Neutral	59	10.7
Agree	206	37.5
Strongly Agree	203	36.9
Students are bored in Offline Learning compare to Online Learning		
Strongly Disagree	111	20.2
Disagree	212	38.5
Neutral	95	17.3
Agree	94	17.1
Strongly Agree	36	6.5
Offline learning is less disrupted as compare to Online Learning.		
Strongly Disagree	32	5.8
Disagree	61	11.1
Neutral	86	15.6

Agree	248	45.1
Strongly Agree	120	21.8

Table 7: has presented the summary of respondents' effectiveness of offline learning among higher education students.

For question one, the result has shown that 46.5% of respondents strongly agree that students will be more focused in offline than online and only 6.9% of respondents disagree with it.

For question two, 46.9% strongly agree and 5.6% disagree that student have more direct interaction during offline learning compared to online learning. Thus, it can be concluded that students will focus more on physical class and interact with their lecture and friends directly.

During offline class, as much as 37.6% respondents agree and 10.4% respondents disagree that students feel free to interact in offline class than online class.

However, based on the result in question four, there are 42.2% of the students agree and 5.6% disagree that students are guided directly through offline class compared to online learning.

For question 5, there is a higher number of respondents who agree (39.1%) than disagree (3.3%) that during offline learning students have good face to face contact than online learning.

For question six, 38.9% agree and 8.4% disagree that offline learning makes students to learn more than online learning.

For question seven; 37.5 % respondents believe that offline examination is more reliable than online assessment.

For question eight, 38.5% disagree and only 17.1% agree that offline learning make students bored compared to online learning.

For last question, there are 45.1% of students chosen agree and 11.1% choose disagree for offline learning is less disruptive than online learning.

Discussion

When the Covid-19 pandemic broke out in early 20's. it seriously affected educational system around the world and give arise to online learning globally.

This study aims to analyze the effectiveness of online and offline learning among higher education students at universities and colleges. The study was carried out in Kashmir province of Jammu & Kashmir UT, India. Among 550 respondents, major responses were from the youth population studying Medical, Nursing and engineering program.

The findings revealed that online learning among higher education students is drab & dull, as students find it difficult to calibrate to various online methods of learning. While offline method of learning is the most preferred method of education, due to its simplicity and essence. The findings from Table 6 show that during the pandemic or in the future, online learning would be more effective. The majority of the students feel that online learning technologies will provide them with a lot of benefits to learn and improve their academic performance because physical work or class would be replaced by technologies in the future. (8) (11). Preceding studies have proven that online learning platforms improve learning process when this pedagogy is used as complementary with offline/formal teaching (12).

However, for those students who reside at far off places from their college or university, online learning is the best pedagogy. Based on the results, the findings show that during the situation of Pandemic, maximum number of students believe that online learning is the only pedagogy that save their time while studying (13). So we can say Online learning is the best way for educators and learners to ensure there is continuity in education during this Covid 19 pandemic, But this mode of pedagogy online also has its pitfalls, like difficulties in teaching, technical issues, restricted attention span, and lack of attentiveness among learners(13).

Conclusion:

It was concluded that Offline learning is more focused, less interrupted, more reliable, more interactive and keep students attentive. Online learning may not be same as offline learning, but during current situation of Covid-19 pandemic, it provides benefits to the students, save their time and Improve their academic performance. For these strategies to be successful, higher education institutions must collaborate among themselves, particularly in the form of decentralization of educational teleconferences and allowing access to nearby institutions to ensure all students have access to a stable internet connection. Private entities can assist by providing the necessary facilities and the government providing the necessary support to enable teaching and learning to take place effectively and without disruption. Once the Pandemic is over, we need to switch back

Study Limitation:

Current study was limited to students of few universities and colleges and data was collected via online survey only due to Covid-19 precautions. Its results can't be generalized to all institutes of valley. It was found that maximum of respondents believe that offline learning is best mode of learning compared to online learning, but we can't ignore the fact that maximum of respondents believes that during Pandemic, online learning is the only ray of hope for them. By which they can learn, save their time and complete their academic years on time. Future studies can address this research gap and focus on other modes to collect empirical data that can be analyzed for better results. In addition, future studies can focus more on effectiveness of blended system of learning.

Conflicts of Interest

The authors declare no conflicts of interest.

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BIOGRAPHIES (Not Essential)

Author Photo-1	Description about the author1 (in 5-6 lines)
Author Photo-2	Description about the author2 (in 5-6 lines)
Author Photo-3	Description about the author3 (in 5-6 lines)
Author Photo-4	Description about the author3 (in 5-6 lines)

