



RESEARCH PAPER

Effectiveness of Online Teaching and the Development of Study Habits in Undergraduate Students: A Post COVID Scenario

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ABSTRACT

The main objective of the study was to determine the effectiveness of online teaching and to examine the development of study habits among undergraduate students during online teaching after post COVID scenario. The target population of the study comprised all the faculty and undergraduate students from the Social as well as Natural sciences at University of Education, Lahore Dera Ghazi Khan Campus. Two questionnaires were developed: one for the students to determine the effectiveness of online teaching, and the second for the faculty to take their opinion about the development of study habits in the undergraduate students. The study confirmed that online teaching has a satisfactory level of effectiveness, while students' study habits were found to be stumpy during online teaching. So, it was suggested that, in order to avoid this situation, the online face to face interaction of the teacher and the taught should be made compulsory along with the examination be taken online on Campus in the physical presence of relevant faculty.

KEYWORDS E-Learning, Online Teaching, Post COVID Scenario, Study Habits

Introduction

All aspects of society especially the educational system have been impacted by the post COVID situation (Flores & Gago, 2020). According to Rahiem (2021), a number of problems for the education sector—including higher education—arose as a result of the COVID scenario, with university students having to cope with considerable barriers to their academic progress. This has led to significant modifications in the educational process for certain students and instructors. Many difficulties that students face might eventually develop into serious issues. According to Farooq, Rathore and Mansoor (2020), challenges include, lack of institutional support, lack of student participation in their studies, the decline in students' study habits and a more general issue with traditional educational dynamics.

The way that students learn and their study habits have been impacted by all of these changes, difficulties, and issues. In this study, we sought to understand whether students' study behaviours had altered in response to the COVID scenario and whether the pandemic had affected how students learn. Studying practices may be characterized as ways and techniques of gathering information (Urh & Jereb, 2014). Habits are commonly characterized in the psychology literature as behaviour that is engaged automatically in response to recurrent environmental signals. They are normally established by repetitive behaviour and the learning of stimulus-response correlations (Volpp & Loewenstein, 2020).

It takes time for behaviour to develop into automatic patterns of behaviour. Without wishing to form them, we are capable of developing habits. It's challenging to create new

habits and difficult to break old ones. Even when focus and motivation are lessening, habits can endure. The good news is that acquiring new behaviour is achievable (Psychology Today, 2021). A crucial implication is that managing cue exposure and establishing new patterns are frequently necessary to break old habits in order to change behaviour (Wood & R nger, 2016).

It is also pretty obvious that the majority of study habits adopted by students are always focused on exams, usually followed by a particular focus on homework and assignments, note-taking, and time management. Each researcher agrees that learning habits vary from person to person and that each person has a different learning objective. The ability to raise motivation and transform study habits into results, which in turn improves learning, depends on a variety of behaviours and abilities. This is another way that COVID has disrupted learning patterns. (Nicola, 2020)

All colleges implemented online teaching for teenagers as a result of the suspension of classroom instruction. It was adopted as a replacement for classroom instruction (Sahu, 2019); however, it is inappropriate for our current situation. Due to their lack of interest in this method or these gadgets as a result of the commercial and digital divide, the majority of students do not have any method of learning using this online system (UNESCO, 2020).

Every type of educational practice is impacted by the COVID situation (Nicola, 2020). The educational institutes offered online education to everyone on earth. There are 1.7 billion pupils worldwide, and nearly every state in the world must shut down or establish a local closure (UNESCO, 2020). To lessen the gathering and stop the virus from spreading further, all nations in the universe must postpone or cancel their activities at workplaces. In light of this, teenagers, especially those enrolled in university studies, have been greatly impacted by this move (Esposito, 2019).

One thing is fairly clear: thanks to the internet's quick expansion and the evolution of information technology, learning habits have changed significantly (Biasutti, 2017). E-learning solutions are now being implemented for future facilities and enable students to participate in and watch lectures online. It is only used to fully utilise modern technologies and to implement learning habits. The widespread use of online learning tools in undergraduate classrooms necessitates a lot of data that can be evaluated, improving the quality of instruction and requiring extensive data analysis at the undergraduate level (Rahiem, 2021). For instance, research by Gasevic, 2019, found that all time management techniques require a clear window of time within which academic achievement can be demonstrated.

According to several studies, self-regulated learning may have an impact on a learner's academic success and learning outcomes (Gasevic, 2019). According to researchers, students with significantly improved self-regulated learning skills continued to succeed in both traditional classroom settings and online learning. During the COVID-19 epidemic, these studies and advancements in the use of appropriate technologies for student evaluations and self-evaluations remained necessary in order to guarantee successful outcomes in e-learning settings.

In order to enhance the educational process, a variety of methods and techniques reliant on computer adaptive testing have been used in educational settings during the past ten years (Garc a, 2020). Setting the learner's information is crucial to obtain personalized outcomes, especially when using computer adaptive testing as an illustration of a learning tool. Computer adaptive testing does not have drawbacks like continuous item display for assessments, which encourages pupils to memorize assessment replies and share them with their peers (Gohiya, 2020). There is a lot of question bank content being suggested as a remedy for assessment item exposure. Given that many examples of computer adaptive

testing require more questions than equivalent linear assessments, this type of solution appears unsuitable in a number of circumstances.

Among other things, one might be inclined to conclude that this is how undergraduates approach their studies after analysing their methods and attitudes towards learning. A learner's typical methods for acquiring abilities, knowledge, and concepts are referred to as study habits. Academic excellence and educational success will be boosted if study habits are positive. In reality, a learner's ability to engage in academic learning depends on a variety of performances and exposures, which are acquired through development of good study habits. Most of the time, the learner's performance is drastically below par.

According to Morgan and Fuchs (2007), effective study habits that promote academic achievement would benefit from the completeness of relearning and reading materials that may be employed in responding to the issues that are raised by reading. The learner also has a link between key concepts and instructional components. These practices may be summed up as the ways that students can use to acquire information, concepts, abilities, and experiences. According to Asawara 2001, improper reading habits enable students to learn by maximizing their habits, time, and other resources. According to Denga 2001, those behaviours are the result of requirements and motivations that cause society to frown upon unfavourable music.

A student who develops self-learning habits outperforms one who chooses not to read but instead spends their time on unproductive articles that cannot advance their educational goals. When they improved their reading and reasoning skills, learner pupils did better academically. Effective learning may also be improved by following a suitable schedule, allocating enough time, and getting enough sleep.

After COVID wave, almost 61 countries like America, Europe, Africa and Asia in the world are implementing the closure of higher education institutions. Pakistani institutions are moving slowly and steadily going far away from the traditional education system and towards an online educational system. Almost all universities in Pakistan are moving towards online education. In digitally advanced countries, the online educational system can be effective, but it is being guessed as an infectious in Pakistan because most of the Educational institutions observed its negative effect like poor development of study habits and dependency on cheating in the students during the system of evaluation. Keeping in view the same notion in mind, the present study is being conducted in order to find out the effectiveness and limitations of online teaching in the Pakistani institutions of teacher education.

Hypotheses of the Study

The following Null hypotheses were formulated for the purpose of testing in this study:

H01: There is no significant difference in the opinion of male and female students regarding the efficacy of online teaching.

Ho2: There is no significant difference in the opinion of male and female teachers regarding the development of study habits among the male and female students during online teaching"

Material and Methods

The effectiveness of online teaching during COVID-19 and its consequences on the study habits of undergraduate students were examined using a descriptive testing approach. The study's population comprises all teachers and undergraduate students from

the University of Education's D.G. Khan Campus. There were two groups of students: one from the social sciences, including BS in economics and BS in education (honors), with 335 students, and another from the natural sciences, including BS in chemistry and BS in physics, with 556 students. All the teachers teaching in these disciplines were included in the sample of this study.

As a research tool, a set of two self-developed questionnaires was applied on the study sample. Study Habits Development Scale (SHDS) was administered to the teachers in order to find out about the study habits of the undergraduate students and Effectiveness of Online Teaching Scale (EOTS) was administered to the under graduate students to determine the effectiveness of online teaching. Undergraduate students from social sciences and natural sciences at the University of Education Lahore, Dera Ghazi Khan Campus, filled in the questionnaire (EOTS).

Table 1
Levels of Effectiveness of Online Teaching Scale (EOTS)

Category	Mean
Higher	4.50-5.00
High	3.50-4.49
Medium/Satisfactory	2.50-3.49
Low	1.50-2.49
Lower	1.00-1.49

The mean score and Combined mean score were used to derive the following degrees of effectiveness of the online teaching scale. The mean score was calculated, and the following factors were weighted:

Table 2
Analysis of Questionnaire 1 (EOTS)

Sr.#	Statements	Mean
1	Online teaching is considered economical for educational purposes.	2.87
2	Online teaching helps to improve the standards of learning.	2.02
3	The use of computers helps to make work very interesting.	3.01
4	Online teaching suits a variety of learning styles.	1.02
5	It is always more convenient to use electronic material than print material.	3.07
6	Online teaching has increased convenience and flexibility.	3.10
7	Teaching by computer is always a pleasure.	3.05
8	Online teaching has improved the employee's knowledge.	3.02
9	Online teaching improves self-discipline and time-management skills.	3.00
10	Online teaching provides more comfortable learning environment.	3.01
11	Online teaching may maximise the quality of learning.	3.01
12	Online teaching offers teachers an efficient way to deliver lessons.	3.00
13	Cheating is possible during the online exam.	3.82
14	The online exam system during COVID was transparent.	1.58
15	The teachers and students may exchange their views via online teaching.	2.80
16	Study of research articles and other material may be utilised during online teaching.	2.10
17	The quality of teaching and learning may be enhanced via online teaching.	2.01
18	Online teaching may be considered more effective than conventional ways of teaching.	3.01
19	More work can be done in less time with greater efficiency using digital technology.	2.00
20	Students take it easy with digital technology while learning.	2.05

21	Online teaching refines critical thinking skills.	2.02
22	Online teaching improves virtual communication and collaboration.	2.20
23	Online teaching increases the students' access to the teachers.	1.70
24	Physical teaching is considered more expensive compared to online teaching.	2.20
Combine Mean		2.53

The combined mean value of the effectiveness of online teaching scale (EOTS) was 2.53, showing a satisfactory level of effectiveness of online teaching by the students.

Table 3
Testing Hypothesis Ho₁

Groups	Statistics			
	N	Mean	SD	Z
Male	24	80.5	18.71	
Female	17	80.35	17.26	0.02

HO₁: The null hypothesis was accepted, showing that "there is no significant difference in the opinion of male and female students regarding the efficacy of online teaching."

The levels of the study habits development scale were determined by applying the following weight age given in the Table as under:

Table 4
Levels of Study habits development Scale (SHDS)

Mean	Explanation
1.00-1.80	Very low
1.81-2.60	Low
2.61-3.20	Medium
3.21-4.20	High
4.21-5.00	Very High

Table 5
Questionnaire 2, Analysis of SHDS

Sr. #	Statement	Mean
1	Study plans are developed by students on daily basis.	2.45
2	Students prepare long-term plans for tests, papers, projects, and assignments.	2.49
3	Short breaks during lectures are liked by students.	2.22
4	Students take a minimum of 12 hours for study on a daily basis.	2.33
5	Morning exercise may increase your motivation to learn.	2.04
6	Mostly, distractions during study are disliked.	2.38
7	Students have a specific place for studying at home.	2.03
8	Taking breaks during long lectures is liked by the students.	1.87
9	Students like to skim topics and other relevant material.	2.01
10	During lectures, students highlight the important material in books and notes.	1.05
11	Students mostly underline the challenging words during lecture.	2.32
12	Students enjoy talking about what they've learned with their classmates and teachers.	1.99
13	Students prepare notes in the class.	1.78
14	Students often like this way of taking notes.	1.77
15	Students enjoy reviewing what they have learned.	1.98
16	Students review their textbook reading and class notes before the class.	2.40
17	Students read the comments made by teachers on tests and answer sheets.	2.10

18	Students prefer to get good grades rather than focus on learning and making fruitful assignments.	2.42
19	While studying, students pay attention nicely.	2.45
20	Students feel pleasure while attending overcrowded classes.	2.05
21	Students sacrifice their attentiveness with too much labour while attending lectures.	2.01
22	Slides are prepared by students before lectures.	2.12
23	Usually, students study using notes after the class.	2.44
24	Students prefer to work for one hour with 10- to 15-minute breaks.	2.43
25	Anxiety about learning frequently forces students to begin a study at any time.	2.41
26	Students try to learn these subjects properly, but they do not show interest.	2.42
27	When the work is not interesting, the students take it seriously too.	2.35
28	The needs of the syllabus are fulfilled within a reasonable timeframe by the students.	2.25
29	Time management is easy for the study process during online learning.	2.33
30	Students think that their syllabus and course are related to their future goals.	2.43
Combine Mean:		2.17

The combined mean value of the SHDS (Study Habits of Development Scale) was found 2.17, showing a negative level of acceptance among the undergraduate students.

Table 6
Testing Hypothesis Ho₂

Groups	Statistics			
	N	Mean	SD	Z
Female	178	87.47	29.24	1.51
Male	289	83.21	30.55	

Ho₂: This null hypothesis was accepted showing "There is no significant difference in the opinion of male and female teachers regarding the development of study habits among the male and female students during online teaching"

Conclusion

Controlling the effectiveness of online instruction was the initial learning objective. A number of advantages highlight how effective online instruction is. The advantage to students who reside in remote and poor locations is the major rationale; regardless of whether teaching online is cost-effective for educational purposes from all angles. Our study also demonstrates that the majority of academics and educators believe that teaching online is a more effective method of containing the rising cost of undergraduate education because it spreads out the cost of a class among tens or hundreds of thousands of students rather than just a select few (Bowen, 2013).

By putting students in front of cutting-edge technology and allowing them to study through a variety of methods, teaching online helps to raise the bar for academic achievement. As long as a student has access to the internet, our study offers us optimism that online learning can assist in providing a top-notch education to everyone, anywhere, at any time (Bowen, 2013). The task is made more intriguing by the use of computers. The reason is that teachers are more interested in adopting this cutting-edge technology when teaching online, which has not always been the case. Test scores, student appointments, and altered knowledge of education and the online format are a few indicators of some favorable learning outcomes that indicate improved education (Sibley, 2005).

A range of learning styles is accommodated via online teaching. Formal and outdated teaching methods aren't thought to be appropriate in the current learning environment because of changes in global trends in education. There are several fresh and cutting-edge teaching methods accessible today. These flexible strategies are well suited to online instruction. The second objective dealt with how undergraduate students should build good study habits. The findings suggest that undergraduate students' study habits have been impacted by online teaching and learning. Undergraduate students' practices of cheating were formed as a result of online exams and quizzes. According to the study on the subject of online teaching, there are still more elements that degrade children and leave out the fundamental purpose of education. Most students spend their time using technology to utilize various programs and talk with their friends. They did not study as much as they might have because of this.

They weren't paying attention to the lectures that the lecturers gave at certain times. Students showed up on the screen just to indicate that they had attended their lectures, which was required in order to sit for examinations. Their lecturers' lectures and discussions were not attended, which had a significant impact on their learning and led to lower academic scores in their final grades. While giving lectures, the professors were unable to monitor the students' progress on their screens in order to keep them focused during discussions. Learners failed because professors had to finish their lectures by a certain time in order to attend another class after that time.

Because of online learning, students' behaviors have changed, which has completely altered their attitude towards education. They now exhibit little enthusiasm in their studies and abandon their studies to read the subjects, which has negatively impacted their reading skills. The students fooled both themselves and their parents by diverting their attention to other programs they downloaded for pleasure. The prime objective of the students, particularly Pakistani students, is to get better grades which was made possible during the COVID via online at home examination. The cheating was observed in full swing because the mute, say, not face to face interaction was possible and in this way the students got maximum grades. This online examination system took the students away from reading and writing because the pattern of the question papers was on MCQs. So, the study habits among the students were found negatively low during post COVID scenario. The intention behind online learning was good, but the way that the students are using technology has rejected the real goal of education. Their ability to study the material honestly was negatively impacted by this scenario.

Recommendations

The following suggestions were recommended from the findings and conclusions of this study in order to make online teaching more effective and to increase the extent of students' study habits during this mode of teaching:

1. There should be a proper check and balance on the students during online teaching. The video mode rather audio should be adopted during online teaching learning process.
2. Online face to face interaction between teachers and the taught should be made compulsory.
3. Examinations should be held in the institutes rather in house with the implementation of proper SOPs.
4. Evaluation process (examinations) may be held on campus in the physical presence of relevant faculty members.
5. Online activities should be ensured during lectures to check the learners' understanding. In this regard question answer sessions may be encouraged.

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