

## ONLINE LEARNING AMONG THE STUDENTS OF FISHERMEN COMMUNITY DURING COVID 19

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### ABSTRACT

COVID 19 outbreak has significantly and severely impacted the education system worldwide. As a means to cope with this unforeseen situation, all the academic activities were shifted to the online platform. However, simply converting offline content online is not enough to provide learners with a unified digital learning experience. Proper learning conditions are equally important as the content delivered. Therefore, in this study, we aimed to discover the acceptance of online learning among school students from the marginalised fishermen community in Kerala, India. The study's findings indicate that students lack interest in online learning. They are facing many problems that diminish the actual benefit of online learning. This study suggests that the government should take adequate measures to provide impartial delivery of education by enhancing students' online learning experience.

**Keywords:** COVID 19 Pandemic, online learning, fishermen community, social media.

### Introduction

The catastrophic effect of the COVID 19 pandemic impacts almost all the domains in our society, with the educational sector being one of them. As a result, most governments around the globe imposed a lockdown to minimise the spreading of the pandemic. India implemented a nationwide lockdown from March 2020, which resulted in an ominous impact on the educational system; it has impacted the whole education system from pre-school to university. Entire academic activities shifted online, giving learners and educators little time to cope with the new shift. Although, mere conversion of offline content to online is not enough to blend into the online environment. Though children from the current generation are surrounded by digital technology from birth, they are not fully equipped for a technology-rich future. (Iivsri, Sharma & Olkkonen, 2020). The effectiveness of using educational technology is dependent not only on the technology but also on the educators, learners, and the learning process (Ma & Lee, 2018). While closing school during COVID 19 is necessary, they also cause many challenges, especially for marginalised students. Unequal access to technology is a major problem that can prevent a significant number of children from attending online education. Marginalised students often have parents who cannot be at home to support their children, which makes online education less effective even with technology access. Also, online education is not as effective as the one in school for many children with special needs (Hani Morgan, 2020). The success of online learning is determined by how well the content is orchestrated in the online environment and by successfully resolving learners' challenges (Muthuprasad et al., 2020). Online learning challenges and inequalities have become emerging realities in developing countries education sectors (Oyedotum, 2020). We all realise how essential digital literacy is to survive in this new world, where online services and social interaction may be the new normal (Bhagat & Kim, 2020).

The present study tries to shed light on the acceptance of online learning among school students from the fishermen community, a less privileged community in Kerala. The primary objectives of this study are to discover the awareness of online learning, perception about the quick transition of online learning during Covid 19, tools and techniques used for their learning and evaluation, preference of online learning, satisfaction and effectiveness of online learning. This paper also examines the benefits and challenges faced by the students while using the online method.

The Fishermen community form an essential fraction of the population of Kerala, India. Kerala is the eighth largest fisherfolk group of the 14 coastal states. However, somehow, this community remain neglected and marginalised, considering the state's overall socioeconomic advancement. For example, fisherfolk's literacy and educational achievement are much lower than the general population's (Kelker, 2012). There has been some progress in their living standards, but some fishermen community sections have yet to improve their living conditions significantly. The state fishing community has been largely excluded from the broader development experience. The study is relevant now since online education has never been implemented like this, such as a massive social experiment in India, where educational attainment is unequally distributed among urban and rural populations. Through this

study, we can understand whether students from marginalised sections are getting equal learning chances during the pandemic period and their acceptance of digital technology for learning.

### Literature review

As an initial response to COVID 19, educators were rushed to change their conventional programs to fit in an online environment. However, transitioning content to an online learning environment is not enough to blend in with the new environment. More educational policymakers must understand the value of broadening their learner populations, course of study, and the need for new learning styles (Bhagat & Kim, 2020).

After transitioning conventional learning into digital learning, only technology usage has enhanced; students' motivation, cognitive engagement, and self-efficacy have reduced since the transition from face-to-face to virtual learning. More research is required to address these online learning barriers (Hermida, 2020). An enormous negative impact on students' current and intended outcomes occurred due to the COVID 19 pandemic. These effects have been exceedingly varied because of the existing socio-economic divides. Low-income students are most likely to decelerate their education due to COVID 19 pandemic (Aucejo et al., 2020). There exists an association between satisfaction and access and use of online learning. Students' satisfaction level is also influenced by residence, prior knowledge of online learning, and family or friend involvement in online learning (Qazi et al., 2020).

Kapasias et al. (2020) emphasise that college students from marginalised sections in west Bengal face numerous difficulties in learning during the pandemic, and deliberate measures are needed to create an efficient education system that gives equal learning chances for all the students during this pandemic period. According to Kundu and Bej (2020), Indian students are neither ready nor satisfied with the shift towards online learning. Students are fearful and hesitant about this sudden change and face all sorts of challenges. Students consider this online shift a temporary adjustment because of the lack of possible alternatives in this pandemic situation. By analysing the data collected from the students of India's north-eastern states, Debbarma & Durai (2020) revealed that several factors contribute to educational disruption among students. Those factors need to be adequately assessed to improve students learning quality. We do not have a clear picture of the issues related to the readiness, design and effectiveness of online learning, especially in a developing country like India, where there is a lot of technical constraints such as the availability of suitable device and bandwidth poses a significant challenge (Muthuprasad et al., 2020).

Azubuikwe, Adegboye & Quadri (2020) asserts that the digital divide and social and cultural replication of education inequality persist in Nigeria, especially during COVID 19 lockdown phase. There is a significant difference in access to online learning resources among government and private school students. A large proportion of school students may be unable to study at all during COVID 19 due to inadequate remote learning opportunities. Reimer et al. (2020) assess the inequality in students reading behaviour during the pandemic in Denmark. The results indicate that students' online reading behaviour considerably increased due to the COVID 19 lockdown. There is a socio-economic disparity in students' reading behaviour, and reading behaviour inequality is increased exclusively during the lockdown, where schools conducted their classes online. The students, teachers, families, school administration, and society require significant adjustments to overcome this quick, unforeseen digital evolution of children's primary education (Iivri, Sharma & Olkkonen, 2020). COVID 19 outbreak resulted in a transition to online pedagogy that creates benefits, challenges, and inequalities, especially in a developing country (Oyedotun, 2020). Handel et al. (2020) say that educators and policymakers need to support higher education students more to handle emergency remote learning challenges more effectively. "There is a significant gap between the government's policy aspirations and the implementation of these online education policies at the fundamental level" (Charurvedi, Vishwakarma & Singh, 2020).

### Methodology

A survey was conducted using a questionnaire instrument developed to understand and analyse the acceptance of online learning during the COVID 19 Pandemic. The study was carried out in the rural fishermen community in Calicut, Kerala, India. The questionnaire was bilingual (English, Malayalam) since some respondents were more comfortable in their native language than English and carefully drafted using simple words since they were less than 16 years.

### Participants

The target population was high school students belonging to the rural fishermen community in Chaliyam, Calicut, Kerala. There are around 350 high school students in that community. A total of 130 questionnaires were distributed by applying the purposive sampling method and received back 105 questionnaires duly filled in by the

respondents. The questionnaires were self-administered and personally delivered. Of the 105 participants, 62.86 % of students were from class 10; 20.95 % and 13.33 % were from classes 9 and 8 simultaneously, and more than half of the respondents were female students (56.19 %). All the participants of this study were aged between 12 to 16 years.

### Data Analysis and Results

Data was analysed based on the objectives of the study and represented in tables and figures.

#### Knowledge about COVID 19

Table 1 represents the time, and the medium respondents first heard about COVID 19 Pandemic. More than 35 % of students knew about COVID 19 from December 2019 onwards. It is clear from table 1 that more than 80 % of the students knew about COVID 19 before it was declared a pandemic by WHO in March 2020. The source of their information was mainly social media (43.81 %), television (33.33 %) and newspapers (23.81 %).

Table 1. Knowledge about COVID 19

Knowledge about COVID 19	Response	Frequency	Percentage
First time heard about COVID 19	Dec-19	38	36.19
	Jan-20	26	24.76
	Feb-20	24	22.86
	Mar-20	17	16.19
Medium through which knew about COVID 19	News paper	25	23.81
	Television	35	33.33
	Social media	46	43.81
	Radio	1	0.95
	Others	3	2.86

\*The total is higher than the population as the question is multi optional.

#### Learning disruption and knowledge about online learning

As indicated in Table 2, Around 88 % of the respondents felt that COVID 19 pandemic affected their learning process. Less than 30 % of students knew about online learning before the outbreak of COVID 19, and only around 15 % of them used online learning tools before COVID 19. Table 2.1 represents the online learning tools they knew before COVID 19 outbreak. 9.52 % of students attended online classes and used digital textbooks (6.67%) before the pandemic.

Table 2. Learning disruption and online learning knowledge

Digital Learning	Response	Frequency	Percentage
Did COVID 19 affected your learning	yes	92	87.62
	no	13	12.38
Knew about online learning before COVID 19	yes	30	28.57
	no	75	71.43
*Used online learning tools before COVID 19	yes	16	15.24
	no	88	84.76

\*The total is lower than the population as the question is not answered by a respondent.

Table 2.1. Use of online learning tools

online learning tools used before COVID 19	Frequency	Percentage
Video conference	4	3.81
Digital textbooks	7	6.67
Online classes	10	9.52
Blog	2	1.90
Digital library	1	0.95

**Online learning experience and academic status during COVID 19 lock down**

The respondents were asked numerous questions to identify the online learning experience and their academic status during the COVID 19 lockdown. Such as the learning methods, syllabus completion, evaluation techniques, exam conduction, the online class attended per week and devices used to participate in online learning. From figure 1, it is evident that students are mainly relying on the VICTERS channel (76.19%) for learning which provides only recorded classes with zero interaction, followed by WhatsApp/Telegram groups (57.14%) and YouTube (49.52%). About 40 % of respondents (Table 3) say that less than 50 % of the syllabus was completed during this lockdown period, and teachers mainly relied on the online exam to evaluate the student's performance (86.67%). It was also found that 40 % of students attended online classes 4 to 8 times a week (table 4), and 22.86 % attended less than 4 hours/ week. About 75 % of the students used a smartphone to participate in online classes and other online learning techniques.

Figure 1. learning methods

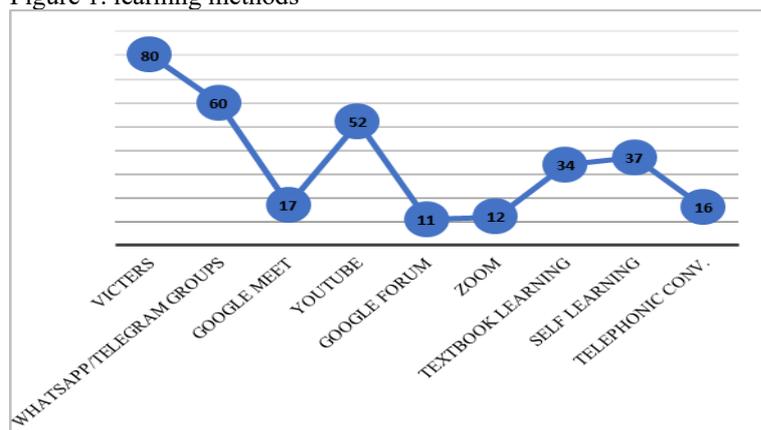


Table 3. Syllabus completion and evaluation techniques

Completion of Syllabus and Evaluation	Response	Frequency	Percentage
Syllabus completed	100	4	3.81
	75% more	26	24.76
	50% less	42	40.00
	25% less	17	16.19
	only exam conducted	7	6.67
	No response	9	8.57
*Evaluation techniques	online exam	91	86.67
	online assignment	3	2.86
	online seminar	5	4.76
	video conference	4	3.81
	no response	9	8.57

\*The total is higher than the population as the question is multi optional.

Table 4. Classes attended and devices used

Classes attended and devices used	Response	Frequency	Percentage
Online classes attended per week	12 to 15	8	7.62
	8 to 12	23	21.90
	4 to 8	42	40.00
	less than 4	24	22.86
	no response	8	7.62
*Devices used attend online classes and other techniques	Pc/laptop	3	2.86
	Smartphone	79	75.24
	Tablet	1	0.95
	Television	35	33.33

\*The total is higher than the population as the question is multi optional.

**Online learning impact in respondents**

Some questions were asked to understand the participants' online learning impact, including preference, self-learning ability, online learning effectiveness, and participants' satisfaction level. It is apparent from figure 2 that around 75 % of the respondents prefer face-to-face learning, and approximately 14 % of the respondents prefer online learning over face-to-face learning, while some students prefer (4.76 %) mixed methods over these two. Of the 101 who responded to the question, 68 respondents said online learning does not improve their self-learning ability. Students' satisfaction levels and the effectiveness of online learning were analyzed using the Likert scale. Table 5 shows that only a small number of respondents found online learning very effective (5.71%) during the lockdown period. Around 24 % of the students found online learning effective. In figure 3, it is evident that only a few students (9.52%) are fully satisfied. In contrast, most respondents point out that they are neither satisfied nor dissatisfied (37.14%) with the online learning facilities available during the pandemic.

Figure 2. Learning preference

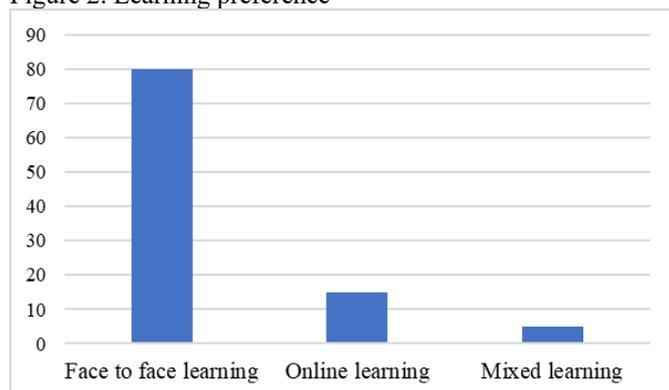
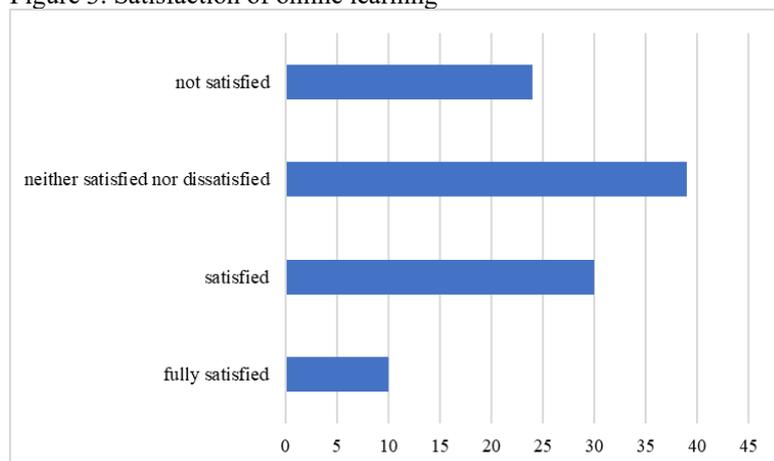


Table 5. Effectiveness of online learning

online Learning	Response	Frequency	Percentage
Effectiveness of online learning	Very effective	6	5.71
	Effective	45	42.86
	Moderately effective	21	20.00
	Not effective	25	23.81
	No response	8	7.62

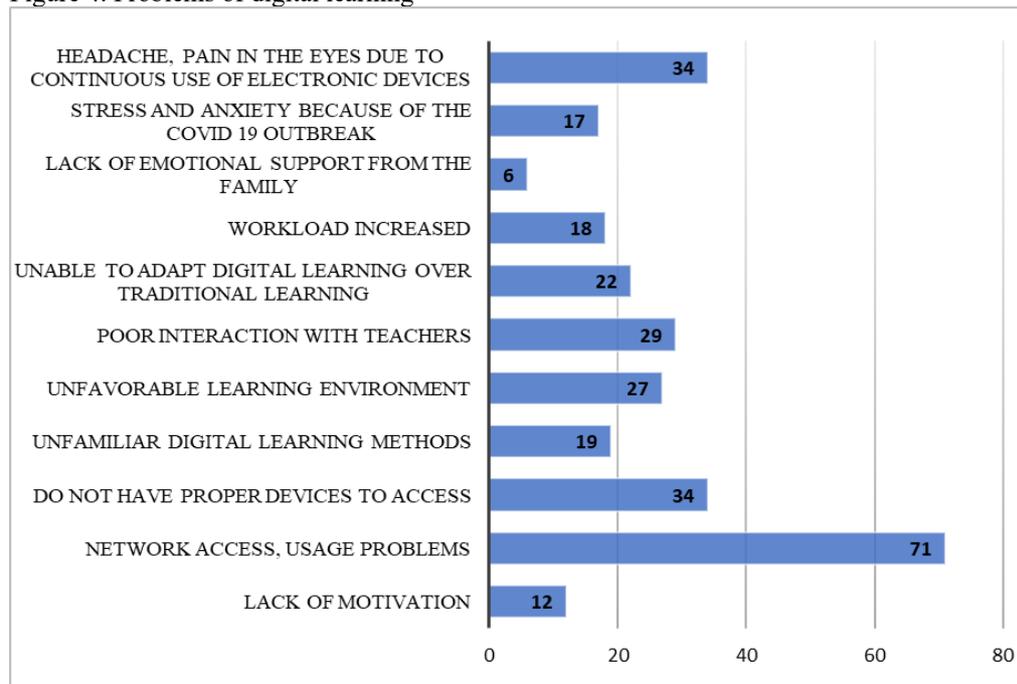
Figure 3. Satisfaction of online learning



**Problems related to digital learning during COVID 19 lockdown**

A query was asked to determine the respondents' difficulties while using the online learning facilities during COVID 10 lockdown. The data in Figure 4 shows that students faced various problems while using online learning facilities. Network access & Usage Problems (67.62%) are the most common among them; followed by health problems because of the continuous use of electrical devices (32.38%), absence of proper devices to access (32.38%), Poor interaction with the teachers (27.62%), unfavourable learning environment (25.71%), unable to adapt online learning over traditional learning (20.95%) etcetera.

Figure 4. Problems of digital learning

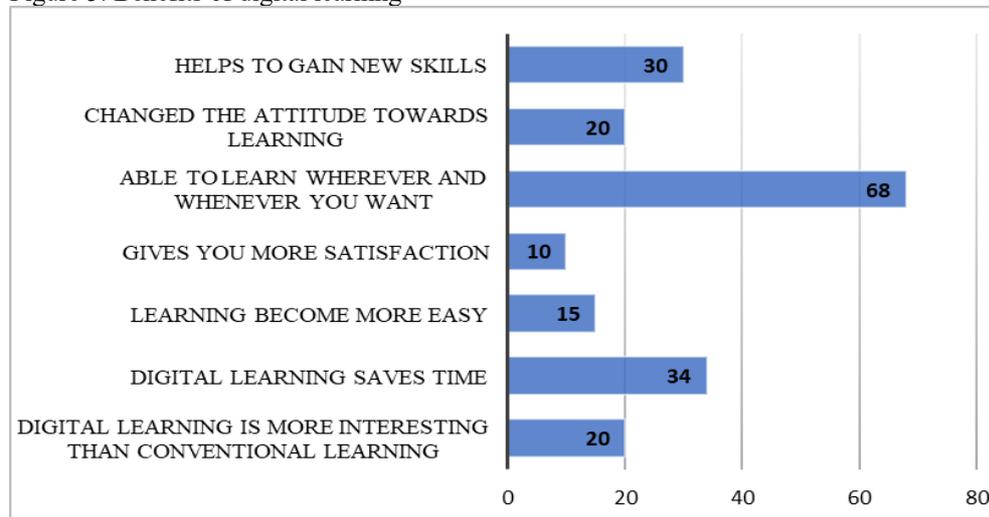


**Benefits of Digital learning**

When the participants were asked about the benefits of online learning, the majority commented that now they can learn wherever and whenever they want (64.76%). According to the respondents, online learning also saves their time (32.38%) and helps them to gain new skills (28.57%). Online learning also changed their attitude towards learning (19.05%), which is more interesting than conventional learning (19.05%).

Only a few respondents gave suggestions in the questionnaire, and they stated that it would be better if the schools were open by obeying COVID 19 protocols. They also commented that online learning does not give complete satisfaction and will never be able to replace the traditional method of learning.

Figure 5. Benefits of digital learning



**Discussion**

This study set out to evaluate the acceptance of online learning during COVID 19 by the school students from the fishermen community in Kerala. The study revealed that over 35% of the students knew about COVID 19 pandemic in December 2019. The majority of the students were aware of COVID 19 before being declared a pandemic by WHO. Interestingly, most students knew about the pandemic through social media, which shows the

social media influence on them. This finding corroborates the study by Kapasia et al. (2020), which shows students' high social media influence.

The majority of students' learning process was affected during the COVID 19 Pandemic. Only a few were aware of online learning before the pandemic; over 70% of students knew about online learning only after the outbreak of COVID 19. Only 16% of the students used online learning tools before the COVID19 outbreak, which shows the poor adoption of online learning among students before COVID 19. A minimal section of the respondents attended online classes and used digital textbooks for learning purposes before the strike of COVID 19.

We also asked questions to understand the academic status and online learning experience during COVID 19. Their response revealed that most students rely on the VICTERS channel for learning during the pandemic. VICTERS is an educational television channel by the government of Kerala. However, it only provides recorded classes with zero interaction, making it less efficient and ineffective. This finding shows students' lack of interest in interactive online learning methods. Students also use social networking sites such as WhatsApp, Telegram, and YouTube for learning, confirming the respondents' social media dependency. Nearly 40% of the students say that their syllabus finished less than 50%, and teachers mainly used online exams to evaluate their performance. The number of online classes attended by the majority of the students per week is only 4 to 8, showing their lack of interest in online learning. As seen in the study by (Muthuprasad et al.,2020), most respondents use smartphones to access online classes. Three-fourths of the students prefer face-to-face learning, and 68 students stated that online learning did not improve their self-learning ability which again proves the low interest among students in online learning. The Likert scale was used to trace the satisfaction and effectiveness of online learning. It is clear from the result that only a small number of students found online learning very effective. Most of them commented that they are neither satisfied nor dissatisfied with the availability of online learning facilities, which again shows, their disinterest in online learning.

During the COVID19 lockdown, students faced various problems while learning via digital technology. The more significant part of the students faced network access & usage problems, and they also faced health issues such as headaches and pain in the eyes due to the constant use of electronic devices. Many of them struggled because of the lack of proper devices to access online learning. They also faced difficulties because of the low interaction with their educators, unfavourable learning environments, and the inability to adapt online learning to traditional methods. From the response we got from the students, we also found out that online learning makes it possible to learn where ever and whenever they want, it saves much time for the students. It changed their attitude towards learning by making learning more exciting than traditional methods. Online learning has benefits and advantages over traditional learning, but mostly those benefits are overshadowed by the users' problems and difficulties. Educators must enhance the online learning experience by adequately assessing the student's learning quality and helping students be motivated to continue online learning.

### Conclusion

The study's main aim was to analyse the online learning acceptance among students from the fishermen community, a marginalised community in Kerala where the learning environments are not ideal. The study concluded that students are not keen on online learning despite substantial social media influence. Online learning was a new idea to most students; it took them by surprise, giving them lots of new learning techniques and opportunities they had never heard of before. However, somehow it also comes up with lots of problems and barriers. The major issues they face are the lack of proper network access and devices. These problems can be resolved by giving them adequate internet facilities and devices and improving their interest in online learning. Suitable learning environments are equally important as the content we offer. It is of no use if the students lack proper learning conditions. We must ensure that barriers to online learning do not overshadow the advantages and benefits of online learning. Appropriate initiatives need to be taken by the Government to ensure the impartial delivery of education for every student and empower them to manage and master their digital future.

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