Student's Experience With Online Learning In The Times Of Covid-19: Insights From A Coaching Institute

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Abstract - Online coaching is an innovative learning method that has gained popularity over the years. This includes the computer-based learning under which students can study according to their convenience within the comfort of their homes. This mode of education has, however, turned into the only feasible mode of imparting and receiving education wing to the outbreak of the COVID-19 pandemic.   This paper aims to focus on knowing and analyzing the experience and perception of the students towards the online classes in the backdrop of this crisis. The paper has used survey data and insights from the students enrolled at Edumentor Educational Services Pvt. Ltd. to draw inferences and conclusions. The study identified 'Enthusiasm among students' and 'Perceived Learning' as the dimensions of online learning which the prime contributors to the Overall Students Experience are. The outcomes of the study have implications for the Education Industry on the whole since the maximum numbers of operations of all the companies in this industry are expected to be conducted through online mode for a long period.

Keywords: Online coaching, Education, Edumentor, Enthusiasm among students and Perceived Learning

I. INTRODUCTION

Education has always been about schools and colleges working in a physical environment, where the students can be seen attending classes in huge numbers with a teacher teaching and then the students get to go home. But in the year 2020, this entire event transformed, when a pandemic made the entire world's education sector realize that the need of the hour is going online. Students all over the world started studying online, which received a mixed chain of reactions ranging from it being a blessing in disguise to it being a highly inconvenient situation. India ranks 2nd for the most densely populated country in the world, as per the UN data.

1.2 Government initiatives for Education Industry

Before COVID-19 took place in the country there was high growth and adoption for education technology. As per a report by World Economic Forum (2020), an investment under Global EDTech has reached to US$18.66 billion in 2019. Soon, $350 Billion is the estimated figure for the online market education by 2025. There has been a huge surge in the use of online education since the outbreak of COVID-19.
India's population is 17.7% of the total world population in 2020, which was estimated to be 1,380,004,385 people that. Of the total population, around 500 million people are the Early youth (age between 10-30 years), who are ready to be educated and employed (Rising population and India @2020, 2020). India's education industry is gaining its importance for the young generation to become better citizens of the country and help in the country's development.
In India, the education sector is the strategic priority for the Government. According to FDI India (2020), since 2002 in education sector, 100 % of Foreign Direct Investment (FDI) is allowed since 2002 by the government.
Within the period of April 2000 to March 2020 it is projected that the total FDI Inflows for the education sector is US$ 3.24 billion.(Department for Promotion of Industry and Internal Trade , 2020).
Union Budget, report for 2020-21 estimation (Output Outcome Budget, 2020), the Department of School Education and Literacy has allocated US$ 8.56 billion (Rs 59,845 crore) by government. In continuing with the same report, an

outlay of US$ 429.55 million (Rs 3,000 crore) is provided for Revitalizing Infrastructure and Systems in Education (RISE) before 2022.

PM eVIDYA, Manodarpan, Pedagogical framework, New National Curriculum, National Foundational Literacy, and Numeracy Mission is launched by the government. These are the programs to provide access to digital/online education and to provide a framework for the education system.

1.2 Education industry

The education industry consists of the profit and nonprofit organizations whose primary objective of operations is to provide education. These organizations include all the schools like preprimary, primary, and secondary and elementary schools and it also includes all the undergraduate and post-graduation colleges who are involved in providing higher education to the students. The education industry not only consists of only the primary schools and the colleges but the other educational institutions that act as mediators to help the students in getting into their desired colleges and schools. The employees that are involved in providing education to the students in the education industry are the teachers who are professionals in the field of education or in the field that they specialize in. These teachers not only teach in their respective schools or colleges but also teach in other institutional centers for coaching the students who need extra guidance from their end. The education industry also generates revenue that is humongous in nature. The government of every country keeps implementing and coming up with policies and strategies to improve the education system of their country. This is done to improve the quality of the education that the students get from their schools and colleges and also to improve the number of enrollments in their educational institutions. A higher number of enrollments specifically in post-graduate colleges increase the rate of skilled labor and entrepreneurs and executives in the country, thus, improving the GDP of the country.

1.2.1 Key elements of the education industry

There are some key elements of the Education Industry that influence it makes the industry flourish. These 3 key elements are as follows: -Consumers, Institutions, and Workers:

The Consumers:

The students who seek the help of the education industry to improve their skills and qualifications are the consumers of the education industry. They support the teachers as well as the education institution by helping them financially. As they provide profits to the institution and help in filling the pockets of the teachers who are teaching for full filling their financial needs. With the changing scenario of the educational industry with the unfortunate start of the pandemic. The students are relying more and more upon the technology and more towards the tech-savvy models of teaching and studying.

The Institutions:

The institutions include the various schools, colleges, and universities that provide the school of education to the students. They provide a platform or a place where the students and teachers meet and share knowledge and education of a particular field or subject in which the teachers specialize. Not only does the institution include the private and government schools, colleges, and universities but also other vocational educational centers that provide facilities to the students or consumers to get ready for their desired college, and their desired job.

The Workers:

The workers in the education industry include administrators, teachers, librarians, lecturers, professors, sports coaches, counselors, etc. Apart from the teachers and the other staff members of the colleges, schools, and the universities, the workers also include the textbook publishers and assessment providers. These workers help in providing the students the education for which they are joining or enrolling in the schools, colleges, or universities. If we take the example of the current scenario of the pandemic, the only thing that the education industry is working on is the teachers or the workers, and the consumers. This pandemic has made the world realize that the education industry though is built-in with these three key elements but the institutions are only names to be a part of for the students and the teachers.

II. LITERATURE REVIEW

The literature review was carried out to identify the factors, which could broadly but decisively be attributed to the student's perception of online learning. Here, studies across the globe were considered. A step by step process of review of the literature was followed wherein order to analyze the perspective of preceding studies towards online and offline learning as a philosophy, the works comparing both the methods of imparting education were covered detailing issues like student's choice of learning environment, a requirement for the usage of technology in education, comparing the efficacy of online and traditional modes, etc. This step was followed by the studies about the factors which have a bearing on student's satisfaction and experience with online learning.

One of the pioneer studies which discussed the issue of student's choice for the learning environment was carried out by Clayton (2010). He examined the student's choice for a particular environment for the achievement of goals, self-efficacy, and learning strategies. The results of the study revealed that the students who have shown a mastery goal orientation and greater willingness to apply effort while learning preferred traditional environments. Students who were more confident about managing a nontraditional class preferred a less traditional environment.

The need for the use of technology in education was pointed out by Dimitrios et al. (2013). This was conducted for comparing traditional teaching methods vs. teaching through the application of information and communication technologies in the accounting field. The study concluded that modern teaching methods, strategies, and tools should adopt and integrate Information and Communication Technologies which could be further adapted according to the characteristics of individual students. Cho and Cho (2014) concluded that though students find offline collaboration to be more effective and satisfied, an online interface for offline collaboration was required. This study analyzed online and offline collaboration in an interior design studio by identifying Student perceptions and performance. Web-based and cooperative learning (traditional plus e-learning) was found to enhance the students' academic achievement more than the traditional method of learning (Ashoori et al. 2014).

However, according to Nguyen, 2015 there is robust evidence to suggest online learning is generally at least as effective as the traditional format of imparting education. Business students also perceived positive online experience despite several problems in the online courses (Alsaaty et al. 2016). This study compared Business Students' Perceptions for Traditional Versus Online Learning in Institutions of Higher Education.

A study by Namara and Murphy (2017) showed that online students engage and experience more excitement and enjoyment. The study was conducted in Ireland for Gamified learning through Online Versus Offline mode. They compared the online and offline cohort by providing an identical web design module. Online learning was also found to work better than offline learning in undergraduate medical education in a study by Pei and Wu (2019). The result shows that online learning enhances undergraduate knowledge, skills, and is considered as a prospective method in undergraduate medical teaching. A recent study by Wadhwa *et al.* (2020) analyzed the effects of sudden embracement of online mode of education by students and teachers due to the outbreak of a pandemic. The study advocated the combination of both online and offline learning modes to achieve effectiveness in teaching and learning.

Though there are a plethora of studies that focus on the factors contributing to the student's experience, motivation, satisfaction, and involvement of students while taking online classes. Some of them have been discussed here-

One of the pioneer studies which looked into the factors affecting student satisfaction and perceived learning in asynchronous online courses was carried out by Swan (2006). It explored the relationship between the student's perception and course design factors. It listed three factors i.e., clarity of design, interaction with instructors, and active discussion among course participants which significantly influenced student's satisfaction and perceived learning.

Online course structure along with peer-interactions and feedback from instructors were found to affect the online course quality in another work which was carried out during 2010. A study by Chen *et al.* (2010) used the hierarchical linear model (HLM) and multiple regressions to examine the impact of web-based learning on student engagement. The research shows there be a positive relationship between use the learning technology, student engagement, and learning outcomes.

The motivation of the students in an online course was found to be affected by the learning-teaching process, competencies of instructors, participants' attention, online learning environment/technical infrastructure, and time

management (Selvia 2010) the paper also stated that online learning environment/technical infrastructure, learning-teaching process, measurements, and evaluation should increase the student's motivation. The study by Ashoori *et al.* 2014 also specified that only the web-based method enhanced the students' achievement motivation. Further, the use of interactive features of e-learning was found to be effective in enhancing the motivation of undergraduate students. (El-Seoud, 2014)

2.1 Research Gap

In the literature review, it has been observed that there is a vast literature contrasting the results for online versus offline learning relationships. These researchers have identified various common dimensions and factors affecting student's perceptions of online learning across many industries and countries. The relationship between these two variables has been well explored and established in the educational context as well. The studies also tried to assimilate the factors affecting the perception of students and their satisfaction towards online learning.
However, the consequence of pandemic on this relationship needs to be uncovered. Online education has gained full momentum due to the pandemic. This paper attempts to explore the factors which have a bearing on the overall experience of students with online classes against this backdrop of COVID-19 when blended learning or traditional learning has been forced to convert to online mode. Thus, the paper contributes to the literature by studying these factors in the times of pandemic, especially for the Delhi region. It uses the case of Edumentor educational services Pvt. Ltd which has recently shifted its batches from offline to online mode. This further adds up to the relevance and recency of the results of this paper.

2.2 Research Objectives and Scope

The main aim of the study is to analyze the perception of students towards the online classes and their overall experience from those classes.

1. To explore the perception of the students towards online classes.

2. To filter out those factors that are contributors to overall students' experience at the chosen coaching institute and then build a general framework.

3. To propose strategies to improve the overall customer/students' experience /satisfaction from online learning.

2.3 Research Methodology

The present work is based on comparative and analytical data on the perception of students towards online and offline classes at the coaching center. A well-structured questionnaire was used to collect primary data. The inputs from the experts, observations through literature review, and the opinion of stakeholders at Edumentor helped in drafting the questionnaire.
The questionnaire focused mainly on collecting the data about the experience and perception of the students of higher classes at the coaching center.
 The first section of the questionnaire captured the demographic details of the respondents and their relationship with the Coaching center. The relationship between variables of online classes and students' satisfaction was explored in the second section. Many factors pertaining to online classes like the convenience of students, network issues while taking classes, value for money from the classes, motivation of students, perceive learning, etc. were included in the questionnaire. More than 180 questionnaires were obtained through the survey. Out of them, 168 filled in questionnaires were used for data analysis.
KMO test results (.743) confirmed the sampling adequacy of data that was to be used for factor analysis. Bartlett's test of Sphericity is significant (0.00) which confirms that the matrix is significantly different from an identity matrix.

Table 1:KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.743
Bartlett's Test of Sphericity	Approx. Chi-Square	227.541
	Df	10
	Sig.	.000

Factor analysis was used to group the factors and drop the insignificant ones. The two factors identified for further analysis were- *Enthusiasm for online learning* and *Perceived Knowledge/learning.* The appropriate descriptive and inferential statistical tools like t-test, ANOVA, Correlation, and Multiple Regression Analysis were used for examining data and achieving the objectives mentioned above.

III. DATA ANALYSIS

3.1 Descriptive analysis

Descriptive Statistics show a score of approximately 3.5 out of 5 which shows a trend towards satisfaction .It also reveals a scope for further improvement(refer Table 2).

.Table 2- Descriptive Statistics

	N	Mean	Std. Deviation
Enthusiasm for online learning	167	3.2814	0.76942
Perceived knowledge	172	3.5320	2.95787
Valid N (list wise)	167		

3.2 Demographics Analysis-Impact of gender

There is no significant difference between groups as demonstrated by the T-test as the value for F is more than 0.05 (refer table 3). There was no relation found between the impact of gender with Coaching center overall experience and variables pertaining to student's satisfaction level for online classes. This means that the student's enthusiasm and Perceived Knowledge for the online method of learning do not vary across the gender of students. However, the differences exist in the cognitive-motivational functioning of boys and girls in the academic environment, while the girls have a more adaptive approach to learning tasks and literature whereas boys are more technology-oriented. (Ghazvini and Khajehpour, 2011).

TABLE 3: T-Test for determining the impact of gender

		Levene's Test for Equality of Variances		t	df	Sig. (2-tailed)
		F	Sig.			
Overall students experience.	Equal variances assumed	.003	.954	.653	165	.515
Enthusiasmforonlinelearning	Equal variances assumed	.219	.640	-1.471	165	.143
Perceived Knowledge	Equal variances assumed	.110	.741	.861	165	.391

3.3 Correlation Analysis and Multiple Regression Analysis
To examine the relationship between the two independent variables i.e. student satisfaction factors and the dependent variable i.e. Overall student experience, correlation analysis was carried out using Pearson's correlation. A correlation result as shown in Table-4 indicates those factors which were significantly positively associated with the overall student's experience.

These results showed that all factors had a positive correlation with the Overall student's experience. This suggests that as the level of experience on each of the factors increases, the Overall students experience also increases. Thus, the correlations amongst the suggested factors and Overall Students Experience are in congruence with the findings of previous research studies. Further, the correlation coefficients between all the independent variables were less than 0.9, indicating that the data was not affected by a co-linearity problem. But the inherent limitation of the correlation technique is that a significant correlation does not necessarily indicate causation, but rather may indicate a common linkage between the independent variables and the dependent variable. Therefore, based on correlation results, we cannot conclude that these factors have a significant impact on the Overall student's experience. This suggests the need to conduct a Regression Analysis on the data. Therefore, to determine the relative importance of independent variables/causative factors on the Overall student's experience, Regression Analysis was carried out.

TABLE 4: Correlation between factors and overall student's experience

Variables	Overall students experience.	Enthusiasmforonlinelearning	Perceived Knowledge
Overall students experience.	1.000		
Enthusiasmforonlinelearning	.416	1.000	
Perceived Knowledge	.349	.486	1.000

Further, to determine the model fit, Regression Analysis was carried out. Result Table 5 shows that collectively both the variables cause a 20.1% variation in Overall Students experience. However, the model under study is significant as the p-value (.000) of the analysis is less than 0.05(i.e., it is a good fit for the data) (refer to Table-6).

Table 5: Regression analysis: Model Summary

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.448[a]	.201	.191	.646

a.   Predictors: (Constant), Perceived Knowledge, Enthusiasm for online learning

Table 6: ANOVAs

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.212	2	8.606	20.637	.000[b]
	Residual	68.393	164	.417		
	Total	85.605	166			

a. Dependent Variable: Rate your experience at the Coaching center from 1-5.
b. Predictors: (Constant), Perceived Knowledge, Enthusiasm for online learning

Even so, the variable –*Enthusiasm for online learning* is a significant contributor to the regression model (refer to Table 7). *Perceived Knowledge* also comes out as a nearly significant factor and contributor to the model.
Enthusiasm for online learning was related to their inspiration for attending the classes and their personal connect with the teacher. The relationship between the lecturers and the students (Suarman, 2015) and the motivation of students (Wach *et al.*, 2016) were found to have an effect on student's satisfaction.
Perceived knowledge attained was a superset of concentration and understanding among the students during online or virtual learning. *Perceived Knowledge* is the indicator of self-evaluation of the student as to the learning which ensued in online classes and the attentiveness, he feels during those classes. According to Balushi (2015), Students'

attention in the classroom is related to their academic achievement. This also affects their understanding of the concepts or learning (comprehension) and recall ability.

Table 7: Regression model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.454	.229		10.735	.000
Enthusiasm for online learning	.301	.075	.322	4.037	.000
Perceived Knowledge	.142	.059	.192	2.408	.017

IV. RECOMMENDATIONS

Based on the data analysis and findings on the subject, some of the recommendations to improve the overall student's experience with online classes have been formulated and discussed below:

1. The overall experience of the students with online classes did not vary across gender groups. There is no requirement for conducting the classes and dividing the sections on a gender basis. But further, it is suggested to conduct webinars and conferences for enhancing the overall experience of the students.

2. Positive correlation was found between the Overall students's, experience at the coaching institute, and *Enthusiasm for online learning*.

Enthusiasm for online learning comes from the student's relationship with the instructor and the student's drive in the online class. The factors like - tone set by the words of the teachers, the frequency of their presence, and the encouragement provided by them to the learners can have an important bearing on the student's *enthusiasm for online classes*. Hence teachers must be provided with the training from time to time to ensure that these factors are included in their lecture delivery. This will help in managing the motivation of the students as well as developing the trust and confidence of the instructors.

3. *Perceived knowledge* /learning achieved from the course refer to its perceived usefulness of the online classes from the student's perspective. This factor was also found to be correlated with the overall student's experience. If the student can concentrate well in the classes and exhibits a thorough understanding of the content, he perceives his learning attained from the classes to be on a higher scale. The concentration of the students in the online class can be improved by engaging them through games, activities, quizzes, etc. Well adapted curriculum, as well as innovative delivery modes (use of the features of online delivery platforms), can help achieves this very objective. Further, the use of Informative and well-developed announcements, wrap-up posts, and regular information of additional academic as well as motivational resources will help in improving the overall experience of the students.

4. Mean score values indicated a high satisfaction and overall positive experience of students with the institute. However, there is further scope for improvement. A detailed discussion with students revealed that they feel- offline classes are better than online ones. A deeper probe uncovered the fact that since the students had to shift to the online mode due to the outbreak of the COVID-19 pandemic, they are comparing it to the offline mode unintentionally. They might take some time to accept this change and the institute must help them in doing so by providing with all the required facilities and maintaining two-way communication with them.

V. CONCLUSION AND IMPLICATIONS OF THE STUDY

The present study has been able to identify *'Enthusiasm among students'* and *'Perceived Learning'* as the dimensions of online learning which are the prime contributor to the Overall Students Experience. It established the relationship between these variables and the overall experience of the students from online classes in the context of the pandemic.

According to Gedera *et al.,*2015, Online learning courses present challenges and concerns in relation to student's motivation and active participation compared to face-to-face classrooms where students' levels of motivation could be observed. Now as the transition to this mode has become inevitable in the wake of the COVID-19 pandemic, these challenges have gained gigantic proportions. This due to the fact that the forced and quick transition to this mode has posed a multitude of hindrances pertaining to physical, technological, and perceptual arenas. The study

attempted to explore these issues in the present context and provided both theoretical and practical implications. Theoretically, the findings of the paper add to the existing strand of literature on online learning and student's experience in the backdrop of COVID-19. On the practical front, the results of the study prescribe the guidelines for the aforesaid institute to improve students' experience as the paper identifies the significant parameters of online learning by taking the case of Edumentor educational services Pvt. Ltd. The study establishes the importance of online learning for coaching centers which are otherwise perceived to be less aggressive in their marketing strategies.

Further, the outcomes of the study would aid the other educational institutions in formulating student's centric strategies as well. This would pave the way for improving the student's satisfaction and their overall experience in the long run.
Hence, building these factors into the marketing strategy would positively affect the baseline for these institutes in the present times.

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