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Satisfaction of online education of college students during pandemic situation

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Abstract
The main aim of this paper is to explore the factors affecting student's satisfaction when the students participate in online learning through. The purpose of this study was to find out the level of satisfaction of online education, find out the level of satisfaction in (arts & science, male & female or rural & urban) students toward online class. Also identify the satisfaction of students and teacher and factor that which affect the satisfaction of online education at the moment of teaching through the teacher online platform. The descriptive survey method was employed to known the objective. A proper representative sample taken from the entire population and 99 under graduate students adopted in my sample from West Bengal State. The results showed that college students in West Bengal have an average or moderate level of satisfaction about online education and also find out the satisfaction college students about online education and did not have a difference with respect to their (Arts & Science), Gender (Male & Female) and Locality (Rural & Urban).

Keywords: Satisfaction, online education, college students, t-test, West Bengal

Introduction

The modern age is the age of science, the role of technology in this modern age is crucial. Online education is wide in India because of the population in India there are very few school, colleges and universities. From its inception online learning has been confronted by concerns about quality from the established educational community and society at large (Maskal, Wziuban, Thompson, Kramer, & Decantis) [10]. Student satisfaction is linked to the students, performance and student satisfaction is an important element in the investigation of faculty satisfaction (Bolliger & Wasilik, 2009) [3]. Often, in addressing these concerns student perception of their course experience becomes a surrogate for learning engagement in the context of satisfaction (Maskal, Wziuban, Thompson, Kramer, & Decantis) [10]. In particular online learning often results in significantly higher student attention then face to face education (Ghanderizefrch & Hoover, 2018) [7]. Reasons for offering online courses include improved students access, higher degree completion rates and the appeal of online courses to nontraditional students (Bolliger & Wasilik, 2009) [3].

Satisfaction is one of the five pillars of quality, together with student satisfaction, learning effectiveness, access and institutional cost-effectiveness. (Bolliger & Wasilik, 2009) [3]. While online teaching is not a new pedagogical method and has been used for many year of various field, there is still a lack of proficiency in implementing online learning platforms from K-12 to college level (Almusharraf & Khahro, 2020) [1]. Although satisfaction is the key concern for most educational institutions is a key concern for most educational institution and instructors. These are relatively few studies about what influences students satisfaction in blended and online courses (Ghanderizefrch & Hoover, 2018) [7].

Specifically, in the India online and teaching are not widely implemented across the college no within the school system (Almusharraf & Khahro, 2020) [1]. The government is supporting online education in India become of its potential to improve educational quality and reach through the digital India initiation (Jindal, 2020) [9]. The benefits of integrating online environments include developing autonomous learners in which they explore and seek information, assess, transform and acclimate new skill needed for millennium learners (Jindal, 2020) [9].

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Review of related literature

Goyal, S. (2012) [8] conducted a study on "E-learning: Future of education". This describes this study on the e-learning is getting very popular these days, as many universities are offering degree and diploma programs through e-learning mode. Many big companies are investing in E-learning and setting up their interactive classrooms like Reliance and Tata. So it will be much more important in the future. Robert et al. (2012) has conducted a study on "Investigating student satisfaction with e-learning courses: The effect of learning environment and social presence". The objective of the study is 1. Examine the relationship between students learning environment and social presence 2. Understand the effects of demographic characteristics, learning environment and social presence on student satisfaction with e learning courses. The result of the study was the positive correlation between the learning environment and social presence. Muhammad et al. (2015) has a conducted a study on "E-learning and students satisfaction".

This objective of the study was measuring satisfaction with learning environment in the first ICT based university of Pakistan, virtual university of Pakistan. The result of the study was that students are highly satisfied by the e-learning education provided by VUP. Nguyan, A. V. (2016) [2] has conducted a study on "Examining Students satisfaction with online learning activities in Blended learning course: A case study". The researchers conducted their study to investigate the following objectives: 1. Design a model of blended learning course with many interactive activities between teacher and students. 2. Identify the factors that affect the degree of satisfaction of students for group activities. 3. Evaluate the level of satisfaction of the students taking part in online learning activities in blended learning courses. The method of the study on descriptive data analysis tools use. The finding of the study is a positive effect of online learning activities in blended learning in students and teachers.

Oyewumi, O. Z et al. (2017) conducted a study on "perception of nursing students towards online learning: A case study of distance learning centre, ogbomoso, oyo state, Nigeria". The result of that study was, on high perception students of online learning, and online learning is more influence than offline learning. Somayeh, G., & Michael, M, L. (2018) has conducted a study on "Student satisfaction with online learning in a Blended Course". The objective of the study is how to influence online learning in student emotions, achievements, and satisfaction. The result of the study was 1. Students reports of high understandability and illustration in the course we're related to greater enjoyment and lower level of anger, anxiety and boredom. 2. Higher level of course expectation, difficulty, fact pace and lack of clarity was related to greater experiences of negative emotions such as anger, anxiety, and boredom. Stephanie, B. J & Claire, M (2018) has conducted a study on "student experiences in online courses".

The objective of the study on describe students their online learning experience. The finding of the study of the five major recurring themes about student experiences from each study include ability to balance school and life, time management skills, acceptance of personal responsibility, Instructor in all responsibility and connections with peers. Ronny, C. C., et al. (2019) have conducted a study on "student satisfaction and learning outcomes in Asynchronous online lecture videos". The objective of the study on Asynchronous online lecture videos on how to effect students learning outcomes and satisfaction. The result of the study is Positive effect of a synchronous learning in student outcomes. Shivangi, D. (2020) has conducted a study on "online learning a panacea in the time of COVID-19 Crisis". The objectives of the study was-To explore the growth of education tech-ups and online learning, To conduct on strengths, weakness, opportunities, & challenges (SWOC) analysis of online learning during the corona virus pandemic and natural disasters, and To give some suggestions are recommend actions for the success of online mode of learning during a crisis like situation. The results of the study on technology helped them overcome the barriers in the difficult time.

Objective of the study

1. Find out the level of satisfaction of online education in college students during pandemic situation.
2. Identify the level of satisfaction in arts and science students of online class.
3. Find out the satisfaction of male and female students on the time of online class in college students.
4. Find out the satisfaction in rural and urban students in online education and identify that, rural people faced to any type of problem during the online class.
5. To find the satisfaction of students and teacher at the moment of teaching through the teacher online platform.
6. Identify the factor that which affect the satisfaction of online education in college students.

Hypothesis of the study

1. The college students have low level satisfaction of online class in the time of pandemic situation.
2. There is no significance difference of the satisfaction of online education with respect their stream.
3. There is no significance difference between satisfaction of male and female students of the online class.
4. There is no significance difference of the satisfaction of online education with respect their locality.

Method

In the research qualitative and quantitative method has been used to knowing the all types objective. The Descriptive method, particularly the normative survey research method was used in the study. A total of 99 UG Students of West Bengal State have been taken as representative sample of the whole population. Simple Random Sampling technique has adopted for selecting UG Students.

An satisfaction scale (Likert type) was used for knowing the Satisfaction of the Under Graduate (arts and science, male and female or rural and urban) students of online education (Objective1, 2, 3 and 4). For positive items procedure of scoring as 5, 4, 3, 2, 1 and for negative items reverse scoring were done.

Also used the structure interview method to known the relationship between student and teacher or find out the factors of students satisfaction of online education (Objective 5 and 6).

Result and Discussion

The means, standard deviation, percentage were used for analyzing data. The t-test and F-test were employed for

testing hypotheses. Researcher has done date analysis based on some objective and find out the results on the sequential manner. Researcher has shown the value of statistics through some tables in the analysis. The results of the study were interpreted on the basis of the results found from the use of about mentioned statistics data.

Table 1: The level of satisfaction of online education

Scores	Frequency	Percentage	Levels of Attitude
Above 45.298	16	16%	High
Between (45.298-44.542)	66	66%	Moderate/Average
Below 44.542	17	17%	Low
Total	100	100%	

Hypothesis-1
The investigators checked the Hypothesis-1 through the assistance of the cut-off point. Here Cut-off Point here is $M \pm 1\sigma$. Mean 44.920, N=100 and σ=5.675, which implies M +1 σ is 44.920 + 1× 5.675 = 79.998 and M -1 σ is 44.920-1×5.675 =70.002.
Most of Students (66% in number) i.e., 66% of Graduate Students had scores ranging from 45.298 to 44.542.
Therefore, the satisfaction of college students in West Bengal was said to be neither more favourable nor unfavourable towards online education i.e., satisfactory or average in satisfaction of college students about online education.

Table 2: Showing Significance of differences between different variable through t-test (Stream, Gender and Location)

Variable	N	Mean	SD	S_{ED}	t	df	Mean difference	Level Significance
Stream								
Arts	26	44.115	6.611	1.30	.825	97	-1.06	95% No Significance
Science	73	45.191	6.366					
Gender								
Male	35	45.228	6.385	1.20	.41	97	.494	95% No Significance
Female	64	44.734	5.34					
Location								
Rural	69	44.40	5.615	1.24	-1.33	97	-1.66	95% No Significance
Urban	30	46.06	5.83					

Testing of H_{02}
It is revealed from table no. 2 that the df is 97. Therefore, at 0.05 level, a t-test is significant if it is 1.98 or more. Since the estimated value of 't' = .825 is lower than the table value of 1.98(.825<1.98), the difference between the satisfaction of college students in west Bengal during online education is not significant at 0.05 level. The H_{02} is therefore accepted; that is to say, there is no significant difference between the Satisfaction of online education in West Bengal arts and science students.

Testing of H_{03}
It is revealed from table no. 2 that the df is 97. Therefore, at 0.05 level, a t-test is significant if it is 1.98 or more. Since the estimated value of 't' = .410 is lower than the table value of 1.98(.410<1.98), the difference between the satisfaction of college students in west Bengal during online education is not significant at 0.05 level. The H_{03} is therefore accepted; that is to say, there is no significant difference between the Satisfaction of online education in West Bengal male and female students.

Testing of H_{04}
It is revealed from table no. 2 that the df is 97. Therefore, at 0.05 level, a t-test is significant if it is 1.98 or more. Since the estimated value of 't' = -1.33 is lower than the table value of 1.98 (-1.33<1.98), the difference between the satisfaction of college students in west Bengal during online education is not significant at 0.05 level. The H_{04} is therefore accepted; that is to say, there is no significant difference between the Satisfaction of online education in West Bengal rural and urban students.

Find out the satisfaction of students and teacher at the moment of teaching and factor that which affect the satisfaction of online education in college students
In this situation, it is very difficult to know the exact information of teacher-student relationship and actually what the factor has satisfied on online education. In view of the above objective, we are conducted interview method with the teacher and students and try to know the main factor of satisfaction of online education or also know as student-teacher relationship at the moment of online education. The questions has –

The questions asked to the Teacher are:
1. Every student can be participating in the course discussion?
2. Is the computer-mediated communication is an excellent method for social and online interaction?
3. Computer-mediated communication is more impersonal than classroom discussion method?
4. Online class through maximum students can easily connected in you class?
5. You have a strong time management skill?
6. Every student can easily monitor of her instruments?
7. How much you emphasize the motivation of your students?
8. You have an multitasker?

The questions asked to the Students are:
1. You are satisfied with the instructions various online teaching approaches?
2. Are you satisfied with the instructors follow up?
3. You are satisfied with how the instructor makes online learning?
4. Online learning help your understand course material?
5. You are more likely to ask questions in an online class through?
6. You can believe the online education as kind of teacher centric education?
7. You can easily assess of your course from any place in the world?

We conducted personal interviews with about 50 teachers and 75 students. At that time different teachers and students expressed their views in different ways. So I have tried to explain their opinion in 2 ways.

Positive aspect
Today the advantage of online education are more important than over. School course and other disruption to your daily life do not have to prevent you from growing learning. Most of the teachers that the online courses provide a safe and effective alternative to the classroom and online education is the ability to learn anytime you want. Teachers are says online learning is incredibly beneficial for building time management skill for future career opportunities. Students do not have tom travel to the classroom you can also save on your daily commute that includes time, effort and money for gas and tolls.
1. Most of the primary factor as to satisfied students through online education is students can easily monitoring of your device that is very simple.
2. In a psychical class we would have to take notes on everything that the teacher tells as, but in online classes, everything is recorded either on video or in writing.
3. Another factor for satisfaction of online education is online education is that is relatively low cost and gives people who can't afford to go to physical school access to quality education.

Recently West Bengal Government announced that every higher education students will give a smart phone for higher study.

Negative aspect
In the pandemic situation as online education is the best method of teaching but at this time some related issue facing on online education. Most the teacher says that not all students can join during online classes especially in rural areas students can't attend classes properly due to internet or other problem. Again some students said that teachers do not have any schedule for online classes, as a teacher conducts the class at any time of night or morning. So the students can't attend the class properly.

Conclusion
Finally we can say that the importance of online education is very importance for all college students, such as students of arts, science, male, female, urban, rural etc. Moreover, in 2015 our Prime Minister says to make India a digital India. To important this policy was to conduct online education. Moreover since almost all students are interested in this online education, this online education can be restored in the future. If education is conduct online through therefore students can be educated at the same time. We can say that students get more pleasure through online education. So it is necessary to pay special attention to this online education in the future.

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