

GURU NANAK COLLEGE ,SRI MUKTSAR SAHIB

**A CASE STUDY OF STUDENT SATISFACTION REGARDING
ONLINE TEACHING DURING PANDEMIC SITUATIONS**

**A
PROJECT
SUBMITTED UNDER
STAR COLLEGE SCHEME
DBT, GOVT.OF INDIA**

**SUBMITTED TO
JASKARANBIR KAUR
ASSISTANT PROFESSOR
P.G. DEPARTMENT OF MATHEMATICS**

**SUBMITTED BY
JAGPREET KAUR(B.SC III,5926)
MANVEER KAUR(B.SC.III,5920)
LOVEPREET KAUR(B.SC.III,5921)
MUKTA(B.A.II,2149)**

ACKNOWLEDGEMENT

It is proud of my privilege and pleasure to express my deep sense of gratitude to my project guide, Mrs.Jaskaranbir kaur (Assistant Professor, P.G. Department of Mathematics, Guru Nanak College, Sri Muktsar Sahib, Punjab.) for her help, valuable guidance and constant encouragement. I am also thankful to all teaching staff of PG Department of Mathematics who have rendered their valuable guidance and assistance from time to time.

INDEX

Sr. No.	Title	Page No.
1.	Abstract	3
2.	Introduction	4
3.	Literature review	5
4.	Research method	6
5.	Analysis	8
6.	Results	9
7.	Conclusion	13
8.	References	14

1 Abstract

The aim of this study was to investigate the relationship between interaction and online learning satisfaction, whether this relationship is mediated by academic self-efficacy and student engagement among students during the COVID-19 pandemic. A serial mediation model was developed to examine the proposed relationship. This study employed a cross sectional, questionnaire-based research design. A sample of 283 Shri Muktsar sahib students from an online survey questionnaire from December 2020 to January 2021 to respond to questions on demographic characteristics and items to measure the variables in the research model. The results of the measurement model showed good reliability and validity for all constructs. The results of the structural model and hypothesis testing showed that all hypotheses were supported in this study.

2 INTRODUCTION

An emergency public health international concern has caused most higher education institutions worldwide to precipitously close in late March 2020 to avoid the spread of the COVID-19 pandemic . Because of these closures, universities were required to use online teaching platforms, regardless of students' and teachers' level of expertise in technological competencies and preparedness .

While online teaching is not a new pedagogical method and has been used for many years in various fields, there is still a lack of proficiency in implementing online learning platform school to college-level. Specifically, in the school level. After the COVID 19 pandemic, university instructors were given limited online options, including live lectures, recorded video lectures, voice-over demonstrations, and picture-in-picture presentations to deliver the rest of their required instruction. With the latest growth in online learning and integrating technology in teaching in Shri Muktsar sahib, it is indispensable to explore what underpins the students' satisfaction level in online learning settings and provides technical training and proper instructions. Research has identified numerous critical challenges thought to affect learning within an online environment. Such challenges include instructors' assessments of learners' academic integrity,

cyberstalking and cyberbullying, lack of internet access, low quality of online instructional delivery, cost control, individual in learning, lack of professional technological training, tool inaccessibility, and technical issues. Additional challenges are related to the instructors' adaptability skills to customize lectures for online learning, learn to monitor students' synchronous or asynchronous collaboration, and design authentic online assessment tools that accompany the transition to the online platforms from face-to-face sessions. Thus, online instruction necessitates various skills, including pedagogical skills, design skills, technical skills, and communication skill, argues that "case studies, storytelling, streamed videos, discussion groups, and bulletin boards" are examples of effective communication techniques, and they are the critical foundation of an interactive online environment.

A series of recent studies has indicated that most learners perceive customized or personalized video lectures as useful resources that supplemented their learning—these results aid faculty in comprehending how to use video as a guide to learners' development. The inclusion of various technological tools plays a significant role in stimulating the online education environment and encouraging critical thinking in collaborative interaction.

3 The Literature Review

3.1. The theoretical framework

This paper is based on the premise of transformative learning theories, which describe the learner's authority and investment over his or her learning. This theoretical framework fits well with this paper, in which it examines adult English as a Foreign Language (EFL) learners' attitudes and perceptions toward experiential online learning in the sudden transformation of the online environment in Muktsar. The transformative learning theory, which is based on the value of personal experience as a central part of the learning process. It proposes that a learner's understanding of the experience creates meaning, which leads to a transformation in behavior, attitude, and views. In transformative learning theories, learners are exposed to challenge tasks to motivate students' thinking. Learners are critical thinking and questioning techniques to measure their understanding of subject matter. It is critical to point out that when transformational learning occurs, learners initiate the learning process to

contribute and collaborate to the social environment in eLearning course design. This study is written to add to the literature reviewed on EFL learners' perceptions and transformative performances toward using online learning platforms as mainstay instruction in Muktsar during the COVID-19 pandemic outbreak.

3.2. Background of online learning collaboration

Within this study, learners were given opportunities to collaborate in Synchronous Computer-Mediated Communication (SCMC) in language learning in which their interaction between two or more learners concurrently transfer through a computer [28]. Collaboration is also measured through learners' actions in planning, evaluating, valuing, and monitoring their own and peer offerings. Collaborative learning can be broadly defined as an instructive method that includes the core of cooperative learning . Within Collaborative learning, groups of learners collaborate to build a project, assess a development, or complete a mission.

Further, collaborative learning within this study adapted technological tools such as the Learning Management System (LMS), Google Classroom, and Google Hangouts that are supported and recommended by the study school context. Within video-conference courses, instructors incorporate exterior materials such as quizzes, activities, and learning sessions. The employment of video-conference permits useful guidelines on various levels of knowledge and cognitive skills of learners and links with the divergent learning styles. Students' contributions are either determined by the instructor as an individual task or by a peer as group work.

3.3. Students' perceptions of online learning

A more comprehensive description of students' perceptions of online learning can be found in study, where learners perceive online collaborative English language learning as a positive and encouraging learning experience, primarily on account of the productive peer-feedback participation in eLearning. A study by showed that the online learning environment encourages a positive influence and improves EFL students' writing skills, self-assurance, and power in composing written texts.

4. The coronavirus (COVID-19) impact on students online learning

COVID-19 has a destructive impact on students learning achievements. [40] in his study of the effect of COVID-19 on the students' performance, their students' grades negatively affected the epidemic, considering that the school academic calendar was brusquely disturbed by the early closure of all institutions in Muktsar. A more comprehensive description can be found in study regarding the influences of (COVID-19/SARS-CoV-2) epidemic outbreaks on worldwide supply chains: China, Europe, North America, and South America. The result of this study revealed that destructive effects were reported, but mainly learners' performance depended on the timing and measure of interruption spread and the school arrangement. These studies' results are in line with regarding learners' negative perspective on the Impact of COVID-19 on their learning. The main issues were related to limited access to the internet and the lack of technical knowledge. The purpose of this survey study is to explore students' perceptions of online learning delivery, as well as instructors' and school support during the COVID-19 pandemic. It also aims to investigate students' preferred online platforms and methods of learning.

4 Research Method

The purpose of this survey study is to explore students' perceptions of online learning delivery, as well as instructors' and school support during the COVID-19 pandemic. It also aims to investigate students' preferred online platforms.

The survey utilized in the current study was created by the researchers and was based on information about online learning and teaching from the extant literature and from the experience of the first author, who earned a Ph.D. in Higher Education and involved in teaching EFL postsecondary level in the Muktsar. Concerning the validity of the instrument, the survey was reviewed by three qualified local and international postsecondary instructors with an academic rank of associate professor or higher within the field of education, and with at least three years of experience in online teaching. Content validity was applied when modifications were made to the survey's structure and content to meet their recommendations.

The survey was generated using Google forms using the online platform and through which

it was disseminated. The survey was made available to all undergraduate students in May 2020. The first three opening questions within the survey urged the respondents to provide demographic information about themselves. The remaining twenty-two questions required responders to specify their level of agreement to a statement typically in scale ranged from (1) strongly disagree (2) disagree (3) neutral (4) agree, (5) strongly agree.

All questions were shaped in a set of online questionnaires and to attain the students' perceptions and satisfaction level on the effectiveness of different actions taken by university management to promote online teaching and learning during the COVID-19 pandemic. The survey was sent to the students via different online portals, including the learning management system (Moodle), Google Forms, social networking apps (WhatsApp and Twitter), and emails. The questionnaire was divided into four sections; student demographic details, students' satisfaction level of the online learning environment, students' satisfaction of the school support, and students

4.2.Participants

The total number of participants who responded to the survey was 283. The participants' ages range from 18-30. Participated students were from various majors including IELTS or TOFEL exams to be excused from the preparatory year's English Language curriculum. Therefore, the survey was conducted in English, and no translation was necessary to be added as the items were written in basic English to be easily understood .

5.Analysis

A descriptive statistical analysis of the survey was conducted using SPSS. Responses to each question were imported into SPSS from Google forms, and complete data of 283 respondents for each question was plotted in SPSS interface. Aggregated Mean Score (AMS) was used as a data analysis approach. The AMS has been successfully used numerous times in such data sets . In the next validation was a crucial milestone in this research; therefore, a two-tier approach was developed. Standard Deviation (SD) and Skewness & Kurtosis tests were conducted on the data in tier one. Both validate each question separately as a distinct entity. Whereas in tier two Cronbach Alpha test was conducted to validate the whole result set of this study.

5.1 Standard deviation

Standard deviation is a function of how often a range of values differs or disperses. Statisticians have calculated that values no higher than plus or minus 2 SD are Measurements closer to the true value than those in the higher than $\pm 2SD$ region [48].

5.2 Skewness & kurtosis

Skewness is a function of the asymmetry, and kurtosis is a function of a distribution's 'peakedness.' Most quantitative packages send you skew and kurtosis values, as well as Standard errors. The values for skewness between -2 and + 2 are considered appropriate To prove normal univariate distribution. The kurtosis values between -3 and + 3 are Deemed appropriate to prove normal univariate distribution .

6. Result

In the first phases of the questionnaire of this paper, respondent demographic information was collected. Table 1 shows the respondent's age.

Table 1. Respondent Age

Valid	Frequency	Percentage	Valid percent	Cumulative percent
	18 or under	29	10.2	10.2
	19-24	220	77.7	88.0
	25-30	34	12.0	100.0
	Total	283	100.0	

The respondents' age ranged from 18 or under to 30 years old. In this study, participants who reported their age from 19-24 years are 77.7% in total. Whereas, the students who reported their age of 18 or under and 25-30 were at smaller percentages. Table 2 shows the respondent gender categorization.

As per the total data collected for this research, 46.6% were female students from the women's campus, and a total percentage of 53.4 were male students from the men's campus. Table 3 shows that the average mean score of all the questions incorporated in section two of this study's questionnaire. The table also shows the results of skewness and kurtosis. Both approaches were used to validate this research's results, and their acceptable

limits were discussed in the last section. The item questions can be shown in Appendix (A).

Valid		Frequency	Percent	Valid percent	Cumulative percent
	F	151	53.4	53.4	53.4
	M	132	46.6	46.6	100.0
	Total	283	100.0	100.0	

As per the total data collected for this research, 46.6% were female students from the women's campus, and a total percentage of 53.4 were male students from the men's campus. Table 3 shows that the average mean score of all the questions incorporated in section two of this study's questionnaire. The table also shows the results of skewness and kurtosis. Both approaches were used to validate this research's results, and their acceptable limits were discussed in the last section. The item questions can be shown in Appendix (A).

Table 3.

Items	N	M	SD	Skewness		Kurtosis			
	Statistics	Statistics	Statistics	Statistics	STD.error	Statistics		STD.error	
I am satisfied with the level of support	283	3.88	1.042	-.990	.145	.369		.288	

I am satisfied with the faculty members' alternative assessment Plan	283	3.91	1.070	-.995	.145	.311	.289
I am satisfied with the course modality in delivery	283	3.87	1.024	-1.021	.145	.596	.289
I am satisfied with the online classes as they helped me achieve the course learning outcome	283	3.90	1.057	-1.034	.145	.644	.289

I am satisfied with the instructor s' follow-up	283	3.99	1.040	1.141	.145	.801	.289
I am satisfied with the gained knowledge and skills	283	3.89	1.049	-.904	.145	.203	.288
I am satisfied with the course level of engagement	283	3.90	1.045	-.920	.145	.256	.288
I am	283	3.89	1.107	-.935	.145	.124	.289

satisfied with the instructor s' various online teaching							
--	--	--	--	--	--	--	--

approaches							
I am satisfied with how the instructor makes online learning	283	3.95	1.092	-1.043	.145	.416	.289

As mentioned earlier, the questionnaire was divided into four sections, and the first section highlighted the EFL students' demographic contribution. In the second section of the questionnaire, the students' satisfaction level with the online learning environment was assessed. It is analyzed that the students are satisfied with the online learning environment during the COVID-19 pandemic. None of the factors had an average mean score below (AMS 3.5/Agree), an acceptance agreement threshold. The students were satisfied with the instructor approaches chosen for the active learning environment in which instructors encourage self-exploring, peer collaborating, and group collaboration.

7.Conclusion

Due to the spread of COVID-19, all sectors in the Muktsar, including the education sector, have prepared emergency and exit contingency plans to manage and overcome this unexpected epidemic. The institution in Muktsar and faculty members made numerous efforts to teach online and provide the students with the best experience during the COVID-19 pandemic under the active guidance of the Ministry of Education (MoE). This study explored the effectiveness of these teaching and learning experiences through students' perceptions of

the actions taken by instructors, staff members, and the institution during online teaching. This study concludes that the students are satisfied with the university staff and faculty members who created a unified vision after COVID-19 in which they agreed on specific platforms to use, grading system, assessment options, training workshops, and online technical support.

8. References

- [1] J. Mezirow, "Learning as Transformation: Critical Perspectives on a Theory in Progress. The Jossey-Bass Higher and Adult Education Series," no. Generic, p. 371, 2000.
- [2] J. Wong et al., "Preparing for a COVID-19 pandemic: a review of operating room outbreak response measures in a large tertiary hospital in Singapore," *Can. J. Anesth.*, 2020
- [3] F. C. Bonafini, C. Chae, E. Park, and K. W. Jablokow, "How much does student engagement with videos and forums in a MOOC affect their achievement?,"
- [4] E. N. Whelan Ariza, "Professional Development and Online Technology," *TESOL Encycl.*
- [5] S. Al-Sharhan, A. Al-Hunaiyyan, R. Alhajri, and N. Al-Huwail, "Utilization of Learning Management System (LMS) Among Intors and Students,"
- [6] A. Alenezi, "The role of e-learning materials in enhancing teaching and learning behaviors," *Int. J. Inf. Educ. Technol.*, vol. 10, no. 1, pp. 48–56, 2020.
- [7] P. Freire, "Pedagogy of the oppressed," *Soc. Work A Read.*, pp. 114–120 [8] N. Almusharraf, "English as a foreign language learner autonomy in vocabulary development," *J. Res. Innov. Teach. Learn.*, vol. 11, no. 2, pp. 159–177, 2018. [9] D. Kaufman, "Third generation course design in distance education," *Postsecond.* [10] A. Kaye, "Computer-mediated communication and distance education,"