

# Examining the Student's Behavior towards e-Learning in COVID-19

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## Abstract

The COVID-19 has resulted in educational institutes closed the whole way across the world. Therefore, many universities have invested in the digital solutions and teaching are embraced on an advanced stage through virtual platforms to keep students in-touch with education. The purpose of this research is to identify the determinants of students' behavior of e-learning and to investigate how these determinants can shape students' intention to use e-learning in the future. This study utilizes the Technology Acceptance Model (TAM) as a hypothetical establishment to reveal the students' perception of ease of use, usefulness, and attitudes towards e-learning. Research takes a sample of Khazar university (Azerbaijan) students. The findings of this research help to establish more user-friendly websites and also provide a vision to improve e-learning for students.

**Key words:** *E-Learning, Distance education, COVID-19, Behavioral Intention, Attitude, Technology Acceptance Model.*

## 1. Introduction:

The spread of coronavirus disease (COVID-19) has influenced all global citizens. The pandemic is a health crisis that resulted in an emergency lockdown to avoid potential risks around the world. This pandemic is a massive challenge to the education system and needs action associated with the learning model policy. The closure of educational institutions interrupts the students learning. Implementing technology can settle these issues to assist students with building up their aptitudes [1].

Online learning has a long history begins with the e-mail adoption of computer networking in the 1970s, it was first utilized for scholastic data trade and afterward to enhance college-level courses. The first online course started in 1981 [2]. The 21st century begins with the changing perspective in mentalities towards online edu with worldwide advancement of teachers and students towards networked collaborative learning. This innovation made online education progressively available and permitted new academic models to rise and extended the scope of disciplines that could be offered on the web [3].

Industries fundamentally revolutionized by digital evolution. Education needs to redesign to meet the challenge of the digital world. The emergence of new academic formats offers the combination of cost viability joined with flexibility and represent a milestone in the domain of education bring convenience for students in their busy schedule. Students can get benefit from a video conference among themselves and with professors along with the traditional face-to-face lecture [4].

Today digital innovation is an integral part of our society, especially for the young generation. The educational landscape requires to adopt more modern integrated approaches to shape their digitalized future. COVID-19 pandemic highlights the need to use online models to accomplish the learning objectives [5].

## 2. Literature Review:

There is a significant impact of the COVID-19 epidemic on education. During the lockdown, instructors are told to educate through web-based channels [6]. [7] Identifies that there is a need to embrace advanced learning for proceeding with education and to lower mental pressure and tensions during the lockdown. The ramification of the outbreak of COVID-19 is digital transformation in the education framework through online lectures, videoconferencing, digital open books, online assessment, and communicating at virtual channels [8].

Digital learning is the transformation of learning processes, operations, and frameworks in order to best utilize the new technology. Simply put, digital learning means learning using electronic media. [9] Describes e-learning as a set of guidelines conveyed through all electronic media, for example, the internet, intranets, and extranets. In this manner, by disposing of the boundaries of time and distance, people would now be able to take responsibility for their own deep-rooted learning [10, 11, 12]. [13, 14] analyzed several benefits of e-learning technologies including flexibility, affordability, and self-pacing for slow or quick learners. In addition, learners can also learn through an assortment of exercises and track their development.

Electronically supported learning (e-learning) is the future of education so determining behavioral intention is critical to anticipate the student's acceptance. As "if a person intends to do a behavior, then it is likely to be done". One of the well-known models that use behavioral intention as a determinant of technology acceptance is TAM [15].

TAM proposes that an individual's behavioral intention defines actual use of the system and users develop an affirmative attitude toward technology when they feel that it is useful and easy to use [16]. As reported by [17] perceived usefulness is "the degree to which a person believes that the use of technology will produce better outcomes". This implies if students see that the internet learning framework can help improve their performance, they most probably utilize web-based learning in their learning cycle. Perceived ease of use describes the user's view of the measure of exertion needed to use the system or the degree to which a user thinks that utilizing a specific technology will be easy [18]. [19, 20, 21] study reveals that behavioral intention (BI) explains "the extent to which a student formulates conscious plans to use or not to use online learning-related activities.

## 3. Materials and Methods:

This quantitative research employs 151 students of Khazar University selected through random sampling. A questionnaire was developed on the core concept of TAM model constructs include student's perceptions on e-learning such as perceived usefulness (PU), perceived ease of use (PEU), attitude and behavioral intention to use e-learning system by using a five-point Likert scale ranging from strongly agree (5) to strongly disagree (1). The questionnaire was made of close-ended questions. The initial inquiries were posed to see the web use frequency and whether the student had ever used online learning. Four things estimating ease of use and five things estimating usefulness of student using online education were gotten from Davis (1989). Data analysis through SPSS includes Pearson correlation and regression analysis.

#### 4. Results:

Table 1: Descriptive information of the respondents:

Demographic	Categories	Frequency N=120	Percentage
Sex	Male	50	0.42
	Female	70	0.58
Age (years)	20-25	62	0.52
	26-30	36	0.30
	31-35	22	0.18
Education level	Bachelor's degree	76	0.63
	Master's degree	44	0.37

The research was performed in Baku (Azerbaijan). Feedbacks from 120 participants were gathered. Among the 120 participants 50 were males and 70 were females. A large portion of the respondents were in bachelor's while 44 respondents were in Masters. Table1 presents the gender and instruction of their spondees.

**Table 2: Reliability Test:**

Correlation		PEU	PU	ATT
ITU	Pearson	0.687	0.644	0.705
	Correlation			
	Sig.(2-tailed)	0.000	0.000	0.000
	N	120	120	120

The results of table 2 show that variables are significantly correlated at the 0.01 level of significance.

**Table 3: Hypothesis Testing:**

Model	Unstandardized		Standardized		
	Coefficients		Coefficients		
	$\beta$	Std. Error	Beta	t	Sig.
Constant	0.046	0.538		0.084	.861
PEU	0.276	0.038	0.265	2.731	.007
	0.162	0.039	0.152	1.541	.000
PU	0.479	0.064	0.451	7.527	.000
ATT					

A regression analysis test was carried out to test the hypothesis and to know the degree to which the independent variables can explain the variation of dependent variable. The R2 score shows that 79% of the variation in the dependent variable can be described by independent variables. In this manner, independent variables have a significant impact on the dependent variable.

## 5. Limitations:

This research can possibly uncover significant discoveries for the student related determinants influencing their intention towards e-learning. This study, however, is subject to some limitations: Firstly, the survey is restricted to Khazar university's students, further examinations ought to include more colleges and universities in Azerbaijan. Secondly, the study utilizes a quantitative strategy to break down students conduct, the qualitative technique may likewise be inferred for detailed investigation, lastly, empirical examination additionally is directed on this theme.

## Conclusion:

All in all, by presuming the strong indicators of students' expectation to utilize e-learning, attitude become the most substantial one, the perception of Ease of Use and usefulness is significant, The attitude towards e-learning affected mostly by perceived ease of use, it is vital for the instructor to guarantee that e-learning will be profited to improve students' learning results and to give more brilliant schooling strategies for better progress.

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