

## INCORPORATING IS SUCCESS MODEL AND UTAUT MODEL TO STUDY THE IMPACT OF GENDER-BASED E-LEARNING EXPERIENCE OF UNDERGRADUATE STUDENTS OF PAKISTAN

Namra Fazal\*

Faculty, FAST-NUCES Lahore, [namra.fazal@nu.edu.pk](mailto:namra.fazal@nu.edu.pk)

Nimra Rafiq

Faculty, FAST-NUCES Lahore, [nimra.rafiq@lhr.nu.edu.pk](mailto:nimra.rafiq@lhr.nu.edu.pk)

Mohsin Tajammul

Faculty, Virtual University of Pakistan, [tajummalmohsin@gmail.com](mailto:tajummalmohsin@gmail.com)

### ABSTRACT

*The goal of this study is to look into students' perceptions on e-learning platforms utilized in educational settings. The data gathered from 60 undergrads is analyzed using a mixed-method study methodology. Semi-structured interviews and questionnaires were used to gather the data. The UTAUT model and the IS success model are utilized in the study to explain the e-learning environment in Pakistani undergraduate programs. The findings show that while gender has no significant impact on a learner's e-learning experience, there are other factors to consider like enhancing E-learning efficiency by training educators with organizational skills and goal achievement capabilities, particularly for time-sensitive classroom activities.*

**Keywords:** E-learning experience, Gender, UTAUT, IS success model.

### INTRODUCTION

Technology has played its part in this pandemic situation, and it has changed the traditional method of learning to a modern method. E-learning comes under a term of technology-based learning using websites, video conferencing, mobile apps, learning portals, and many other free websites available for learning (Radha et al., 2020). E-learning is improving the knowledge of the students, academic staff, and the industry based on people using the internet. E-learning involves excellent arrangements, skills and knowledge, and experience in the field of IT in terms of smart apps and services that enable digital communication. Online learning is described as "learning experiences in synchronous or asynchronous contexts employing various devices (e.g., mobile phones, laptops, etc.) with internet connection. Students can learn and interact with teachers and other students anywhere in various settings (independently). (Singh & Thurman, 2019). A setting characterized by synchronized learning is organized as in students go to live talks, there are constant cooperation's among instructors and students, and there is a chance of the moment input, while nonsynchronous learning conditions are not appropriately organized. In such a learning climate, learning content isn't accessible in the type of live talks or classes; it is accessible at various learning frameworks and gatherings. Moment input and quick reaction are unrealistic under such a climate (Mueller & Littlefield, 2018).

They deliver lectures through online meeting sessions, but the quality of education has still been disturbed by the various challenges posed by this major shift (Sahu 2020). Moreover, Higher educational institutions are switching their instructional techniques through technical expertise, as the quality of education and the infrastructural facilities are very much needed (Shahzad & Hassan, 2020).

Digital revolution with regards to higher-level education establishments can be viewed as the addition of all computerized measures needed to achieve change measure that gives advanced education foundations the occasions to decidedly apply for computerized advances ideally (Koppet al., 2019). This measure likewise comprises satisfactory vital planning, trust foundation, thinking in cycles, combination, and fortification of all gatherings included, independent, cooperative, and authoritative information (Cameron & Green, 2019). There is a more grounded need for scholastic associations to improve their educational program and the use of new instructional techniques and methodologies ought

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\* Corresponding Author

to be of the most extreme essentialness (Toquero, 2020). It must be acknowledged that e-learning is not limited to the utilization of smart gadgets but has a tendency to expand educational borders and to act as a catalyst for learners. Quick web -access is more important for teaching and learning purposes through e-learning services that allow digital distribution, communication, authentic online quizzes, meaningful chatsessions, and communication practices among students (Maphalala & Adigun, 2021).

In Pakistan, a huge arrangement of learning and instructing, just as authoritative exercises of scholastic establishments are taken care of physically (Salam, Jianqiu, Pathan, & Lei, 2017). Online participation, or interaction among learners for information sharing and development, is at the heart of both online and traditional learning concepts. This process enables the learners to refine their acquired knowledge through interaction with others which provides peers' justification.

### **Problem Statement**

This study aims to evaluate the experience of the undergraduate students of Pakistan concerning the e-learning methods they are being offered. The problem which is kept in consideration in this research is the evaluation of the experience which has come out after the students using e-learning platforms for their education. The reason for this consideration is the different views of each student which makes the e-learning process complex.

### **Purpose of the Study**

The basic aim of this research is to get knowledge about e-learning among male and female students of the undergraduate level in Pakistan. The study also aims on analyzing the behavior of a student towards online learning which has a lot of factors related to it and the response they get from the e-learning experience.

### **Research Objectives**

After looking at the research model and the details of the research, we propose the following research objectives for the study:

- To identify the impact of performance expectancy among male and female students on usage intention.
- To identify the impact of effort expectancy among male and female students on usage intention.
- To identify the impact of social influence among male and female students on usage intention.
- To identify the impact of usage intention among male and female students on the e-learning experience.

### **Research Hypothesis**

H1a: There is a positive relationship between performance expectancy and usage intention among male and female students.

H1b: There is no relationship between performance expectancy and usage intention among male and female students.

H2a: There is a positive relationship between effort expectancy and usage intention among male and female students.

H2b: There is no relationship between effort expectancy and usage intention among male and female students.

H3a: There is a positive relationship between social influence and usage intention among male and female students.

H3b: There is no relationship between social influence and usage intention among male and female students.

H4a: There is a positive relation between usage intention and e-learning experience among male and female students.

H4b: There is no relation between usage intention and e-learning experience among male and female students.

### **Significance of the Study**

All of its readers will find this study relevant, but academicians will find it most significant as researchers, technology-based organizations, universities, and other educational institutions. The study will help provide the concerned bodies with the proven data about the ways e-learning can affect the students and what will be the best way to respond to their needs.

From an academic point of view, firstly this study will help to identify the key elements which affect

the whole e-learning process and help to identify the factors which are the barriers in the process of online education. Secondly, it will give academicians a detailed analysis of the involvement of support of readers on that specific cause when readers get saturated with information. Thirdly, it will help to create a practical view of how to implement a successful e-learning platform which is a success for the undergraduate institutions of Pakistan.

## **REVIEW OF LITERATURE**

### **Information Systems (IS) Success Model**

The Information Systems success model or the IS success model is based on a theory that aims to provide a detailed understanding of the IS success by describing, explaining, and identifying the relationship between six of the most crucial dimensions of success (Kulkarni, Ravindran, & Freeze, 2006). The theory for this system was first developed by William H. DeLone and Ephraim R. McLean in the year 1992. It was further modified and refined by the original authors after a decade which was response feedback from other researchers working in the same area. IS success model involving six basic dimensions to illustrate the usage of technology and its benefits. These dimensions are system quality, information quality, service quality, usage intentions/usage, user satisfaction, and net benefits. With the help of the IS success model, this study will modify its elements and utilize the model with the UTAUT model.

### **Unified Theory of Acceptance and Use of Technology (UTAUT)**

The Unified Theory of Acceptance and Use of Technology (UTAUT) is a technology acceptance model that was designed by Venkatesh in the “User acceptance of IT”. The UTAUT model tries to explain the user intentions about a specific use of an information system and its behavior about the usage (Im et al., 2011). There are four basic determinants of the theory which are the governing factors of a user’s experience about a technology i.e., performance expectancy, effort expectancy, social influence, and facilitating conditions. Further, these elements are linked with behavioral intentions which lead to the usage behavior which can be positive or negative. Also, the UTAUT model involves four determinants that are useful in identifying the basic four constructs i.e., age, gender, experience, and voluntariness of use.

Alharbi and Drew (2014) coordinated the UTAUT and Information System (IS) Success models to clarify factors influencing the expectation of students at Griffith College, Australia, towards tolerating m-learning. Predictable with the first UTAUT, they found that performance expectancy, effort expectancy, and social influence emphatically corresponded with behavioral intention.

### **Performance Expectancy and E-Learning Experience**

Performance expectancy measures an individual's level of confidence that employing the system will enable him or her to improve job performance. Given that this model is an amalgam of earlier ones, five elements from earlier models—perceived usefulness (technology acceptance models), external motivation (motivational model), job fit (PC utilization model), relative advantages (innovation diffusion theory), and outcome expectations (social cognition theory)—helped provide information on the performance expectancy variable. A few researchers have utilized the willful and compulsory setting to assess the impact of performance expectancy on the usage intentions of utilizing it and found a critical direct impact (Raza & Qazi, 2021).

Numerous investigations reliably featured that it is the main forecaster of Behavioral Intention (BI) for technology usage since learners generally hope to anticipate the level of advantages to be acquired from a specific technology. For example, PE was discovered to be the critical factor that influences the pre-service instructors in Malaysia to the BI to utilize advanced technology for guidance (Pullen, Swabey, Abadoo, Ranjit Sing, & Kaur, 2015).

### **Effort Expectancy and E-Learning Experience**

The amount of convenience thought to come with using the system is known as effort expectancy. Perceived ease of use (acceptance model), complexity (PC utilization model), and innovation diffusion theory all share similar constructs from a semantic perspective. Being a fundamental component of the UTAUT model, it is utilized broadly to explore the objectives of the individual to new technology usage. This aspect is more salient in the early stage of use and becomes more insignificant with periods of extended use, as users learn to effectively operate new technology (Venkatesh et al., 2012).

The connection between effort expectancy and behavioral intention has regularly been discovered to be important and positive. The rule that underpins this relationship is that simple to-utilize

frameworks make users all the more ready to embrace them (Khechine & Augier, 2019). The strength of indicators for the intention of students to acknowledge and utilize ICT for learning and exploration in Ghana by utilizing the UTAUT model and found that effort expectancy was an important symbol of behavioral intention to utilize ICT (Liebenberg et al., 2018).

**Usage Intentions and E-Learning Experience**

Esterhuysen et al. (2016) contended that e-learning achievement paves the way for learner’s fulfillment and aims to use e-learning frameworks which are essential components of the effective e-learning process. The motivating elements that affect behaviors are presumed to be captured by intentions, which serve as indicators of how much effort individuals are prepared to put forth to carry out the behavior. As a general rule, a behavior should be more likely to be performed the stronger the intention to engage in it.

**Social Influence and E-Learning Experience**

According to Venkatesh (2012), social influence refers to how much a person believes that another person is crucial to him or her in using the new system. The development of this variable was influenced by the concepts of subjective norms (rational action theory, planned behavior theory, extended TAM, deconstructed planned behavior theory, and technology acceptance model 2), social variables (PC utilization model), and image (innovation diffusion theory).

**Gender and E-Learning Experience**

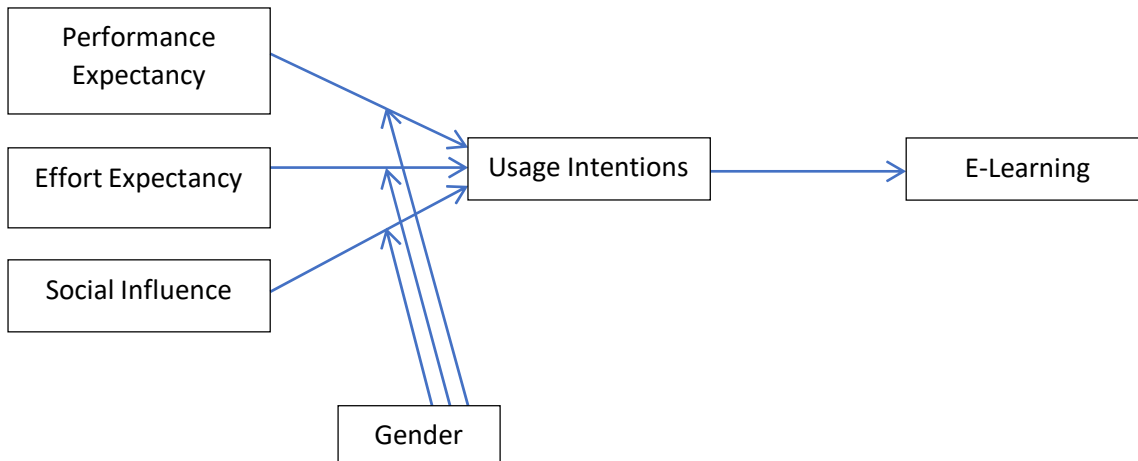
Gender likewise influences the connection between the impact of Effort Expectancy and Behavioral Intention. In the first UTAUT (Venkatesh et al. 2012), it is contended that guys depend more on performance when choosing to make use of an IT technology (Tai and Ku, 2013). The connection between social influence and behavioral intention goal is influenced by gender since women are more delicate to others' feelings while embracing innovation to build their dynamic capacities.

**METHODOLOGY**

This study aims at understanding the student's experience when they are taught through online modes of learning and whether they benefit from e-learning platforms as they give opportunities to learners to make a progress at their own pace. This study aims at analyzing the behavior of students regarding e-learning which is related to the varied responses and different factors that influence their e-learning experience, so this study comes under the domain of Computer Assisted Language Learning also known as Computer-Aided Instruction (CAI). This study focuses on the various ways performance expectancy, effort expectancy, and social influence impact the usage behavior of male and female learners and the ways they can develop organized learning skills among learners by addressing their needs for more effective implementation of e-learning at Higher Educational Institutions in Pakistan.

**Research Framework**

*Figure 1: Theoretical Framework*



The above-proposed model is a combination of the IS success model and UTAUT model which will be the core framework for this research. The model represents that there are three major aspects concerning undergraduate students in Pakistan when e-learning is associated with them i.e., performance expectancy, effort

expectancy, and social influence about technology fore-learning. These determinants are further linked with the usage intentions of technology which works as the “Mediating Variable” of the study. Gender, which is the “Moderator variable” of the study, assists the relation between Independent Variables (IVs) of the study with the mediator. Further, the dependent variable of the study is E-learning experience or success by the determinants of the undergraduate students of Pakistan.

### **Research Design**

Using a mixed-methods approach, the research study seeks to identify the various e-learning trends among students. Questionnaires can be utilized for quantitative data analysis, and semi-structured interviews with students can be used for qualitative data analysis to verify results from quantitative data analysis.

### **Sampling**

This study will gather the samples using a purposive sampling. In purposive examining, things are chosen dependent on explicit qualities, other than accessibility, that make them pertinent to the examinations unbiased. When we select our objects of study as indicated by some rationale or procedure, cautiously however not haphazardly, we utilize purposive or intentional testing (Patton, 2014).

### **Sampling Size**

The sample size of this research study will be 60 undergraduate students. Among the participants, thirty will be male students and the other thirty will be female students. This sample size is estimated for the quantitative portion of the study which will include the numerical representation of the data acquired by the students selected for analysis. Referring to the qualitative portion of the research, 10 undergraduate students will be selected for the analysis which might all be male, female, or a mixture of both. The reason for choosing a low sample for qualitative research is because qualitative research is a time-consuming activity that needs to be catered to along with the quantitative approach of the research.

### **Instrument Selection & Development**

An instrument in a research study is the tool that is used to obtain data for the research study (Jones & D, 2009). For this study, we have selected a questionnaire as the instrument for quantitative data gathering and analysis. Questionnaires will be floated to the selected sample size among various institutions of Pakistan. As Popa (2020), used an integrative mixed-method design to get knowledge about teaching and learning changes. Therefore, this study will also include a different instrument for qualitative type of data gathering i.e., semi-structured interviews. Semi-structured interviews include open-ended questions which allow the respondent to have a detailed discussion instead of answering the typical question/answer format.

### **Data Collection**

For this study, a five-point Likert scale is used for the questionnaire of the study. This five-point Likert scale will provide the sample with five options to mark their best option. The five-point Likert scale will be from 1 to 5 where 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, and 5= Strongly Agree. The data is collected using Google Forms where an online questionnaire will be developed and made accessible to the sample.

### **Data Analysis**

This research study used SPSS as the statistical tool to measure the results. Since the data is also being analyzed quantitatively SPSS helped in addressing the collected data into reasonable results (Jones & D, 2009). The data analysis will help students to maximize the benefits of e-learning by practicing skills like managing time, working in a more organized way, and effectively using a wide range of online learning tools with the help of their teachers.

This study will include the thematic analysis concept of evaluating the responses from the respondents. Thematic analysis is the most common type of analysis used in qualitative research. This analysis is applied to any set of text or transcriptions of interviews. It focuses on analyzing, interpreting, and identifying the meaning of any qualitative data.

## **RESULTS**

In this chapter the data which is analyzed by Process Macros analysis is discussed with correlation analysis, regression analysis and thematic analysis.

### **Correlation Analysis**

Correlation analysis is used in quantitative research when a researcher is looking to find a significant

relationship among variables of the study. For this study, Pearson’s correlation is used which is the test statistics that analyzes the statistical relation present among two variables. It gives the best information about the actual magnitude of the data and the direction of the relationship present between those variables.

When analyzing the correlation, it is analyzed using a 2-tailed model having values ranging from +1 to -1. There are certain degrees to measure correlation among variables. If a correlation value is said to be +1 or -1, the relation is said to be perfectly correlated i.e., one variable is predicting the other variable completely. If the value lies between  $\pm 0.50$  and  $\pm 1$ , the relation is said to be highly correlated. If the value is said to be between  $\pm 0.30$  and  $\pm 0.49$ , the relation is said to be moderately correlated. If the value is below  $\pm 0.29$ , there is a weak relation among variables, and it does not explain much of the relationship.

**Table 1: Correlation Analysis**

<b>Correlations</b>		<b>EL</b>	<b>PE</b>	<b>EE</b>	<b>SI</b>	<b>UI</b>
<b>EL</b>	<b>Pearson Correlation</b>	1	.699**	-.103	.772**	.442**
	<b>Sig. (2-tailed)</b>		.000	.435	.000	.000
	<b>N</b>	60	60	60	60	60
<b>PE</b>	<b>Pearson Correlation</b>	.699**	1	-.080	.858**	.691**
	<b>Sig. (2-tailed)</b>	.000		.545	.000	.000
	<b>N</b>	60	60	60	60	60
<b>EE</b>	<b>Pearson Correlation</b>	-.103	-.080	1	-.239	-.005
	<b>Sig. (2-tailed)</b>	.435	.545		.066	.973
	<b>N</b>	60	60	60	60	60
<b>SI</b>	<b>Pearson Correlation</b>	.772**	.858**	-.239	1	.448**
	<b>Sig. (2-tailed)</b>	.000	.000	.066		.000
	<b>N</b>	60	60	60	60	60
<b>UI</b>	<b>Pearson Correlation</b>	.442**	.691**	-.005	.448**	1
	<b>Sig. (2-tailed)</b>	.000	.000	.973	.000	
	<b>N</b>	60	60	60	60	60

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The table above shows the correlation analysis conducted for this study using SPSS. The model used for the analysis is Pearson's correlation coefficient. All the variables are included in the analysis which is denoted as EL for E-learning (which is the DV for the study), PE for Performance Expectancy, EE for Effort Expectancy, SI for Social Influence, and UI for Usage Intension. The results are correlated to a significant level of 0.01. The analysis is done with a sample of 60 students i.e., 30 male and 30 female students from the education facilities of Pakistan.

The correlation value among EL and PE is 0.699\*\* which shows that the relationship is positive and highly correlated, and it is explaining 69.9% of the relationships among variables. The correlation value among EL and EE is -0.103\*\* which is a negative relation, and a low correlation value lies among both the variables. The correlation value among EL and SI is 0.772\*\* which is a positive relationship, and a highly strong relation lies among the two variables. PE and UI have a strong positive correlation value of 0.691\*\*, EE and UI have a negative low correlation value of -0.005, and SI and UI have a moderate positive value of 0.448\*

**Regression Analysis**

Alike the correlation analysis, regression is also a statistical set of interpretations that are used to predict a relation between two variables i.e., dependent, and independent variables of the study. When it is used for causal research or prediction, the researcher needs to justify its existence very carefully with a logical explanation.

When using regression analysis in a study, the most common type of regression model is Linear Regression. Linear regression tries to elucidate the connection between two variables using a linear equation on the data.

Table 2: Regression MS

Model Summary									
Model	R	Adjusted R Square	Std. Estimate	An error of the	Change Statistics	F	Sig.	F	F
	R Square				R Square Change	Change	df1	df2	Change
1	.778 <sup>a</sup>	.606	.82215		.606	28.686	3	56	.000

a. Predictors: (Constant), Social Mean, Effort Mean, Performance Mean

The model summary table which can be seen above is the first result output which is generated by running linear regression on SPSS. It shows the correlation among the variables. The table shows an R-value which is the overall correlation value among all the IVs and DV of the study. The R-value in this table is 0.778 which shows a strong positive correlation value. It can be said that PE, EE, and SI are 77.8 percent correlated to E-Learning. Then, there is the R-Square value which explains that how much variation lies in the independent variables of the study to explain when talked with the DV of the study. In this table, the R-square value is 0.606 which is quite a large value, or it can be said that there is 60.6 percent variation in the independent variables.

Table 3: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	58.168	3	19.389	28.686	.000 <sup>b</sup>
Residual	37.852	56	.676		
Total	96.020	59			

Dependent Variable: E-Learning Mean

Predictors: (Constant), Social Mean, Effort Mean, Performance Mean

The next table which is listed above i.e., ANOVA defines the fitness of the regression model to the total variance of the study. When interpreting the ANOVA table, we look at the significance level of regression which is a constant p-value (p<0.05). Looking into this table, the significance level of the study is 0.000005 which is less than 0.05, and the study is said to be significant to its variance. The remaining columns like df i.e., degree of freedom define the rows and observations used in the study (3 and 56 respectively).

Table 4: *Regression Coefficient*

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	T	
1	(Constant)	-.244	.541		-.451	.654
	PE	.118	.186	.106	.632	.530
	EE	.131	.161	.073	.816	.418
	SI	1.057	.262	.698	4.034	.000

a. Dependent Variable: EL

The third and last table which is generated from the linear regression test is the regression coefficient’s table which provides the details about the equation of the regression for any study. It uses the DV of the study to predict the values and explain the association among variables. The table shown above depicts the coefficients (unstandardized and standardized) along with the significance level of the variables following the DV. The B value or the beta of the coefficient shows the unit increase or decrease in the DV from the respective IV. In this table, we have the beta values for each of the IVs of the study following the DV i.e., E-learning. The B-value of PE is 0.106 or 10.6 percent, which means that PE explains 10.6 percent of E-learning. Beta for EE is 0.073 or 7.3 percent which means that EE explains 7.3 percent of EL for the research. SI beta value is 0.698 or 69.8 percent which explains that SI has a large beta value and explains 69.8 percent of EL for the study.

T-value measures the errors in the results and its value needs to be above +2 or below -2 to predict the actual reading of the study. T-test works along with the significance level of the study which is also a predictor for the criteria of the hypothesis. The “sig” represents the p-value which is set at 0.05 for a 2-tailed test. Looking at the table, we can see that PE has a t-value of 0.632 which is quite away from +2 and it has a p-value of 0.530 which is greater than 0.05. Same as PE, EE has a t-value of 0.816 which is better than PE but still not close to +2, and a p-value which is 0.418 and it is greater than 0.05. SI has a t-value of 4.034 which is higher than +2 and explains that there is no error in SI about EL. The p-value of SI is 0.000 which is less than 0.05 and explains that the variable is significant with EL for the study.

**Thematic Analysis**

To measure the qualitative portion of the study, thematic analysis was used on the semi-structured interviews conducted for the paper. Braun & Clarke (2006) have described thematic analysis as the process of identifying, reporting, and analyzing the different patterns in data. It is the widely used method of analysis when conducting qualitative research. They have also stated that thematic analysis is the base method of conducting analysis which is needed to be defined and identified to create its space in the qualitative method of research.

For this study, thematic analysis was used for the interviews conducted on a sample of 10 students. Using the thematic analysis, the interview questions are analyzed separately to get an overview of the ideas answered by the respondents on each question. There was a total of 6 questions which will be detailed below. The respondents were equally selected i.e., 5 males and 5 females, and they were interviewed. The first question asked by the respondents was “How do you see E-learning as a source of knowledge?”

Table 5. Themes Q.1

Theme 1	Theme 2	Theme 3	Theme 4	Theme 5
Difficulty understanding	Time-consuming	Resource Issues	Cost-effective	Easy to Setup
0.4	0.3	0.2	0.1	0.2

The above-mentioned table shows the different themes answered by the respondents when asked about e-learning as a platform for learning. There were five themes extracted from the answers i.e., difficulty in understanding, time-consuming, resource issues, cost-effective procedure, and it is easy to set up. Among these themes, 0.4 or 40 percent of respondents were of the thought that e-learning is a



difficult platform where understanding is quite difficult. For example, a respondent, responded that I find it very challenging to get thoughts which a speaker is instructing when a web-based class happens". 30% of the respondents were of the possibility that E-learning is a tedious interaction.

Topic 1 was of the asset issues which come in the method of online schooling. These assets are the stages and the network issues in Pakistan. A great many people use cell phones for utilizing Zoom or Skype which is associated through the cell organization's portable information association. It disturbs the presentation of the application which brings about the detachment of the web-based class. 0.2 Or 20% of the respondents detailed this issue.

Simultaneously, a recurrence of 0.2 respondents accepted that they find online schooling an interaction that is not difficult to set up. It is very realized that web-based schooling decreases a ton of expenses, and it is very simple to set up when contrasted with a class-based setting.

The second question in the process was "Do you wish to continue using online platforms for learning in the future? If yes or no, why?"

Table 6: *Themes-Q2*

<b>Theme 1</b>	<b>Theme 2</b>	<b>Theme 3</b>	<b>Theme 4</b>	<b>Theme 5</b>	<b>Theme 6</b>
Lack of quality (in online) 0.3	No long-term commitment 0.4	Security issues 0.1	Performance at stake 0.3	Future of education 0.2	Ease 0.1

When asked by the students, they answered in 6 different themes i.e., lack of quality, no long-term commitment, security concerns, and performance becomes at stake; it is the future of education and easy education. 40 percent of the respondents believed that online education has no long-term commitment due to the failure to match the quality of education. 30 percent believed that online education lacks quality, and they will not use it in the future. The third question in the analysis was "What is your strategy for increasing benefits while minimizing efforts in e-learning?"

Table 7: *Themes-Q3*

<b>Theme 1</b>	<b>Theme 2</b>	<b>Theme 3</b>
Group Sessions 0.6	Internet 0.4	Study Alone 0.2

There were three themes extracted from these questions which are listed in table 14 above i.e., group sessions, internet usage, and studying alone. When asked about the strategy to maximize benefits, 60 percent of the respondents believed that group sessions are most convenient, 40 percent believed that the internet is their strategy for learning, and 20 percent meant to rely on their own for learning in the pandemic situation.

The last question in the analysis was "How have teachers assisted you in enhancing adaptability to E-learning?"

Table 8: *Themes-Q4*

<b>Theme 1</b>	<b>Theme 2</b>
No help provided 0.4	receivable for help 0.6

In response to this, the respondents gave answers in two themes i.e., no help provided and available for help. 60 percent showed their response in the favor of the teachers, that they were available when they needed assistance regarding educational material or online usage. 40 percent were of the thought that no help was provided to them by the teachers, and they could not learn anything because of it.

## **DISCUSSION AND CONCLUSION**

This research study was conducted to evaluate and find the impact of E-Learning and experience of undergraduate students of Pakistan, for this, we have developed a different hypothesis. Every hypothesis

developed was statistically analyzed using Statically analyzing tools, this includes IS Success Model and Unified theory of acceptance and use of technology UTAUT Model. The UTAUT model is used since it offers another benefit which is that it endeavors to clarify how individual differences impact technology usage which can be directed by age, gender, and experience. Therefore, the hypothesis is either rejected or accepted based upon the statistical data, which was collected from 60 (Sixty) participants that took part in this research work, all the students were undergraduate students that were from both genders – Males and Females.

### **Hypothesis Testing**

The Tools used for this utilizes the Information Systems success model or the ISsuccess model that is based on a theory that aims to provide a detailed understanding of the IS success by describing, explaining, and identifying the relationship between six of the most crucial dimensions of success. The hypothesis is driven by four basic determinants of the theory which are the governing factors of a user's experience about a technology i.e., *performance expectancy*, *effort expectancy*, *social influence*, and *facilitating conditions*. Our First Hypothesis was whether there is a positive relationship between performance expectancy and usage intention among male and female undergraduate students, or if there is no relationship at all. For this hypothesis, the beta value for E- learning and Performance Expectancy is negative -0.0799 which is said to be statistically significant with a negative relation. There is no relationship between performance expectancy and usage intention among male and female students is thus the hypothesis is rejected from the data provided by the participants. This Hypothesis was used since Performance expectancy is the degree to which an individual believes that using the system will help him or her to attain gains in job performance.

Hypothesis No.2 was driven to determine whether there is a positive relationship between effort expectancy and usage intention among male and female students, or if there is no relationship between effort expectancy and usage intention among male and female students at all. This Hypothesis is vital since Effort expectancy is the extent of convenience perceived for using the system. For this, the Hypothesis was rejected on account that the beta value E-learning and Performance Expectancy is -0.05789 which is said to be statistically significant with a negative relation. Also, the standard error (SE) is 0.2015 which is higher and the p-value i.e.,  $0.50 > 0.01$  which explains that usage intention is not moderating the relation of PE and E-learning. Hypothesis No.3 debated whether there is a positive relationship between social influence and usage intention among male and female students, or there isn't any relationship between social influence and usage intention among male and female students. This hypothesis was developed to gain the strength of one's intention to perform a specified behavior that is the intention one puts in learning via using E-Learning Platforms in the events of Corona Virus 19.

It was then statically driven that there is no relationship between social influence and usage intention among the students in Pakistan. Since the qualities show a coefficient worth of - 0.1630 which is an adversely critical worth, SE esteem as 0.4749 which is very high, and p-worth of the review for example  $0.7327 > 0.01$ . These qualities make sense of that there is certainly not a tremendous impact from utilization goal as a middle person of the review and doesn't influence the connection of Exertion Hope and E-learning. Therefore, the Hypothesis There is no relationship between social influence and usage intention among male and female students is accepted and the latter is rejected.

Hypothesis's No.4 was driven to conclude whether there is a positive relation between usage intention and e-learning experience among male and female students, or there is no relation between usage intention and e-learning experience among male and female students at all, it was then concluded by the sample data that there is no relation between usage intention and E-learning. This was done to achieve the social influence; they meant the degree to which an individual perceives that the other one is important to him and/or her in using the new system. The coefficient value of the model is -0.1489 which is a negative significant value with a Standard Error (SE) of 0.35 and a p-value of 0.6764 which is greater than the criteria of 0.01. It concludes that the hypothesis that there is no relation between usage intention and E-learning experience among male and female students, is accepted while the latter is rejected. The topic of this research study is Incorporating IS Success Model and Unified theory of acceptance and use of technology UTAUT Model to Study the Impact Gender-based E-Learning Experience of Undergraduate Students of Pakistan. The data was precisely collected that can be used in the UTAUT model and IS success model. Thereby a statistical analysis would help us in evaluating the impact of electronic learning on males and females. For this, we have developed different Hypotheses that were a link to our conclusion hence it was also necessary to conclude how the performance expectancy, the

effort expectancy, the social influence, is impacted upon the students who use E-Learning Platforms. Our derived hypotheses were the following.

*H1a: There is a positive relationship between performance expectancy and usage intention among male and female students.*

*H1b: There is no relationship between performance expectancy and usage intention among male and female students.*

*H2a: There is a positive relationship between effort expectancy and usage intention among male and female students.*

*H2b: There is no relationship between effort expectancy and usage intention among male and female students.*

*H3a: There is a positive relationship between social influence and usage intention among male and female students.*

*H3b: There is no relationship between social influence and usage intention among male and female students.*

*H4a: There is a positive relation between usage intention and e-learning experience among male and female students.*

*H4b: There is no relation between usage intention and e-learning experience among male and female students.*

The results reveal that the sudden shift in the education system is making it difficult for male and female learners alike. Interviews were conducted with learners who had faced challenges when they were online, to understand how and why their learning experience differs. The finding makes it clear that it was not their gender that caused the difference, but their lack of preparation for the experience. The lack of training seems to be what inhibits students from learning when they must start surfing the internet for information and resources.

This also means that when learners are unfamiliar with the technology and are not sure about how to operate various applications and e-learning portals, they will certainly be demotivated from using technology for their learning purposes. The researchers analyzed the various degrees of performance in terms of male and female usage of e-learning portals, and they discovered that female students at Malaysian institutions are more willing to utilize e-learning portals, but they neglected to take into account user perceptions (Shahzad et al., 2020).

This study supports the findings of Fawaz and Samaha (2020), which found that student satisfaction with e-learning is unrelated to gender and that most of the student's experience tension because of having to complete enormous assignments and challenging activities in such a short amount of time. As a result, the basic parts of the IS and UTAUT models, such as performance expectancy, effort expectancy, social influence, and usage intention, may be disrupted in terms of male and female learners' e-learning experiences. Students must be appropriately taught for e-learning, as per the quantitative and qualitative findings, so that they can be evaluated on part of their knowledge and performance, as well as how effectively and efficiently they can use virtual learning platforms.

E-learning has some advantages, and by obtaining suggestions from students who provide positive feedback, the administration can use that information to improve the educational experience for other individuals who find e-learning to be a barrier to achieving their learning objectives. Rather than transferring traditional course content to an online setting a deliberate effort should be made to build online courses. During the workshop, emphasis should be placed on interaction opportunities to improve academic performance.

E-learning students who report an anxiety-provoking experience should be addressed, as their issues can help us identify the leading causes of stress and anxiety associated with e-learning, such as a lack of awareness regarding the use of technology.

Students interviewed at universities insisted that e-learning systems provide poor quality education, so they do not want to continue using this medium of education, but given the circumstances, universities have no other option, so ensuring quality is imperative. Teachers and schools are challenged in these contexts by students' lack of digital skills and abilities, a lack of structured content despite the abundance of online resources, a lack of student engagement and motivation, and the social and cognitive difficulties that occur. It is now widely accepted that a lack of student connection is linked to the social issue provided by the loss of human interaction between professors and students (Ferri et al., 2020).

According to respondents, students' unprofessional behavior is also evident in online classes on their part, which distracts the attention of students willing to learn. Teachers struggle to assess students' work or determine whether they have learned by doing homework and tests at home. Parental involvement is often crucial during children's learning processes, but the extent and degree of support vary a lot. The technology is designed to make it possible for students to learn and test more engagingly. Students can also have better opportunities for social interaction, via virtual interactions with their colleagues.

Researchers discovered that online homeschool educators need communication opportunities to learn about their students' issues and wants, as well as maintain a multiple communications network. An important part of a student's understanding of the learning experience was behavioral and psychological awareness.

In conclusion, the findings of this study show that the efficiency of e-learning can be enhanced by training your teachers and students to complete their tasks more efficiently. The available data depicted that, there is no relationship between, efforts expectancy social influence, and there is no relation at all. The concept of electronic learning is reaching new horizons in the 1st - world countries while for countries like Pakistan, it requires massive changes and massive developments so that, For the country like Pakistan where the mode of E-learning is still in its can be practiced and made readily available for students.

To make electronic learning a mode of learning the students and the teachers must be trained. So that Teachers can use the electronic platform. For this, the teachers need to be trained so that they know how to teach, while students need to be trained equally so that they can acquire and develop the abilities required for E-learning, it is also necessary for students to be trained evenly.

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