

# FACTORS INFLUENCING ON THE BEHAVIOURAL INTENTION OF THE UNIVERSITY UNDERGRADUATES FOR E-LEARNING DURING THE COVID-19 PANDEMIC: A CASE STUDY IN UNIVERSITY OF KELANIYA SRI LANKA

Silva, U.K.I.U.<sup>1\*</sup>, Mahalekamge, W.G.S.<sup>2</sup> and Shalini, B.H.<sup>3</sup>

<sup>1,2,3</sup> *University of Kelaniya, Kelaniya, Sri Lanka,*

*\*[ishangaudan@gmail.com](mailto:ishangaudan@gmail.com)*

## Abstract

E-learning refers to a wide range of educational activities and acquiring new knowledge based on electronic platforms. It has become increasingly popular because of its flexibility, accessibility and cost-effectiveness. During the days of Covid-19, it has been particularly relevant due to the growth of remote work and distance education. Students' acceptance of e-learning is important because it is associated with their engagement in education. This study aimed to assess the factors influencing the behavioural intention of E-learning of undergraduates related to the University of Kelaniya, Sri Lanka. A quantitative explanatory approach has been used in this research work. Further, the sample was selected randomly and used a simple random sampling technique. This is a cross-industry descriptive research, and a standard questionnaire was used to collect primary data through a survey. Questionnaires are distributed to a sample of undergraduates at the University of Kelaniya. SPSS (Statistical Package for Social Science) was used to analyse the data collected from the questionnaire. To test the relationship between variables, the Pearson correlation technique analysis was used. Simple regression analysis was used to identify the degree of the impact of the independent variable on the dependent variable. Also, it was found that there is a significant moderate positive relationship between performance expectancy, effort expectancy, social influence, hedonic motivation and work-life quality on the behavioural intention of e-learning. The present study provides the direction to educational institutions, educational policymakers & other non-government educational institutions.

**Keywords:** Behavioural intention to use E-learning, effort and performance expectancy, hedonic motivation, social influence, work-life quality.

## **1. Introduction**

Learning intentions specify what a student must learn to complete the activity successfully (Clarke, 2013). Intentions have been defined in the Theory of response amount/Theory of Planned Behavior as the amount of effort one is willing to exert to attain a goal (Ajzen, 1991). Also, in the context of e-learning, behavioural intention refers to the user's wish to accept the e-learning systems and e-learning methods (Salloum et al., 2019). Another Boston University study defines behavioural intention as the motivational factors that influence a specific behaviour; the stronger the intention to perform the behaviour, the more likely the behavior will be performed (Díaz & Caminero, 2020).

Society has evolved to be technology-driven, and different types of developments in information and communication technology (ICT) and its application in all facets of human life have seen immense changes in the global landscape of education. Vidakis & Charitakis (2018), The Effect of the COVID-19 pandemic on educational institutions, worldwide has interrupted the conventional teaching and learning method, ultimately creating the demand for online classes. In the background of the study, the aim is to find out students' perception towards intention on online-class during the COVID-19 pandemic. Nowadays, the situation in Sri Lanka and around the world that the Covid 19 pandemic from China affects everyone and everywhere. Covid 19 caused a series of transformations in the different spheres of social, educational, political, labour, and economies worldwide (Díaz & Caminero, 2020).

### **1.1 Statement of the problem**

E-learning caused an increase in the dropout rate of students, and previous researchers found that this e-learning system has a higher dropout rate than face-to-face learning programs (Bawa, 2016). Therefore, it is significant to investigate the factors that affect the e-learning intention of learners which helps to pay more attention to addressing these issues and assist students in learning better (Bawa, 2016). A research study by Heyman (2010) says that one of the biggest concerns in online education emanates from the excessively high attrition rates in fully online programs compared with traditional classes. Also, another research study revealed that students' retention rate with this online education has increased by 10% to 20% when compared with the traditional face-to-face educational system (Herbert, 2006). A total 40% to 80% of online drop out of online classes (Smith, 2010).

Another research study has found that the results showed that behavioural intention (BI) was significantly influenced by performance expectancy, social influence, habit, hedonic motivation, self-efficacy, effort expectancy and trust, in their order of controlling the strength and explained 70.6 percent of the variance in behavioural intention (Tarhini et al., 2017).

Also, another research study has found that learning through e-learning methods has increased the stress level of e-learners as well as it has caused to raise the possibility of depression and anxiety disorders among undergraduate university students (Fawaz & Samaha, 2020).

Bączek, Bączek, & Szpringer (2020) investigated the undergraduate's perception of online during the Covid-19 Pandemic in Poland. The results show that the majority of the students had never experienced any form of e-learning before the pandemic. Hence, they identified technical issues as one of their key challenges. The result might stem from the fact that the students were not previously exposed to online learning due to inadequate awareness and accessibility to the facilities required.

Another research study conducted at Liaquat College of Medicine and Dentistry by (Abbasi, Ayoob, & Malik, 2020) surveyed towards university students' perception of e-learning during the lockdown. The majority of the students have negative perceptions of e-learning education. The study conveyed that there is a need for the administration of e-learning, and faculty heads should take crucial measures to improve e-learning during the lockdown.

Considering the factors discussed, the research problem analysed in the present study is "What are the factors influencing the behavioural intention of e-learning among undergraduates at the University of Kelaniya in Sri Lanka with Covid 19?"

### **1.2 Specific objectives**

The following specific objectives have been developed to support the achievement of the above main objective.

- i. To assess the impact of performance expectancy on the behavioural intention of e-learning among university undergraduates in Sri Lanka during Covid 19.
- ii. To assess the impact of effort expectancy on the behavioural intention of e-learning among university undergraduates in Sri Lanka during Covid 19.
- iii. To assess the impact of hedonic motivation on the behavioural intention of e-learning among university undergraduates in Sri Lanka during Covid 19.
- iv. To assess the impact of social influence on behavioural intention of e-learning among university undergraduates in Sri Lanka during Covid 19.
- v. To assess the impact of work-life quality on the behavioural intention of e-learning among university undergraduates in Sri Lanka during Covid 19.

### **1.3 Significance of the study**

With the impact of COVID-19, there have been lots of improvements in the online education systems and methods. With the adoption of e-learning, students' perspectives towards online education and e-learning methods.

Measuring the students' perspectives towards online education and e-learning methods is important. This study will be useful and beneficial for the students' undergraduates, and lecturers to identify the impact of the factors influencing behavioural intention to use e-learning. By identifying those factors, any educational institution can develop e-learning educational methods that are ideal to the students' expectations as well as teaching styles the way students are expected. That will improve the students' participation and the e-learning process's success. This study could be useful for future researchers as a source of information for future studies that would be carried out on e-learning-related topics because future researchers can get a clear idea of undergraduates' intentions toward the e-learning process in Sri Lanka. The current study will consider the Sri Lankan state sector university students, who will represent many university students in Sri Lanka. Because, still, state sector university undergraduates represent a high percentage of undergraduates in Sri Lanka.

Also, the current study's findings will be helpful for the long-term decision-making process. Management of the educational departments can be aware of the learners' perception towards e-learning. And this will be important for the management of the educational departments to develop educational policies and procedures by maintaining a good awareness towards the undergraduates under Covid-19. This report will present significant information useful to the literature for future researchers and everyone interested in reading or learning about the impact of perceptual aspects on intention to e-learning. The research study has referred to many journal articles and publications related to the undergraduate's perceptions of online education.

## **2. Literature Review**

### **2.1 Behavioural intention to use**

In this study's context, the BI determines users' wish to accept e-learning systems. (Salloum, Mostafa Al-Emran, & Shaalan, 2019) BI means the intention of individuals to use e-learning systems from existing methods of learning in the future. It is considered a precursor of use behaviour. It signals the indication of users' readiness to carry out a specific behaviour. Past studies (Viswanath Venkatesh, 2003; Venkatesh & Davis, 2000; Davis, 1986) have validated that individuals' actual use of electronic systems is directly influenced positively by the intention to use such systems and in the e-learning systems context. (Tarhini et al., 2017).

### **2.2 Performance expectancy**

Performance Expectancy (PE) is defined as the degree of individual belief that an e-learning system will help attain the job performance of the employees (Viswanath Venkatesh, 2003). This means how much the individual may believe the use of particular information for their day-to-day work and if they adopt the

information system, what are the additional benefits for them. When aligning the information systems with the e-learning context, e-learning may assist the e-learners to do their learning activities instantly and conveniently in addition to that, e-learning helps to uplift the learner's skills and performance. PE has been a predictor of intention to use new e-learning technologies among the learners in the banking sector (Alalwan et al., 2018), Mobile Banking (Alalwan et al., 2018) as well as social media, and e-government (Sharma, 2015). PE is defined in this study as the degree to which a user believes that using an e-learning system will improve or increase educational performance. According to existing literature, it can be seen that PE has a significantly positive association with BI to the use of e-learning systems.

### **2.3 Effort expectancy**

Effort Expectancy is defined as "the degree of ease associated with consumers' use of technology" Venkatesh & Thong (2012) effort expectancy (EE) can be used to measure the degree of comfort connected to the use of information systems Viswanath Venkatesh (2003) as well as without making an extra effort, he or she can use the information technology (Sharma et al., 2016). It reflects the ease of use the users experience when using technology. E-learning is still in the development stage, and that will always be changing due to innovation hence, EE is seen to be one significant factor affecting the behavioural intention of e-learning. Easiness and user-friendliness of e-learning systems will impact the acceptance of e-learning systems and the intention to use E-Systems. (Salloum, Mostafa Al-Emran, & Shaalan, 2019). Many of the former research studies by Sharma et al. (2016) have shown that EE positively influences the intention to use e-system. This study assumes that if a learner finds an e-learning system simple to use, they are more likely to accept it.

### **2.4 Social influence**

Social Influence (SI) is "the degree to which an individual perceives that important others believe he or she should use the new system". (Viswanath Venkatesh, 2003) SI refers to the effect that others' opinions on someone's intention to use e-learning systems. It is the effect that others' opinion has on someone's intention to use an information system (Zhou, 2011). When people get some recommendations from recognized persons, it causes them to use a particular technology. (Bagozzi & Lee, 2002) SI will influence people to use technology when they receive some opinions from their family members, relatives' personalities, and socially recognized and recognized people (Riquelme & Rios, 2010) It is the degree of realization one has about how others feel that he or she should use a new information system. Research conducted by Viswanath Venkatesh (2003) proposed in the UTAUT model that SI captures the role of social factors, image and subjective norms. SI has been validated in many studies as a significant influencing factor that determines people's intention to

use technological innovations like e-learning systems. (Alalwan et al.,2018; Tarhini et al., 2017; Alzeban, 2016) So, this study assumes that individuals' intention to use e-learning systems is influenced by the beliefs of their lecturers, instructors and colleagues.

## **2.5 Work-life quality**

Work-life quality (WLQ) means the perception or the faith somebody has that when using technology, their quality of work would improve; in this case, the usage of an e-learning system is supposed to improve students' learning process by bringing savings for them in terms of time and cost when they download learning materials and literature or making communications with their colleagues or teachers. (Ali, Qazi, Puah, & Raza, 2018). While many studies (Tarhini et al., 2017; Kripanont, 2007) on the acceptance of technology have investigated the importance of work-life quality, the number of studies that focus on the area of e-learning is very low. (Tarhini et al., 2017) Hence, this study attempts to test the impact of WQL on e-learning system acceptance, as done by Ali, Qazi, Puah, & and Raza (2018), in the Sri Lankan context. Past studies (Tarhini et al., 2017) have proved that WLQ has a significant impact on the intention to use e-learning systems. Hence, it is evident that WLQ can be one of the better predictors of an individual's intention to use e-learning systems. Therefore, the following hypothesis is proposed:

## **2.6 Hedonic Motivation**

Hedonic Motivation (HM) can be defined as "the fun or pleasure derived from using a technology." (Venkatesh & Thong, 2012) This hedonic motivation tries to refer to the perceived enjoyment and the perceived entertainment in using technology. (Venkatesh & Thong, 2012). Thus, previous research done by Venkatesh & and Thong (2012) has added this HM to the UTAUT2 model. this will be a pleasure of having the technology to complete the task. The innovativeness found in a new system brings the HM's key influence. (Venkatesh & Thong, 2012) Also in previous studies this has been identified as an important factor in identifying the user's intention to use technologies (Alalwan et al., 2018; Tarhini et al., 2017) Therefore when the usage of an e-learning system keeps users joyful, then they are more inclined to use such system. (Ali, Qazi, Puah, & Raza, 2018; Abbasi, Ayoob, & Malik,2020).

## **2.7 Relationship Between Behavioural Intention and E-Learning**

A comprehensive understanding related to e-learning causes to individual's perception of learning by using electronic modes and engage in electronic-based learning activities. Thus, gradually tend to factor to e-based system success (Li, Duan, Fu, & Alford, 2012). According the scholarly articles has pointed out most of the time, social context prefers to use e-learning for their studies more than the system, individual and organisational contexts (Park, 2009).

### 3. Methodology

#### 3.1 Conceptual framework

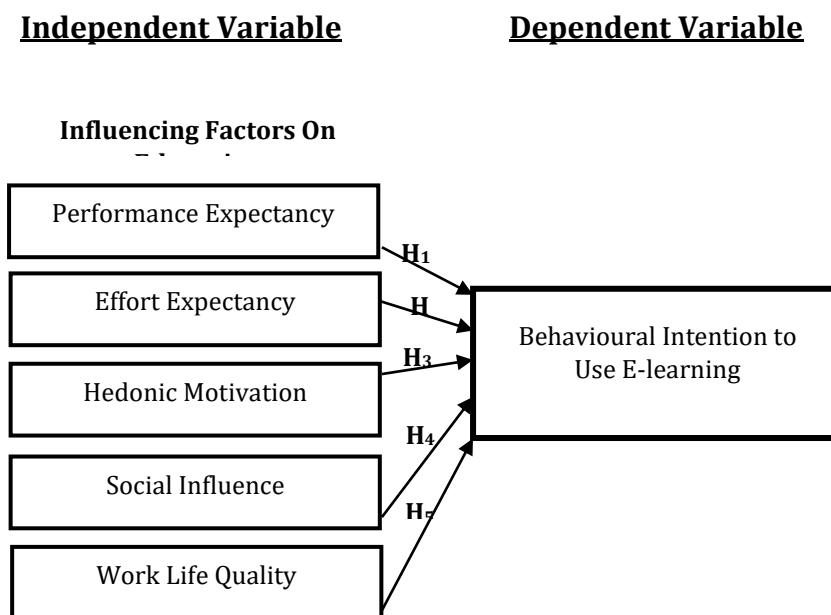


Figure 6: Conceptual Framework of the Study

Behavioural intention to use e-learning represent the dependent variable of the study, and the independent variable includes five exogenous variables with the support of extant literature recognized under the influencing factors on e-learning (Tarhini et al., 2017).

#### 3.2 Advancing Hypothesis

Considering the evidence in previous literature recorded in this study, performance expectancy, effort expectancy, social influence, hedonic motivation, and Work life quality is recognized as the independent variable, while the behavioural intention to use e-learning is recognized as the dependent variable.

Accordingly, the following hypothesis was drawn to find out whether the relationships theorized in the conceptual framework hold,

H1: Performance expectancy has a significant impact on the behavioural intention of e-learning among the undergraduates at the University of Kelaniya.

H2: There is a significant impact of effort expectancy on the behavioural intention of e-learning among the undergraduates at the University of Kelaniya.



H3: Social influence has a significant impact considerable effect on the behavioural intention of e-learning among the undergraduates at the University of Kelaniya.

H4: Work-life quality has a significant impact on the behavioural intention of e-learning among the undergraduates at the University of Kelaniya.

H5: Hedonic motivation has a significant impact on the behavioural intention of e-learning among the undergraduates at the University of Kelaniya.

### **3.3 Overall Research Design**

This study on “Factors influencing the behavioural intention of the university undergraduates on e-learning during the covid-19 pandemic “relates to the University of Kelaniya. This was a quantitative study to find the solution to the research problem of “What are the factors influencing the behavioural intention of e-learning among undergraduates at the University of Kelaniya in Sri Lanka with Covid 19?”. Moreover, this explanatory study was used to test the formulated hypothesis and establish relationships in the model. Further, a cross-sectional examination is a collection of information gathered for a specific purpose. This field study examined the factors influencing the behavioural intention of e-learning among university undergraduates with special reference to the University of Kelaniya in Sri Lanka. The unit of examination was at the individual level, undergraduates at the University of Kelaniya. Data was collected pre-tested, standard questionnaire that had met the accepted standards of validity and reliability in the collected data was analyzed using Statistical Package for Social Science 23.0 (SPSS). Further, frequency analysis, correlation test and regression analysis were used to analyze data to test the advanced hypotheses.

The study population consists of 2000 undergraduates at the University of Kelaniya in Sri Lanka, and adhering to Morgan’s table calculation, a 322-sample size was considered to distribute the questionnaire. Concerning the current study, the researcher knows the total elements in the population. Hence, the researcher used a probability sampling technique. In this case, the researcher selected a simple random sampling method due to an equal probability of being chosen for every single element in the population. The researcher obtained a list of undergraduates registered in an academic year. Then, the researcher selected random numbers using an online random number generator.

### **3.4 Research instruments**

The developed questionnaire contained three (03) sections and a cover letter. Using a covering letter facilitates the researcher to convince the participants of the current research's purpose and general information. The first section of the



questionnaire comprised five questions (1-3) which helped the researcher to collect demographic information about the selected sample of the study that will assist the researcher to elaborate on the sample characteristics in the research. Under the second section of the questionnaire, the researcher used Tarhini et al., (2017), twenty-five (20) items with the seven-point Likert scale to assess the independent variables (performance expectancy, effort expectancy, attitude, social influence and work-life quality.) of the study. In the third section of the questionnaire, includes five (5) items with a seven-point Likert scale option, which assesses behavioral intention to use e-learning (Samsudeen & Mohamed, 2019).

#### 4. Data Analysis and Results

The questionnaire was distributed among 322 undergraduates of the University of Kelaniya. 273 of undergraduates responded for the questionnaire & and due to the incomplete data had mentioned 12 responses had discarded. Hence, 261 sample responses consider for the statistical analysis. And it resulted in an 81.06% response rate out of the total sample. Further, responses were eligible for analysis through SPSS.

**Table 1: Response Rate**

No. questionnaires distributed	No. responses received	No. responses discarded	No. responses considered	Effective Response Rate
322	273	12	261	81.06%

Source: Analyzed data

#### 4.1 Reliability

To ensure the reliability of the measurement scales, internal consistency statistics were used. As recommended by Nunnally (1978), construct reliability and the dimension reliability was assessed using Cronbach's Alpha coefficient. Cronbach's Alpha values of all the variables are greater than 0.7 indicating that the multi-item scale is reliable at a greater level, and all the items have played a significant role in conceptualizing the respective constructs. Further, all the items except two reached corrected item correlation values over 0.7 Cronbach's Alpha values indicating that there is greater internal consistency in the measurement scales. It can be justified that one item takes a lesser inter-correlation value because it is a reverse-coded item, whereas the other item takes a value above 0.5 which could be considered considerable inter-correlation.

## 4.2 Validity

According to the validity statistics, the cumulative percentage of the Extraction Sums of Squared Loadings (ESSL %) of the two constructs and their dimensions are greater than 50%, and the item Factor Loading (FL) values are above the threshold limit of 0.5 as recommended by Hair (2010). So that, statistically, the construct validity is ensured.

## 4.3 Correlational

The Pearson Correlation Coefficient was used to assess the strength of association among the variables in which the influencing factors on e-learning & behavioural intention to use e-learning. Further, Sig. (2-tailed) test was applied to test the significance of the correlation coefficient as the advanced hypothesis was non-directional. According to the results,

**Table 2: Correlational Statistics**

Dimension	Correlational Coefficient	Sig Value (Less than 0.01)	N	Correlation Result
Performance Expectancy	0.594	0.00	261	Moderate Positive Correlation
Effort Expectancy	0.603	0.00	261	Moderate Positive Correlation
Social Influence	0.466	0.00	261	Moderate Positive Correlation
Hedonic Motivation	0.487	0.00	261	Moderate Positive Correlation
Work-life quality	0.553	0.00	261	Moderate Positive Correlation

Source: Analyzed data

According to the results of the study, it is revealed there is a moderate positive correlation between Performance Expectancy, Effort Expectancy, Social Influence, Hedonic Motivation, Work life quality & behavioural intention to use e-learning. All the variables resulted in a positive correlation higher than 0.5 of the correlational coefficients.

#### 4.4 Regression

Linear Regression analysis was used for analyzing the impact of each identified factors on behavioural intention to use E-Learning. The results were depicted as follows.

**Table 3: Regression Statistics**

Hypothesis	R Square value	Sig Value (Less than 0.05)	N	Regression Result
H1	0.352	0.000	261	There is a significant impact
H2	0.364	0.000	261	There is a significant impact
H3	0.217	0.000	261	There is a significant impact
H4	0.237	0.000	261	There is a significant impact
H5	0.306	0.000	261	There is a significant impact

Source: Analyzed data

The sample responses were analyzed based on the R square values & the sig. the value which is less than 0.05. Accordingly, the sample of the study depicted positive R square values with sig. values less than 0.05. It depicted that there is a significant impact on the behavioural intention to use e-learning. As well as the results shown that there is a substantial impact of the factors which affect the influencing factors towards e-learning on the behavioural intention to use e-learning.

#### 4.5 Coefficient

**Table 4: Coefficient Statistics**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.846	.206		8.955	.000

Performance Expectancy	.566	.048	.594	11.874	.000
(Constant)	1.851	.201		9.212	.000
Effort Expectancy	.566	.047	.603	12.162	.000
(Constant)	2.779	.179		15.528	.000
Social Influence	.362	.043	.466	8.465	.000
(Constant)	3.372	.104		32.416	.000
Hedonic Motivation	.242	.027	.487	8.964	.000
(Constant)	2.523	.166		15.193	.000
Work-Life Quality	.426	.040	.553	10.680	.000
a. Dependent Variable: Behavioural Intention					

Source: Analyzed data

Finally, all the hypotheses (H1, H2, H3, H4, and H5) were accepted using correlation statistics, regression statistics, and coefficient statistics.

## 5. Discussion and Findings

The primary objective of this research was to assess the impact of performance expectancy, effort expectancy, social influence, hedonic motivation and work-life quality on the behavioural intention of e-learning of university undergraduates at the University of Kelaniya, Sri Lanka. In addition to that, it was focused on studying the possible impact of each independent variable (performance expectancy, effort expectancy, social influence, hedonic motivation and work-life quality) on the behavioural intention of e-learning. Five hypotheses were formulated based on the study's objectives and verified based on the results of Pearson's Correlation analysis and Simple Regression analysis.

According to previous research findings, most researchers found the factors influencing behavioural intention to use e-learning. According to the research conducted by Ali, Qazi, Pua, & Raza (2018); Samsudeen and Mohamed (2019), performance expectancy, effort expectancy, social influence, hedonic motivation and work-life quality positively impacted behavioural intention to use e-learning. By considering the researcher's findings of correlation analysis and simple regression analysis, this study found a significant positive

correlation between PE, EE, SI, HM, WLQ on BI to use e-learning. It was shown that identified influencing factors based on the literature directly impact the behavioural intention to use e-learning of the undergraduates at the University of Kelaniya. Results of the Correlation analysis and Regression analysis clearly showed a moderate positive and strong positive correlation between a dependent variable and independent variables of the study.

Further, the researcher has found that, several influencing factors on behavioural intention to use e-learning. According to the results of Pearson's Correlation analysis and Simple Regression analysis, it was proven that they have a moderate positive correlation between performance expectancy and behavioural intention to use e-learning. This was proven by the previous research conducted by (Ali, Qazi, Puah, & Raza, 2018; Samsudeen & Mohamed, 2019), which showed there was a positive impact from PE on BI to use e-learning relevant to Sri Lankan context. Hence, the researcher suggests previous research findings and current research findings were the same in the Sri Lankan context without considering the contextual differences and perception differences.

As per the statistical evidence of the study, according to the results of Pearson's Correlation analysis and Simple Regression analysis, it was proven that there is a moderate positive correlation between effort expectancy and behavioural intention to use e-learning. This was proven by the future research conducted by (Ali, Qazi, Puah, & Raza, 2018; Samsudeen & Mohamed, 2019), which showed there was a positive impact from EE on BI to use e-learning relevant to Sri Lankan context.

Moreover, the researcher has found that a moderate positive correlation between social influence and behavioural intention to use e-learning. This was proven by the future research conducted by (Ali, Qazi, Puah, & Raza, 2018; Samsudeen & Mohamed, 2019), which showed that there was a positive impact from SI on BI to use e-learning relevant to Sri Lankan context. Hence, the researcher suggests previous research findings and current research findings were the same in the Sri Lankan context without considering the contextual differences and perception differences.

Furthermore, the researcher has found that a moderate positive correlation between hedonic motivation and behavioural intention to use e-learning. This was proven by the future research conducted by (Ali, Qazi, Puah, & Raza, 2018; Samsudeen & Mohamed, 2019) which showed there was a positive impact from HM on BI to use e-learning relevant to the Sri Lankan context. Hence, the researcher suggests previous research findings and current research findings were the same in the Sri Lankan context without considering the contextual differences and perception differences.

In the last factor, the researcher has found that, a moderate positive correlation between work-life quality and behavioural intention to use e-learning. This was proven by the future research conducted by (Ali, Qazi, Puah, & Raza, 2018; Samsudeen & Mohamed, 2019), which showed there was a positive impact from WLQ on BI to use e-learning relevant to Sri Lankan context. Hence, the researcher suggests previous research findings and current research findings were the same in the Sri Lankan context without considering the contextual differences and perception differences.

Finally, the researcher can conclude that the five hypotheses of the study were accepted with achieving five research objectives. It was clear that performance expectancy, effort expectancy, social influence, hedonic motivation & work-life quality have a significant impact on behavioural intention to use e-learning for undergraduates at the University of Kelaniya, Sri Lanka.

## **6. Conclusion and Policy Implication**

The purpose of conducting this research is to assess the factors influencing on behavioral intention of e-learning among university undergraduates during Covid 19. The researcher selected undergraduates who are studying in University of Kelaniya, Sri Lanka. The objectives of the study were verified based on the results of Pearson's Correlation analysis and Simple Regression analysis. Having considered the findings, the current study concludes each factor presents a positive correlation with the behavioral intention to use e-learning. The findings of this study will be important theoretically and practically for the parties who are directly involved with the research area. As concluded the results it has identified the various types of factors influencing the behavioral intention of e-learning. Based on the findings of the study, the researcher can provide some implications which will be important for relevant parties in the educational field.

The result of the behavioral intention to use of e-learning can be used for decisions that are relevant to the current educational system, and the result will be important for the strategic decisions related to the educational functions. These research findings will be helpful for identifying the factors influencing on behavioral intention of e-learning. Mainly, the research findings will be helpful for educational institutions and educators (Users of e-learning methods and technologies). Because, in the Sri Lankan educational context, e-learning is a new thing in other countries. Because when considering the pre-COVID-19 situation, Sri Lankan educational authorities mainly considered the physical educational systems & suddenly, with the COVID-19 pandemic, educational institutions had to adopt e-learning technologies. Furthermore, the current research studies will be helpful for educational institutions when deciding the new educational programs and the contents of the new online courses. Because, the current research study has been analyzed user's various kind of perceptions

affected to the behavioral intention to use e-learning. So, educational institutions and authorities can make their decisions based on the student's various perceptions and that will be caused to improve the satisfaction of the e-learners as well.

In the future, this study positively encouraged future researchers to do this type empirical studies for identify the relationship between factors influencing on behavioral intention of e-learning. Present study was conducted based on university undergraduates in university of Kelaniya. It can be suggested that future researchers can conduct their studies by taking samples which represents all the state universities of Sri Lanka or comparing the results of the state universities and the private universities; if the researchers are capable of doing the study effectively it was proposed to choose a sample from state-owned universities as well as private universities. The researcher suggested that future researchers study this area by taking different types of independent variables that affect behavioral intention to use e-learning.

## References

- Abbasi, S., Ayoob, T., & Malik, A. (n.d.). Perceptions of students regarding E-learning during Covid-19 at a private medical college, Perceptions of students regarding E-learning. doi:<https://doi.org/10.12669/pjms.36.COVID19-S4.2766>
- Ajzen, I. (1991). Organizational Behavior and Human Decision Processes. 179-211. doi:10.1016/0749-5978(91)90020-T
- Alalwan, A., Dwivedi, Y. K., Rana, N., & Algharabat, R. S. (2018). Examining factors influencing Jordanian customers' intentions and adoption of internet banking: Extending UTAUT2 with risk. *Journal of Retailing and Consumer Services*. doi:10.1016/j.jretconser.2017.08.026
- Ali, M., Qazi, W., Puah, C.-H., & Raza, S. (2018). Assessing the e-learning system in higher education institutes: evidence from structural equation modelling. *Interactive Technology and Smart Education*.
- Alzeban, b. (2016). Factors influencing adoption of the international financial reporting standards (IFRS) in accounting education.
- Bączek, M., Bączek, Z. M., & Szpringer, M. (2020). Students' perception of online learning during the COVID-19 pandemic: a survey study of Polish medical students. 1-14. doi:<https://doi.org/10.21203/rs.3.rs-41178/v1>
- Bagozzi, R., & Lee, K.-H. (2002). Multiple Routes for Social Influence: The Role of Compliance, Internalization, and Social Identity. *Social Psychology Quarterly*, 226.



- Bawa, P. (2016). Retention in Online Courses: Exploring Issues and Solutions. 401.
- Clarke, S. (2013). Catholic Education Office Melbourne. 25.
- Davis. (1986). A technology acceptance model for empirically testing new end-user information systems: Theory and results Massachusetts Institute of Technology.
- Díaz , L. E., & Caminero, G. F. (2020). Analyzing the impact of COVID-19 on Eeducation. *Sustainability*, 2-10. doi:<https://doi.org/10.3390/su12145646>
- Fawaz, M., & Samaha, A. (2020, October 30). E-learning: Depression, anxiety, and stress symptomatology among Lebanese university students during COVID-19 quarantine. doi:<https://doi.org/10.1111/nuf.12521>
- Hair, J. H. (2010). Multivariate Data Analysis.
- Herbert, M. (2006). Staying the course: A study in online student satisfaction and retention. *Online Journal of Distance Learning Administration*. Retrieved from <http://www.westga.edu/~distance/ojdla/winter94/herbert94.htm>
- Heyman, E. (2010). Overcoming Student Retention Issues in Higher Education Online Programs: A Delphi Study.
- Kripanont, N. (2007). Examining a technology acceptance model of internet usage by academics within Thai business schools.
- Li, Y., Duan, Y., Fu, Z., & Alford, P. (2012). An empirical study on behavioural intention to reuse e-learning systems in rural China. *British Journal of Educational Technology*, 43(6), 933-948.
- Nunnally, J. C. (1978). Psychometric theory. *New York : McGraw-Hill*.
- Park , S. (2009). An analysis of the technology acceptance model in understanding university students' behavioral intention to use e-learning. *Journal of Educational Technology & Society*, 12(3), 150-162.
- Riquelme, H., & Rios, R. (2010). The moderating effect of gender in the adoption of mobile banking. *International Journal of Bank Marketing* 28(5):328-341, 328-341.
- Salloum, S., Mostafa Al-Emran, & Shaalan, K. (2019). Factors affecting the e-learning acceptance: a case study from UAE. *Education and Information Technologies*, 24, 509-530.

- Samsudeen, S. N., & Mohamed, R. (2019). University students' intention to use e-learning systems: A study of higher educational institutions in Sri Lanka. *Interactive Technology and Smart Education*. doi:10.1108/ITSE-11-2018-0092
- Sharma, S. K. (2015). Adoption of e-government services: The role of service quality dimensions and demographic variables. *Transforming Government People Process and Policy*.
- Sharma, S. K. (2015). Adoption of e-government services: The role of service quality dimensions and demographic variables. *Transforming Government People Process and Policy*.
- Sharma, S. K., Al-Badi, A., & Govindaluri, S. M. (2016). Predicting motivators of cloud computing adoption: A developing country perspective. *Computers in Human Behavior*.
- Sharma, S. K., Yadav, R., & Tarhini, A. (2016). A multi-analytical approach to understand and predict the mobile commerce adoption. *Journal of Enterprise Information Management*. doi:10.1108/JEIM-04-2015-0034
- Smith. (2010). E-learning technologies: A comparative study of adult learners enrolled on blended and online campuses engaging in a virtual classroom.
- Tarhini, A., Masa'deh, R., & Al-Busaidi, K. A. (2017, November 06). Factors influencing students' adoption of e-learning: a structural equation modeling approach.
- Venkatesh , V., & Thong, J. X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*.
- Venkatesh, V., & Davis, F. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, 186-204.
- Vidakis, & Charitakis. (2018). Designing the learning process: the IOLAOS platform", in Proceedings of the 10th International Conference on Subject-Oriented Business Process Management. 15.
- Viswanath Venkatesh, F. D. (2003, September). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*. doi:10.2307/30036540
- Zhou, T. (2011). Understanding mobile Internet continuance usage from the perspectives of UTAUT and flow. *Information Development*, 207-218