

INTEGRATION OF THE UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY MODEL IN ACCEPTANCE OF E-LEARNING AT STATE ISLAMIC RELIGIOUS UNIVERSITIES IN EAST JAVA

Ilham¹, Merlin Apriliyanti²

¹²Universitas Islam Negeri Sunan Ampel Surabaya, Indonesia

Correspondence Email; ilham@uinsa.ac.id; merlin@uinsa.ac.id

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Abstract

This study aims to identify the variables from the Unified Theory of Acceptance and Use of Technology (UTAUT) model that influence e-learning acceptance among lecturers at State Islamic Religious Universities (PTKIN) in East Java. Employing a quantitative approach with a cross-sectional design, the study tested a theoretical model using hypothesis-driven analysis. Data were collected through online questionnaires with a simple random sampling technique, involving 321 lecturers as respondents. Responses were measured using a five-point Likert scale, and Structural Equation Modeling (SEM) was used for data analysis. The findings show that effort expectancy, facilitating conditions, hedonic motivation, habits, and behavioral intentions significantly influence lecturers' acceptance of e-learning. Conversely, performance expectancy and social influence do not show significant effects. Behavioral intention also mediates the positive effect of facilitating conditions and habits on actual e-learning use. Although this study focuses on two PTKIN institutions in East Java, limiting generalizability, it provides useful insights for higher education management. The results have practical implications for designing effective strategies and policies to enhance e-learning adoption, such as lecturer training, awareness campaigns, periodic system reviews, and supportive policy development. E-learning offers solutions to overcome limitations of conventional teaching and enhances access, monitoring, and skill development, contributing to the improved performance of PTKIN. This research also validates the UTAUT model in a new cultural and institutional setting, expanding its relevance for future studies on technology acceptance in education.

Keywords

E-learning, Higher Education, Lecture, Management, System, UTAUT.



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INTRODUCTION

The increasing prevalence of technology in daily life has emphasized the urgency of integrating e-learning into higher education. Numerous educational reforms have underscored the adoption of digital systems as essential in modern academic institutions (Farooq et al., 2017). E-learning and mobile learning, which rely heavily on internet-based platforms, offer innovative methods to enhance the quality of teaching and learning. As part of the digital revolution, e-learning requires not only technological infrastructure but also an adaptive and creative learning environment to foster broader acceptance, particularly among university lecturers (Violante & Vezzetti, 2015).

In Indonesia, the State Islamic Religious Colleges (PTKIN), including UIN Sunan Ampel Surabaya and UIN Maulana Malik Ibrahim Malang, have implemented e-learning systems since 2019. However, PTKIN institutions differ from general state universities (PTN) in their organizational structure and educational orientation. PTKINs operate under the Ministry of Religious Affairs, focusing on religious and Islamic studies, while PTNs are supervised by the Ministry of Education, Culture, Research, and Technology, with a broader scope of disciplines. These institutional differences influence policy decisions, including the integration of e-learning into the educational system.

The Unified Theory of Acceptance and Use of Technology (UTAUT), developed by (Venkatesh et al., 2003); (Göğüş et al., 2012), serves as a foundational framework to assess technology adoption. The model comprises four core constructs: Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions. Later, UTAUT2 was proposed to include additional variables such as Hedonic Motivation, Price Value, and Habit, along with moderating factors like age, gender, and experience (Venkatesh et al., 2012); (Farooq et al., 2017) further extended the model by introducing Personal Innovativeness in IT (PI), thus forming UTAUT3.

Several studies have employed the UTAUT and its extended models to evaluate technology adoption in educational settings, particularly e-learning. For instance, Gunasinghe et al. (2020) applied UTAUT3 to examine lecturers' adoption of e-learning in Sri Lankan universities, revealing that Performance Expectancy, Effort Expectancy, Facilitating Conditions, Hedonic Motivation, and Habit significantly influenced adoption, while Social Influence and Personal Innovativeness were less impactful (Gunasinghe et al., 2020). Similarly, Abbad (2021) investigated students' usage of e-learning systems in developing countries using the UTAUT framework, emphasizing the relevance

of Facilitating Conditions and Effort Expectancy in enhancing system adoption (Abbad, 2021). Narayana (2019), in a case study at STMIK STIKOM Bali, confirmed that Performance Expectancy and Effort Expectancy are among the key predictors of e-learning system usage among academic staff (Narayana, 2019). Raman and Thannimalai (2021), employing UTAUT2 during the COVID-19 pandemic, found that Hedonic Motivation and Social Influence had a notable effect on students' behavioral intentions toward e-learning in higher education (Raman & Thannimalai, 2021). Additionally, Raza et al. (2021) expanded the UTAUT model by incorporating the variable of social isolation and found that it significantly shaped users' intention to adopt learning management systems during remote learning periods (Raza et al., 2021). These prior studies underscore the versatility of the UTAUT framework in capturing the complexity of e-learning adoption in diverse educational contexts.

Although previous studies have successfully applied the UTAUT and its extended models in various educational contexts, several gaps remain. For instance, Gunasinghe et al. (2020) focused on e-learning adoption among lecturers in Sri Lanka using UTAUT3 but did not account for the socio-religious institutional context, which may influence adoption behaviors differently. Abbad (2021) and Narayana (2019) emphasized students' and academic staff's general use of e-learning systems, yet they overlooked contextual barriers such as digital resistance and infrastructural constraints. Raman and Thannimalai (2021) highlighted the impact of Hedonic Motivation and Social Influence during the COVID-19 pandemic, but did not explore long-term post-pandemic behavioral patterns among faculty. Meanwhile, Raza et al. (2021) introduced social isolation into the UTAUT model, but their study was student-centered and lacked consideration of academic professional dynamics in Islamic higher education. Collectively, these studies confirm the utility of UTAUT but tend to generalize findings across varied institutions without addressing unique organizational, cultural, and infrastructural challenges.

This current research distinguishes itself by focusing specifically on the integration of the UTAUT model in the context of State Islamic Religious Universities (PTKIN) in East Java, Indonesia—a context characterized by both traditional pedagogical values and growing digital transformation efforts. Unlike prior research, this study directly addresses the enduring challenges faced by PTKIN lecturers, such as limited digital literacy, reluctance to shift from conventional teaching methods, low system usability, and poor internet infrastructure. By examining these factors within the UTAUT framework, the research provides a culturally and institutionally nuanced

understanding of e-learning acceptance. This localized focus not only adds empirical depth but also offers practical insights for policy and decision-makers seeking to enhance the digital transformation of Islamic higher education in developing regions.

Therefore, this study adopts the UTAUT model—particularly its later adaptations UTAUT2 and UTAUT3—as a theoretical foundation to examine factors influencing e-learning acceptance among PTKIN lecturers in East Java. The study identifies a research gap in evaluating the mediating role of behavioral intention and other psychological variables within the UTAUT framework. The proposed model includes key constructs such as Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation, Habit, Behavioral Intention, and Use Behavior.

The originality of this study lies in its contextual focus on PTKIN, a distinctive academic environment within Indonesia's higher education system, and its attempt to validate the UTAUT model in this setting. By analyzing the mediating effects among UTAUT variables, this study offers novel insights into the complex interplay of personal, social, and infrastructural factors affecting e-learning adoption.

This study is significant in its aim to understand and improve e-learning acceptance in PTKIN institutions. It contributes to the broader discourse on technology adoption in education, particularly in religious-based academic institutions that face unique cultural and operational challenges. The research findings are expected to yield practical implications for policymakers, IT developers, and educators, supporting more effective strategies for digital transformation in higher education. Moreover, it provides theoretical contributions by refining the UTAUT model within the context of developing countries and Islamic higher education institutions.

METHOD

This study uses quantitative research by testing theories through measurements that emphasize numerical data (numbers) on the variables studied and then analyzed using statistical analysis. The population in this research is College State Islamic Religion (PTKIN) located in the cities of Surabaya and Malang. Respondents in this study were lecturers at the State Islamic Religious College (PTKIN). The sample used in this study used the probability sampling method, namely simple random sampling (Zikmund et al., 2013); (Karimuddin Abdullah et al., 2022).

This research is intended for all lecturers who have used e-learning at PTKIN and not for prospective users. The technique used is the proportional simple random sampling technique, which is a sampling procedure that guarantees that every element in the population has the same opportunity to be included in the sample (Zikmund et al., 2013). Researchers used a structural equation model (SEM) in analyzing data with SEM applications, with the consideration that SEM has the ability to combine the measurement model with the structural model simultaneously and efficient (J. F. Hair et al., 2021). SEM is a multivariate technique that combines aspects of multiple regression and factor analysis to estimate a series of dependency relationships simultaneously with the data analysis process using AMOS and SPSS (J. F. J. Hair et al., 2010).

The data used in this study were obtained from primary sources through a structured questionnaire (Sugiyono, 2016) distributed to PTKIN lecturers who actively use e-learning systems. The questionnaire was designed to measure all constructs based on the Unified Theory of Acceptance and Use of Technology 3 (UTAUT3) model. Each item was rated using a five-point Likert scale ranging from strongly disagree to strongly agree. The data collection technique involved both online and offline distribution to ensure a broader reach and to accommodate lecturers in both urban and peripheral locations. Based on the UTAUT3 framework and previous empirical studies, the following research hypotheses were formulated:

H₀₁: Performance Expectancy (PE) does not have a significant effect on Behavioral Intention (BI);

H₁₁: Performance Expectancy (PE) has a significant effect on Behavioral Intention (BI).

H₀₂: Effort Expectancy (EE) does not have a significant effect on Behavioral Intention (BI);

H₁₂: Effort Expectancy (EE) has a significant effect on Behavioral Intention (BI).

H₀₃: Social Influence (SI) does not have a significant effect on Behavioral Intention (BI);

H₁₃: Social Influence (SI) has a significant effect on Behavioral Intention (BI).

H₀₄: Facilitating Conditions (FC) do not have a significant effect on Behavioral Intention (BI);

H₁₄: Facilitating Conditions (FC) have a significant effect on Behavioral Intention (BI).

H₀₅: Hedonic Motivation (HM) does not have a significant effect on Behavioral Intention (BI);

H₁₅: Hedonic Motivation (HM) has a significant effect on Behavioral Intention (BI).

H₀₆: Facilitating Conditions (FC) do not have a significant effect on Use Behavior (UB);

H₁₆: Facilitating Conditions (FC) have a significant effect on Use Behavior (UB).

H₀₇: Behavioral Intention (BI) does not have a significant effect on Use Behavior (UB);

H₁₇: Behavioral Intention (BI) has a significant effect on Use Behavior (UB)

FINDINGS AND DISCUSSION

Findings

Characteristics of Respondent PTKIN Higher Education

PTKIN Higher Education Section to be classified in order to obtain data on the distribution of respondents' work positions. In this case, the number of samples has been calculated according to the number of lecturers at each tertiary institution so that the distribution can be seen evenly. There are two universities in PTKIN, namely UIN Sunan Ampel Surabaya and UIN Maulana Malik Ibrahim Malang. The following is Table 1 of the percentage of universities where respondents work.

Table 1. Distribution of Respondents Based on PTKIN College

PTKIN Name	Frequency	Percentage
UIN Sunan Ampel Surabaya	186	47.5%
UIN Maulana Malik Ibrahim Malang	195	52.5%
Total number	381	100%

Source: Data Processed by Researchers

Table 1 presents the distribution of respondents based on their affiliated PTKIN institutions. The data shows that out of a total of 381 lecturers who participated in the study, 195 respondents (52.5%) were from UIN Maulana Malik Ibrahim Malang, while 186 respondents (47.5%) were from UIN Sunan Ampel Surabaya. This relatively balanced distribution indicates that the sample was proportionally and fairly drawn from both institutions, allowing for more representative insights into lecturers' perceptions and behaviors regarding e-learning adoption across PTKIN universities in East Java.

The overall results of the validity test of the research instrument are in Table 2 as follows.

Table 2. Results of Validity Test Research Instruments

No.	Variable	Indicator	Loading Factor	Significant	Conclusion
1.	Performance Expectancy	(PE-1)	1,000		Valid
2.	(Performance Expectations)	(PE-2)	1,610		Valid
3.		(PE-3)	1,540		Valid
4.		(PE-4)	1,550		Valid
5.	effort expectancy	(EE-1)	1,000		Valid
6.	(Business Expectations)	(EE-2)	0.660		Valid
7.		(EE-3)	0.620		Valid
8.	social Influence (Social	(SI-1)	1,000		Valid
9.	Influence)	(SI-2)	0.770		Valid
10.	Facilitating Conditions _ _	(FC-1)	1,000		Valid
11.	Facilitate)	(FC-2)	0.730	Load Factor > 0.5	Valid
12.		(FC-3)	0.650		Valid
13.	hedonic Motivation	(HM-1)	1,000	And	Valid
14.	(Hedonic Influence)	(HM-2)	0.950		Valid
15.	Habits (Habits)	(HB-1)	1,000	$P < \alpha = 0.05$ (5%)	Valid

No.	Variable	Indicator	Loading Factor	Significant	Conclusion
16.		(HB-2)	0.920		Valid
17.	Behavior Intention (Behavior Intention)	(BI-1)	1,000		Valid
18.		(BI-2)	0.900		Valid
19.		(BI-3)	1,110		Valid
20.	Use Behavior (Usage Behavior)	(UB-1)	1,000		Valid
21.		(UB-2)	1,000		Valid

Based on Table 2 above that all question items in the questionnaire are declared valid, because the calculated factor loading (r) value is greater than 0.5 and $P < \alpha = 0.05$. Thus, the questionnaire instrument items, the overall indicator of research variables, can be used as questionnaire instruments by researchers.

Based on the results of the p-value and loading factor according to the established criteria, that is greater than 0.7, it can be concluded based on results reliability test the questionnaire as a whole is reliable or reliable. The following is Table 3, which is the result of the overall latent variable reliability test.

Table 3. Results Test Research Instrument Reliability

No.	Variable	P Value Variance Error Loading	Loading (λ)/CR	Conclusion
1.	Performance Expectancy (Performance Expectations)	0.000	1.157	Reliable
2.	Effort Expectancy (Business Hope)	0.000	0.815	Reliable
3.	Social Influence (Social influence)	0.000	0.885	Reliable
4.	Facilitating Conditions that Facilitate)	0.000	0.928	Reliable
5.	Hedonic Motivation (Hedonic Motivation)	0.000	0.975	Reliable
6.	Habits (Habits)	0.000	0.960	Reliable
7.	Behavioral Intention (Behavior Intention)	0.000	1.005	Reliable
8	Use Behavior (Usage Behavior)	0.000	1,000	Reliable

Based on Table 3 found that the Loading (λ) variable in a manner, almost the same with 0.7. So that can be concluded that the variable has a good reliability value and the questionnaire can be confirmed dependable for used in measure the phenomenon proposed.

Convergent Validity Test (Convergent Validity)

Convergent validity aims to determine the validity of each relationship between indicators and constructs or latent variables. Based on Hair et al (2010), the minimum value for each factor loading is ≥ 0.5 or normally ≥ 0.7 . The results of processing using AMOS can be seen with the value

of the outer model or the correlation between the construct and the variables, initially not fulfilling convergent validity, because there are still quite a number of indicators that have a loading factor value below 0.50. The following Table 4 is the Loading Value for all constructs.

Table 4. Loading Values for All Constructs

No	Indicator	Outer Value Loading	Information
1.	PE1	1.00	Meets convergent validity
2.	PE2	1.04	Meets convergent validity
3.	PE3	1.03	Meets convergent validity
4.	PE4	1.02	Meets convergent validity
5.	EE1	1.00	Meets convergent validity
6.	EE2	0.71	Meets convergent validity
7.	EE3	0.57	Meets convergent validity
8.	SI1	1.00	Meets convergent validity
9.	SI2	0.61	Meets convergent validity
10.	FC1	1.00	Meets convergent validity
11.	FC2	0.85	Meets convergent validity
12.	FC3	0.67	Meets convergent validity
13.	HM1	1.00	Meets convergent validity
14.	HM2	2.01	Meets convergent validity
15.	HB1	1.00	Meets convergent validity
16.	HB2	4.56	Meets convergent validity
17.	BI1	1.00	Meets convergent validity
18.	BI2	0.89	Meets convergent validity
19.	BI3	1.09	Meets convergent validity
20.	UB1	1.00	Meets convergent validity
21.	UB2	1.08	Meets convergent validity

Source: Data Processed by Researchers

Discriminant Validity Test (Discriminant Validity)

Discriminant validity is carried out to ensure that each concept from each latent model is different from other variables. Discrimination validity can be observed from the Fornell-Larcker Criterion value. The next step is to do a Discriminant Validity Test. The results of the Fornell-Larcker Criterion value show that the correlation between the variables and the variable itself is greater than the correlation between the variables and other variables, as shown in Figure 1, as follows.

	EE3	UB2	HM1	HM2	FC1	FC2	FC3	SI1	SI2	EE1	EE2	PE1	PE2	PE3	PE4	HB1	HB2	UB1	BI3	BI2	BI1
EE3	1.000																				
UB2	.195	1.000																			
HM1	.207	.142	1.000																		
HM2	.228	.255	.254	1.000																	
FC1	.089	.234	.072	.182	1.000																
FC2	.116	.133	.089	.160	.275	1.000															
FC3	.180	.062	.144	.072	.162	.191	1.000														
SI1	.118	.148	.094	.220	.095	.120	.173	1.000													
SI2	.081	.198	.174	.260	.205	.146	.128	.123	1.000												
EE1	.086	.217	.181	.246	.060	.112	.068	.200	.269	1.000											
EE2	.191	.250	.173	.319	.188	.164	.016	.101	.146	.161	1.000										
PE1	.121	.267	.155	.183	.121	.179	.075	.173	.155	.125	.112	1.000									
PE2	.231	.109	.132	.209	.108	.112	.063	.124	.210	.152	.124	.256	1.000								
PE3	.175	.173	.138	.125	.157	.192	.144	.032	.163	.053	.240	.170	.208	1.000							
PE4	.139	.106	.102	.159	.133	.179	.104	.094	.192	.095	.147	.215	.189	.279	1.000						
HB1	.237	.071	.125	.214	.232	.174	.158	.164	.157	.086	.272	.103	.173	.229	.069	1.000					
HB2	.152	.220	.227	.183	.090	.111	.169	.117	.194	.186	.257	.157	.162	.179	.109	.171	1.000				
UB1	.083	.227	.139	.319	.080	.134	.101	.166	.148	.256	.139	.090	.165	.014	.048	.118	.208	1.000			
BI3	.174	.269	.114	.184	.117	.132	.193	.200	.068	.199	.130	.141	.190	.105	.042	.152	.262	.205	1.000		
BI2	.197	.184	.153	.204	.176	.163	.135	.130	.254	.161	.157	.141	.213	.138	.151	.229	.218	.121	.188	1.000	
BI1	.142	.216	.234	.199	.214	.133	.085	.228	.154	.232	.117	.130	.199	.115	.115	.100	.210	.216	.237	.193	1.000

Figure 1. Fornell-Larcker Criterion

Source: Data Processed by Researchers

Model Suitability Test (Goodness of Fit Model) After Making Improvements with Index Modifications

After doing the Model Suitability Test initially on all latent variables whose results do not meet the Goodness of Fit Model (GOF) standard, the data is modified by index, so these latent variables can produce a better value, and the average value meets the standard. The results of the analysis in the form of a path diagram are presented in Figure 2.

In Table 5, it shows that the eight criteria used to assess the feasibility of a model, in fact, can be declared good. It can be concluded that the model is acceptable, which means that there is a match between the model and the data used.

Table 5. Results of Testing the Use Behavioral Model with Modifications

No	Criteria	Cut-off Values	Calculation Results	Conclusion
1.	Chi Square	Expected small	124,631	χ^2 with df=179 is 225.933 Good
2.	Significance probability	≥ 0.05	0.899	Good
3.	RMSEA	≤ 0.08	0.000	Good
4.	GFI	≥ 0.90 or close to 1	0.965	Good
5.	AGFI	≥ 0.90 or close to 1	0.944	Good
6.	CMIN/DF	Less than 2, upper limit 2 (≤ 2.00)	0.854	Good
7.	TLI	≥ 0.90 or close to 1	1,043	Good
8.	CFI	≥ 0.90 or close to 1	1,000	Good

Source: Data Processed by Researchers

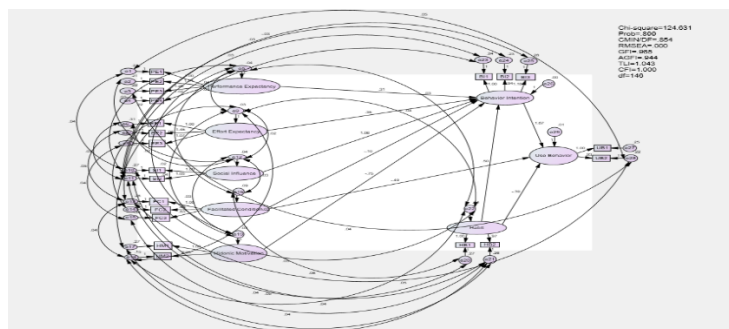


Figure 2. Results of Index Modification Path Analysis

(Source: Data Processed by Researchers)

Figure 2 shows the path coefficients, which are the results of hypothesis testing in this study, and can be presented in the following structural equation.

$$BI = 0.31PE + 0.35 EE + 1.06 SI + (-0.10 FC) + (-0.75 HM) + 0.76 HB$$

$$UB = (-0.49 FC) + (-0.39 HB) + 1.67 BI$$

Table 5 and Figure 2 present the results of the model fit assessment and hypothesis testing for the modified Use Behavioral (UB) model. As shown in the table, all goodness-of-fit indices meet or exceed the recommended thresholds, indicating that the structural model fits the data very well. The Chi-Square value is low, with a high significance probability (0.899), and other indicators such as RMSEA (0.000), GFI (0.965), AGFI (0.944), CMIN/DF (0.854), TLI (1.043), and CFI (1.000) all suggest an excellent model fit. Figure 2 further illustrates the strength and direction of relationships among variables. The structural equation results show that Behavioral Intention (BI) is positively influenced by Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Habit (HB), while Facilitating Conditions (FC) and Hedonic Motivation (HM) show negative effects. Furthermore, the actual Use Behavior (UB) is significantly and positively influenced by Behavioral Intention (BI), while FC and HB show negative coefficients. These findings indicate that although intention plays a key role in influencing actual usage, some external factors, like facility availability and habitual patterns, may counterintuitively act as barriers in the context of e-learning adoption.

Discussion

Effect of Performance Expectancy on the Behavioral Intention of Lecturers in e-Learning

Based on the results of testing the hypothesis of the effect of performance expectancy on behavioral intention, a path coefficient of 0.17, which is positive, and a CR of 1.670 with a probability of 0.095, which is greater than the significance level (α), which is determined at 0.05. Thus, Performance Expectancy (PE) has no significant effect on Behavioral Intention (BI), which means

that every time there is a change in Performance Expectancy (PE) will not change Behavioral Intention (BI). The first hypothesis (H1), which states that Performance Expectancy (PE) has a positive and significant effect on Behavioral Intention (BI), is not accepted. This resulted in the finding that performance expectancy has a positive and insignificant effect on behavioral intention. The results of this study indicate that the more trust and confidence lecturers have in performance expectancy in using e-learning at PTKIN, will not increase the positive intention of lecturers in developing the use of e-learning at PTKIN.

The results of this study are in line with research from (Ghozali & Sri Handayani, 2018); (Al-Gahtani, 2016) because they claim that performance expectations do not directly affect lecturers' intentions to use e-learning. This insignificant effect is suspected because lecturers do not fully believe that the use of e-learning can provide benefits in learning effectiveness.

The results of this study are not in line with the findings from (Venkatesh et al., 2003); (Göğüş et al., 2012); (Farooq et al., 2017); (Gunasinghe et al., 2019); (Gunasinghe et al., 2020); (Varkey et al., 2023); (El-Masri & Tarhini, 2017); (Rivai Zaenal, 2014); (Smith et al., 2014); (Gunasinghe et al., 2019); (Gunasinghe et al., 2019); (Jameel et al., 2020); (Raza et al., 2021) which said that the performance expectancy variable was found to be consistently positive and significantly influencing interest in the use of information technology. Likewise, relevant recent research establishes that performance expectancy can be a significant predictor of continued intention to use technology in blended learning, which is a recent phenomenon in higher education (Abbad, 2021); (Chen et al., 2021); (Bervell et al., 2020); (Salloum et al., 2019); (Kurniati & El-Yunusi, 2023). The difference between the results of this study and those of (Venkatesh & Davis, 2000) lies in the objectives and the research sample used. Venkatesh's research aims to examine literature as well as compare eight models related to user reception, as well as formulate a unified model that integrates elements from 8 model and validate in an empirical manner, as well as targeting research on population of user technology who are not interested to try use something system which new.

Effect of Effort Expectancy on Lecturer Behavior Intention in Using e-Learning

Based on the results of testing the hypothesis of the effect of Effort Expectancy on Behavioral Intention is significant with a path coefficient of 0.43 and a positive sign and a CR of 2.619 with a probability of 0.009, which is smaller than the significance level (α), which is determined at 0.05. Thus, Effort Expectancy (EE) has a direct effect on Behavioral Intention (BI) of 0.43, which means that every time there is an increase in Effort Expectancy (EE), it will increase Behavioral Intention

(BI) by 0.43. The second hypothesis (H2), which states that Effort Expectancy (EE) has a positive and significant effect on Behavioral Intention (BI), is accepted. This results in the finding that Effort Expectancy has a positive and significant effect on Behavioral Intention. Based on the test results, it can be concluded that Effort Expectancy has a positive and significant effect on behavioral intention. The results of this study indicate that the better the lecturer perceives Effort Expectancy in PTKIN e-learning, the positive the attitude towards the lecturer's willingness to carry out Behavioral Intention.

The results of this study are consistent with the results of research (Venkatesh et al., 2003); (Göğüş et al., 2012); (Venkatesh et al., 2012); (Gunasinghe et al., 2020); (Waheed et al., 2015); (Abbad, 2021); (Mousa Jaradat & Al Rababaa, 2013), who found that Effort Expectancy has a positive and significant effect on behavioral intention. The similarity of this research with that of (Gunasinghe et al., 2020), is that both produce the effect of effort expectancy on the intention to use the e-learning system, which is significant, and also both use a deductive approach and a quantitative methodology, where the model is theoretical tested using hypotheses to assess causality between variables. As well as the use of retrieval techniques random sample was used to collect the data is also the same, use a questionnaire, which was managed alone and sent via Google Forms to respondents, using academics, as well as usage a Likert scale is the same.

The results of this study are inconsistent with research conducted by (Waheed et al., 2015); (Arshad & Zaman, 2020); (Salloum et al., 2019); (Lestari, 2021); (Narayana, 2019) with the title Analysis of the Application of the UTAUT Model on E-Learning User Behavior. The Effort Expectancy variable is considered not to have a positive influence on the Behavior In Use System. The difference in results is in the use of the unit of analysis. Rizki Puji Lestari used student analysis as respondents, while this study used lecturers.

Effect of Social Influence on Behavior Intention in the Use of e-Learning

Based on the results of testing the hypothesis of the effect of Social Influence on Behavioral Intention is not significant, with a path coefficient of 0.60, which is positive, and a CR of 1.142, with a probability of 0.253, which is greater than the significance level (α), which is determined at 0.05. Thus, Social Influence (SI) has no significant effect on Behavioral Intention (BI) of 0.60, which means that every time there is an increase in Social Influence (SI), it will not increase Behavioral Intention (BI) by 0.60. The third hypothesis (H3), which states that Social Influence (SI) has a positive and significant effect on Behavioral Intention (BI), is rejected. This results in findings that Social Influence

has a positive and not significant effect on Behavioral Intention. Based on the test results, it can be concluded that social influence has a positive and insignificant effect on behavioral intention, which is not proven. The results of this study indicate that the less well the lecturer perceives Social Influence in the PTKIN e-learning, the less positive attitudes towards the lecturer's willingness to carry out Behavioral Intention will not increase.

Empirically, the findings regarding the influence of Social Influence on Behavioral Intention, which is not significant at the university lecturer level, are supported by research conducted by (Gunasinghe et al., 2018); (Gunasinghe et al., 2019); (Gunasinghe et al., 2020); (Tseng et al., 2022); (Hayat et al., 2023); (Olga Mironova, Irina Amitan, Jelena Vendelin, 2012). And the findings of this study contradict the other findings (Göğüş et al., 2012) (Farooq et al., 2017). The similarity of these results is due to using a quantitative approach and multivariate statistical analysis techniques with the same PLS SEM, even though different countries, cultures, and populations.

The Effect of Facilitating Conditions on the Behavior Intention of the Lecturer in Using e-Learning

Facilitating influence hypothesis Conditions on Behavioral Intention is significant with a path coefficient of 0.28, which is positive, and a CR of 2.608 with a probability of 0.009, which is smaller than the significance level (α), which is determined at 0.05. Thus, the Facilitating Condition (FC) has a direct effect on Behavioral Intention (BI) of 0.28, which means that every time there is a change in Facilitating Condition (FC), it will change the Behavioral Intention (BI) by 0.28. The fourth hypothesis (H4), which states that Facilitating Condition (FC) has a positive and significant effect on Behavioral Intention (BI), is accepted.

The results of this study are consistent with the results of previous studies, which show the facilitation of conditions that directly influence behavioral intentions (Gunasinghe et al., 2020); (Intan & Handayani, 2017); (Bock et al., 2005); (Bharati & Srikanth, 2018); (Raza et al., 2021). The results of this study are inconsistent with research conducted (Narayana, 2019) with the title Analysis of the Application of the UTAUT Model to User Behavior of e-learning. Variable facilitating conditions are considered to have a positive influence on the Behavior In Use System. This can be seen from the t value for the Facilitating relationship conditions, and the behavior in use system has a value greater than the t-table, namely 1.385. The same thing with the results obtained previously showing a non-significant facilitating effect of conditions on behavioral intention, such as the results (Teo et al., 2016); (Masa'deh et al., 2016); (El-Masri & Tarhini, 2017). There are differences in the results of the effect of facilitation conditions on this intention because Tarhini uses a student

population as respondents, while this study uses lecturers. Likewise, the differences from the cultural perspective of foreign education with the educational culture in Indonesia also affect the descriptive data of the respondents.

Effect of Facilitating Conditions on Use Behavior of Lecturers in Using e-Learning

Facilitating influence hypothesis Conditions for Use Behavioral is not significant with a path coefficient of -0.15 and a positive sign, and a CR of -0.916 with a probability of 0.360, which is greater than the significance level (α), which is determined at 0.05. Thus, Facilitating Condition (FC) has a negative and insignificant effect on Use Behavioral (UB) of -0.15, which means that every time there is an increase in Facilitating Condition (FC), it will not increase Use Behavioral (UB) by -0.15. The fifth hypothesis (H5), which states that the Facilitating Condition (FC) has a significant effect on Use Behavioral (UB), was rejected. This resulted in the finding that Facilitating Conditions have no positive and insignificant effect on Use Behavioral.

The results of this study support research from (Wijaya et al., 2022) namely facilitating conditions have no significant positive effect on system use behavior in e-learning. The results of this study are different from the results of this study (Gunasinghe et al., 2019); (Gunasinghe et al., 2020); (Ramantoko et al., 2016); (Kim et al., 2024), Agudo-Peregrina, (Brynjolfsson et al., 2019) that facilitating conditions have a significant positive effect on the use behavior of a system. This difference in results is due to using a population in the field of education abroad, which has a different cultural character from that at PTKIN Indonesia, and (Farooq et al., 2017) using a sample of students, while this study used lecturers.

Influence of Hedonic Motivation on Lecturer Behavior Intention in Using e-Learning

Hedonic influence hypothesis motivation on Behavior Intention is significant with a path coefficient of 0.45, which is positive, and a CR of 2.564 with a probability of 0.010, which is smaller than the significance level (α), which is determined at 0.05. Thus, the Hedonic Motivation (HM) has a significant effect on Behavioral Intention (BI) of 0.45, which means every time there is an increase in Hedonic Motivation (HM), it will increase Behavioral Intention (BI) by 0.45. The sixth hypothesis (H6), which states that Hedonic Motivation (HM) positive and significant effect on Behavioral Intention (BI), is accepted. This results in the finding that Hedonic motivation positive and significant effect on Behavior Intention. Based on the test results, it can be concluded that Hedonic motivation positive and significant effect on Behavior Intention. The results of this study indicate that the better the lecturer perceives Hedonic motivation in PTKIN e-learning it will increase

positive the attitude towards the willingness of lecturers to carry out Behavioral Intention.

The results of this study are in line with research (Göğüş et al., 2012); (Gunasinghe et al., 2020); (El-Masri & Tarhini, 2017); (Kleinberg et al., 2020) states that hedonic motivation has an important role in intention and usage behavior. Hedonic motivation has a positive effect on behavioral intention and is one of the main predictors. The similarity of these results is due to the fact that they both use populations and samples from universities, and also use quantitative research methods and the same SEM analysis techniques. The results of this study contradict the research conducted by (Raman & Thannimalai, 2021) (Pertiwi & Ariyanto, 2017), which shows that hedonic motivation has no significant influence on behavioral intention.

CONCLUSION

This study reveals that among PTKIN lecturers, Effort Expectancy, Facilitating Conditions, and Hedonic Motivation significantly influence Behavioral Intention to adopt e-learning systems. Lecturers find the system easy to use, adaptable, and enjoyable, indicating a strong readiness to embrace e-learning when it is user-friendly and supported by institutional infrastructure. These results suggest that with adequate facilities and a motivating user experience, PTKIN lecturers are inclined to integrate e-learning into their teaching practices. In contrast, Performance Expectancy and Social Influence did not show significant effects, implying that many lecturers still harbor doubts about the usefulness of e-learning in improving productivity or feel less pressured by their social or institutional environment to adopt it. Furthermore, while Facilitating Conditions significantly influence intention, they do not directly affect actual Use Behavior. This gap suggests that despite institutional readiness, inconsistent access to resources—such as uneven internet quota distribution and inadequate digital infrastructure in rural areas—hinders full adoption. Therefore, strengthening infrastructure and providing consistent support are crucial. These findings underscore the importance of addressing both psychological and logistical factors to increase e-learning acceptance within Islamic higher education institutions and highlight the relevance of the extended UTAUT framework in examining technology adoption in religious-based academic settings.

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