International Journal of Language Education
Volume 6, Number 3, 2022, pp. 314-331
ISSN: 2548-8457 (Print) 2548-8465 (Online)
Doi: https://doi.org/10.26858/ijole.v6i3.24144

Students' Acceptance of Technology Use in Learning English Pharmacy

Vivit Rosmayanti
Universitas Megarezky, Indonesia
Email: vivitoellah@gmail.com

Nurdin Noni
Universitas Negeri Makassar, Indonesia
Email: nurdinnoni@yahoo.com

Andi Anto Patak
Universitas Negeri Makassar, Indonesia
Email: andiantopatak@unm.ac.id

Received: 15 October 2021
Reviewed: 1 March 2022-30 June 2022
Accepted:6 October 2022
Published: 31 October 2022

Abstract
This study aimed at determining how Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions influenced Behavioral intentions to use technology in learning English Pharmacy. This study employed a sample of 100 pharmacy students who were enrolled in English pharmacy course. The samples were chosen using quota sampling technique. The Unified Theory of Acceptance and Use of Technology (UTAUT) model was performed to measure students' acceptance of the use of technology in this study. The findings of this study indicated that the four aspects mentioned above, such as Performance Expectations, Effort Expectations, Social Influences, and Facilitation Conditions, have a favorable impact on students' Behavioral intentions when using technology to learn English Pharmacy. However, only 40% of the four factors could explain the influence on Behavioral intention. The impact of this study is that it can lead the way and serve as a reference for future research on the UTAUT approach in larger scope. In addition, the university should be able to increase the benefits and usability of technology as a learning resource by developing its own Learning Management System (LMS) which is easy to use.

Keywords: Behavioral Intentions; UTAUT; English Pharmacy

The rapid advancement of Information and Communication Technology has an impact on the need for an IT-based teaching and learning concept and mechanism to be inevitable. The concept, which was eventually dubbed e-learning, had the impact of digitizing traditional education, both in terms of content and system. During the Covid 19 pandemic, which lasted around two years, practically all higher education institutions in Indonesia underwent digital transformation and utilized technology in learning.

Students not just in Indonesia, but all throughout the world, use the internet and computers on a daily basis. Technologies allows users quick access to knowledge and

information (Tan, 2013). Currently, e-learning is gaining popularity in a variety of educational institutions, particularly universities. E-learning refers to a number of different types of learning apps that can be accessible for free on the internet. E-learning can serve as tutors and learning media, allowing students to study whenever and wherever they want, according to their goals (Sihar et al., 2011). The use of technology in the classroom allows teachers to create a more informative and appealing learning environment by including a variety of learning materials, photos, videos, and even free software to enable more effective learning (Pardede, 2020). Students' perspectives of the usage of modern technology in learning were highlighted in a study conducted by Hodges et al., (2020). The findings revealed that students' perceptions of technology use were very important, implying that technology played a vital part in achieving successful education.

The issue that can arise in this digital learning environment is that not all students can tolerate rapid and abrupt changes in learning concepts. Certain technology and applications, for example, are unfamiliar to students. By interacting directly with the teacher and their classmates, students with a kinesthetic learning style will find it simpler to comprehend lessons. Apart from that, the level of acceptance and use of technology in learning at one of the private universities where this research takes place has never been attained before. To begin, the authors used the measurement of level of acceptability and usage of technology in learning English in the Faculty of Pharmacy as a starting point. Lecturers should employ the Unified Theory of Acceptance and Usage of Technology, or UTAUT Model, proposed by Venkatesh et al., (2003) to determine the amount of acceptance and use of technology in English pharmacy learning.

Literature review

The Information Technologies development and the Internet's growth has reduced learning's time and place constraints, attracting an increasing number of students to learning websites or online learning environments to pursue their learning (Tan, 2013). The presence of information technology has changed the organization a lot. In order to make information technology to improve performance, this technology must be accepted and used first by its users. Explaining how technology is accepted and used by users is an interesting study. Several theories based on psychology and sociology have been used to explain this phenomenon. Venkatesh et al. (2003) examined theories about acceptance technology by system users. A total of eight theories were studied as follows:

1. The theory of reasoned action (TRA) (Fishbein, 1980)
2. The technology acceptance model (TAM) (Davis, 1989)
3. Motivational model (motivational model or MM) (Davis et al., 1992)
4. The theory of planned behavior (theory of planned behavior or TPB) (Ajzen, 1991)
5. Combined TAM and TPB model (a model combining the technology acceptance model and the theory of planned behavior or TAM + TPB) (Davis, 1989), (Ajzen, 1991)
6. PC utilization model (model of PC utilization or MPCU) (Thompson et al., 1991)
7. The innovation diffusion theory (IDT) (Rogers, 2003)
8. Social cognitive theory (SCT) (Compeau et al., 1999)

Venkatesh et al. (2003) then used these pre-existing theories to develop a new, integrated model. This unified model is then called the Unified Theory of Acceptance and Use of Technology or by its abbreviation, UTAUT. There are seven constructs which are always significant to be influences directly to the intention (intention) or to the use (usage) of one or more adoption models

that form UTAUT. Of the seven constructs, only four main constructs are considered to have an important role in direct effects on user acceptance and usage behavior. These four constructs are performance expectancy, effort expectancy, social influence, and facilitating conditions.

Venkatesh et al. (2003) defined performance expectancy as the level at which someone believes that using the system will help that person to obtain performance benefits on the job. In this concept, there is a combination of variables obtained from previous research models regarding the acceptance and use of technology models. The variables are Perceived usefulness, extrinsic motivation, job fit, and relative advantage, and outcome expectation. Davis (1989) defined usefulness as a level where a person believes that the use of a particular subject will be able to increase the person's work performance. From some of the explanations that have been presented above, it can be concluded that someone believes and feels that using an information technology will be very useful and can improve work performance.

Effort expectancy is the level of convenience use of systems that will reduce effort (effort and time) individual in doing his job. The variable is formulated based on 3 constructs in the previous model or theory, namely perception ease of use (perceived ease of use-PEOU) from the TAM model, the complexity of the PC utilization (MPCU) model, and ease of use from the diffusion theory of innovation (IDT) (Venkatesh et al., 2003). Davis (1989) identify that ease of use has an effect on the use of information technology. Venkatesh & Davis, (2000) said that the Ease of use of information technology will create a feeling in a person that the system has usability and hence a feeling of comfort when working with uses it. The complexity that can form the construct expectations effort defined by Rogers and Shoemaker in Venkatesh et al. (2003) is the degree to which innovation is perceived as relatively difficult to be interpreted and used by individuals.

Davis (1989) provided several indicators of the ease of use of information, namely: IT is very easy to understand, IT works with easily what the user wants, the user's skills will be add to the use of IT, and IT is very easy to do operated. From some of the explanations that have been presented above, Information technology users believe that information technology is more flexible, easy to understand and easy in terms of operation generate interest in using this information technology and so on will use the information technology.

Social Influence is defined as the extent an individual perceives the interests that are believed by others who will influence him using the new system. Social influence is a determining factor for behavioral goals in using information technology, which is represented as subjective norms in TRA, TAM, TPB, social factors in MPCU, and images in the diffusion theory of innovation (IDT) Venkatesh et al. (2003). Moore & Benbasat (1991) stated that in certain environments, the use of information technology will increase one's status in the social system. According to Venkatesh & Davis, (2000), social influence has an impact on individual behavior through three mechanisms, namely compliance, internalization, and identification. It can be concluded that the more influence an environment has on prospective users of information technology to use a new information technology, the greater the interest that arises from the prospective user's personal in using information technology because of the strong influence of the surrounding environment.

Facilitating conditions are defined as the extent to which a person believes that the organizational and technical infrastructure is available to support the system. In this concept, there is a combination of variables obtained from previous research models regarding the acceptance and use of technology models.

Researchers in a wide range of countries have long employed the UTAUT model to assess the level of acceptance of the use of online learning. Tan (2013) explored the Taiwanese college students' needs for English E-learning websites using the unified theory of acceptance and use of technology. The result demonstrates that performance expectations, effort expectancy, and social influence have positive effects on behavior intentions and facilitating conditions; behavioral intentions also have positive effects on use behavior. Tsai (2015) reported on the development of ESP (English for Specific Purposes) courseware for semiconductor technology and its integration into teaching as a "silent partner." According to the findings, the courseware's multimedia-assisted environment enhances learning effectiveness. Students who scored higher on the posttest shown greater involvement and motivation, used more multimedia, and had a better knowledge of the English content, indicating that they are more capable of functioning in a professional and learner-centered ESP course using the courseware.

Recent study conducted by Mohan et al. (2020) investigated the important factors that influence the behavioral intention to use MOOCs among students in an Indian private institution using the Extended Unified Theory of Acceptance and Use of Technology (UTAUT2). The study revealed that Indian students appear to have a strong desire to participate in MOOCs in order to expand their skill sets. Because the ability to improve skill sets and knowledge is one of the key factors of intention to use MOOCs, it can be deduced that learners regard the ability to increase skill sets and knowledge as one of the key aspects of intention to use MOOCs based on the findings of the study.

Research method

Research design

This research belongs to qualitative study since it aims at investigating the effect od Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Condition (FC) towards the students' Behavioral Intentions (BI) to use technology in English Farmacy learning. The participants of this study were the students of pharmacy study program who programmed English Pharmacy course in the academic year of 2020/2021. The English pharmacy course is one of the compulsory courses programmed by students who pursue degrees in Pharmacy. It is an annual 2-credits elective during their study at university. The amount of time spent with students is an hour forty minutes per week.

Respondents

The numbers of students who programmed the course of English Pharmacy are 355 students consisted of 88, 5% female students and 11, 5% male students. In order to collect the quantitative data from the research, the researcher selected 100 students, 12 (12%) male students and 88 (88%) female students, as samples. The samples were selected using quota sampling technique. Quota sampling is a type of non-probability sampling where the samples are chosen based on the probability proportionate to the distribution of a variable in the population (Rukmana, 2014). The objective of quota sampling is to improve the representation of all components in the population.

Procedures

In collecting the data, the researcher distributed an online questionnaire in the google form to 100 respondents after completing their English pharmacy course. The questionnaire was distributed to see the effect of performance expectancy (FE), effort expectancy (EE), social condition (SI), and facilitating condition (FC) on students' behavior intention to use technology in

learning English pharmacy. The questionnaire is adapted based the construct in UTAUT model proposed by (Venkatesh et al., 2003).

The adaptation of questionnaire items was carried out to obtain the validity of the items that made up the construct of the research (construct validity). Compilation of research questionnaires based on the adaptation of items then adjusted to the research objectives. After determining the original items taken, then the items are adjusted to the place of research. The items used in the questionnaire were 19 items consisting of 4 items from performance expectancy construct, 4 items from effort expectancy construct, 4 items from social influence construct, 4 items from facilitating condition construct, and 3 items for behavior intention construct.

The procedure for collecting data in this study consists of three stages. The first stage is contacting the dean of Pharmacy faculty for approval conducting research. The second stage is Asking the lecturer of English pharmacy's willingness to participate in the research as a participant, and the third or the main stage is collecting the data by Administering the questionnaire to the students of English pharmacy.

Validity and realibility

The data collected through the questionnaire were analyzed using quantitatively using UTAUT model. The result of the questionnaires was calculated using smart PLS software as follows:

Inner model: The structural model or inner model describes the relationship between latent construct based on theory. The design of a structural model of the relationship between latent constructs is based on the formulation of the problem or research hypothesis.

Outer model: The measurement model or outer model defines how each indicator block relates to its latent construct. The design of the measurement model determines the indicator properties of each latent construct, based on the operational definition of the variable.

Evaluating outer model: There are three criteria for assessing the outer model, namely Convergent Validity, Discriminant Validity and Composite Reliability. Convergent Validity from the measurement model with reflexive indicators were assessed based on the correlation between item scores, as calculated by PLS. The size of reflexive individual is categorized to be high if it is correlated more than 0.70 with the construct being measured. However, according to Chin (Ghozali, 2006: 25), for the initial research stage of developing a loading value measurement scale from 0.5 to 0.6 is adequate.

Discriminant Validity from the measurement model with reflexive indicators were rated based on Cross Loading measurements. If the construct correlation with the measurement item is larger than the size of other constructs, then it shows the latent constructs predict the size of their blocks better than the size on the other blocks.

The Composite Reliability indicator block that manages a construct can be evaluated using the output generated by PLS. Compared to the Cronbach Alpha, this measure does not assume tau equivalence between measures assuming all indicators are weighted the same.

Evaluating inner model: Testing the inner model or structural model with PLS started from the R-square value for each dependent latent variable. R-square changes can be used to assess the effect of independent latent variables whether the dependent latent variable has that significant effect.

Hypothesis testing (Resampling Bootstraping): Hypothesis testing between constructs, namely the exogenous construct against the endogenous construct (γ) and the endogenous construct against the endogenous construct (β) was carried out using the bootstrap resampling

method developed by Geisser (Ghozali, 2006: 25). The test statistic used is statistic t or t test. Application of the resampling method allows the application and is freely distributed (distribution free) does not require the assumption of a normal distribution, and does not require a large sample.

Result

The data description presented is to provide a general description of the data distribution that has been carried out in the field. The samples in this study were 100 students from the Faculty of Pharmacy. The distribution of the questionnaire was carried out starting April 1, 2020; the results of this questionnaire were then analyzed on April 15, 2020. The distribution of the questionnaire was carried out directly by the researcher by distributing the questionnaire/ google form link through the WhatsApp Group class of students of the Faculty of Pharmacy in one of private university in Makassar who are or have studied English Pharmacy course. Direct distribution of the questionnaires was carried out to obtain the overall level of filling in the questionnaire. In filling out the questionnaire, students are given the freedom to ask questions directly to researchers via WhatsApp Group, this is intended to help respondent understanding of the filling system or the purpose of the questionnaire. The entire questionnaire filled out fulfills the requirements to be processed, because there is no incomplete questionnaire.

The profiles of respondents in this study were 100 students of Faculty of Pharmacy. As for the characteristics of the respondents include gender, age, origin, and study program. The identification of the characteristics of 100 respondents can be described as follows:

Gender

The respondents of this study were the students of pharmacy study program who programmed English Pharmacy course in the academic year of 2020/2021. The respondents who were selected in this study were selected by using quota sampling technique. The distribution of respondent can be seen in the following table:

Table 1. Respondent characteristic based on gender

Gender	Number of Respondent	Percentage
Male	88	88%
Female	12	12%
Total	100	100%

Table 1. shows that 88% respondents were female respondents and 12% others were male respondents. It may be concluded that the majority of students who filled out the questionnaire from the pharmacy faculty who programmed the English pharmacy course were female.

Age

Respondents in this study were between the ages of 17 and 24. The respondents are students of Pharmacy who programmed English Pharmacy course in academic year of 2020/2021. The following table shows the distribution of respondent characteristic data by age:

Table 2. Respondent characteristic based on age

Age	Number of Respondent	Percentage
< 17 years old	3	3%
17-20 years old	90	90%
21-24 years old	7	7%
Total	100	100%

Based on the characteristic data based on age in table 2, it can be determined that the majority of respondents are between the ages of 17 and 20 were 90% of the total respondent. While respondents aged 21-24 years old were 7% of the total respondents and respondents aged less than 17 years old were 3% of the total respondents. It can be concluded that the majority of students participating in the English Pharmacy course in the academic year 2020/ 2021 were between the ages of 17 and 20 years old.

Origin

The Pharmacy students who participated in this study came from various regions or provinces throughout Indonesia like Kalimantan, Sulawesi, Papua etc. The distribution of respondent characteristic data by origin can be seen in the following table:

Table 3. Respondent characteristic based on origin

Origin	Number of Respondent	Percentage
South Sulawesi	26	26%
South East Sulawesi	9	9%
West Sulawesi	9	9%
Papua	9	9%
Maluku	8	8%
North Maluku	7	7%
NTB	8	8%
North Kalimantan	6	6%
Central Sulawesi	5	5%
East Kalimantan	5	5%
NTT	4	4%
West Papua	4	4%
Total	100	100%

Based on the Table 3, it can be seen that the respondents of this study were dominated by students from south Sulawesi 26 0r 26% of students. There were 9 or 9% of respondents were from each south east Sulawesi, Papua, and west Sulawesi. There were 8 or 8% respondents from each Maluku and NTB, 6 or 6% respondents were from north Kalimantan, 5 or 5% respondents were from central Sulawesi and east Kalimantan, and then 4 or 4% respondents were from NTT and west Papua.

The descriptive statistics of each construct

The next raw data were analysed using descriptive statistic with SPSS 26. The table of analysis presented covers minimum score, maximum score, sum, mean, and standard deviation as shown in the following table:

Table 4. Descriptive statistics of each construct

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
BI	100	15	21	1964	19,64	1,534
EE	100	19	28	2548	25,48	2,329
FC	100	20	28	2519	25,19	2,549
PE	100	16	28	2108	21,08	2,432
SI	100	20	28	2537	25,37	2,200
Valid N	100					

The construct of Performance Expectancy (PE)

The data of PE construct was obtained from the distribution of closed questionnaires with a total of 4 questions/items using an answer choice scale of 7 scale (7 alternative answers), having a theoretical score between the lowest score of 4 to the highest score of 28.

The empirical score spreads from the lowest score of 16 to the highest score of 28, with a total score of 2108, an average (M) of 21,08 and a standard deviation of 2,432.

The construct of Effort Expectancy (EE)

The data of EE construct was obtained from the distribution of closed questionnaires with a total of 4 questions/items using an answer choice scale of 7 scale (7 alternative answers), having a theoretical score between the lowest score of 19 to the highest score of 28.

The empirical score spreads from the lowest score of 19 to the highest score of 28, with a total score of 2548, an average (M) of 25,48 and a standard deviation of 2,329.

The construct of Social Influence (SI)

The data of SI construct was obtained from the distribution of closed questionnaires with a total of 4 questions/items using an answer choice scale of 7 scale (7 alternative answers), having a theoretical score between the lowest score of 4 to the highest score of 28.

The empirical score spreads from the lowest score of 20 to the highest score of 28, with a total score of 2537, an average (M) of 25,37 and a standard deviation of 2,200.

The construct of Facilitating Condition (FC)

The data of FC construct was obtained from the distribution of closed questionnaires with a total of 4 questions/items using an answer choice scale of 7 scale (7 alternative answers), having a theoretical score between the lowest score of 4 to the highest score of 28.

The empirical score spreads from the lowest score of 20 to the highest score of 28, with a total score of 2519, an average (M) of 25,19 and a standard deviation of 2,549.

The construct of Behavioral Intention (BI)

The data of BI construct was obtained from the distribution of closed questionnaires with a total of 4 questions/items using an answer choice scale of 7 scale (7 alternative answers), having a theoretical score between the lowest score of 3 to the highest score of 21.

The empirical score spreads from the lowest score of 15 to the highest score of 21, with a total score of 1964, an average (M) of 19,64 and a standard deviation of 1,534.

The data analysis

Inner model design

The design of the inner model of the relationship between constructs is based on the formulation of the problem or research hypothesis. The design of the inner model using smartPLS 3 software can be seen in the following Figure:

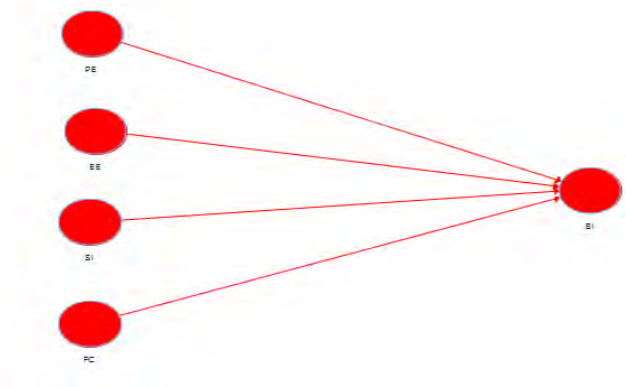


Figure 1. Inner model design

Outer model design

The Characteristics of the indicators of each construct in the PE, EE, SI, FC, BI constructs on the outer model are reflexive. So that the direction of the arrow in the measurement model is from the direction of the construct to the indicator. The outer model design using smartPLS 3 software can be seen in the following figure:

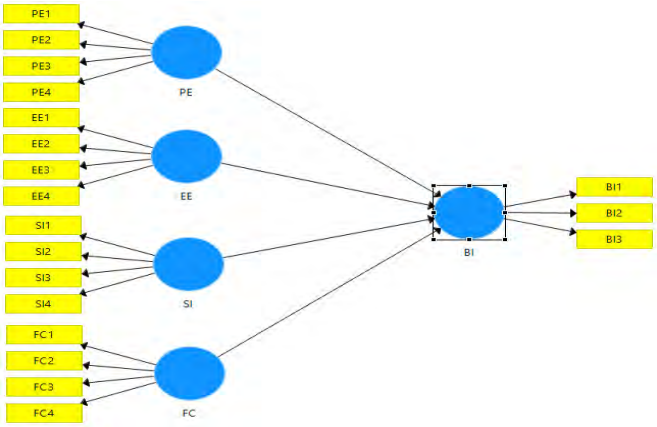


Figure 2. Outer model design

Estimated model

The parameter estimation method in this study uses the PLS Algorithm on the smartPLS 3 software. Provisions to test the unidimensionality of each construct by looking at the convergent validity.

The individual reflexive measure criterion is said to be high if it has a correlation of more than 0.70 with the construct being measured. The results of the model execution with the PLS Algorithm can be seen in the following figure:

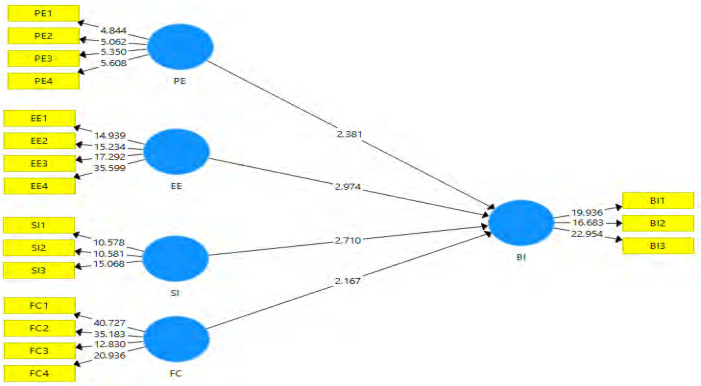


Figure 3 Loading Factor

Figure 5 show that the indicator of SI4 has a loading factor below 0.50 so that the indicators of SI4 were eliminated from the model so that the next model can be evaluated.

Model evaluation.

The evaluation of the model for the outer model and the inner model is then carried out by reading the report results from the PLS Algorithm.

Outer model evaluation

To evaluate the outer model with reflexive indicators, there are 3 criteria, namely convergent validity, discriminant validity and composite reliability. Convergent validity of the measurement model with reflexive indicators can be seen from the correlation between the score item/indicator and its construct (loading factor) which can be seen from the output outer loading. The output of the outer loading of the estimation results from the PLS Algorithm is as follows:

Table 5. The output of outer loading.

	BI	EE	FC	PE	SI
BI1	0.863				
BI2	0.853				
BI3	0.827				
EE1		0.800			
EE2		0.779			
EE3		0.187			
EE4		0.874			
FC1			0.894		
FC2			0.887		
FC3			0.744		
FC4			0.814		
PE1				0.833	
PE2				0.846	
PE3				0.770	
PE4				0.783	
SI1					0.761
SI2					0.769
SI3					0.793

Based on the output of the outer loading, the indicator of SI4 has been eliminated. After eliminating the indicator with low correlation, it can be seen that the loading factor results of all indicators for each construct have met convergent validity, because all the loading factor values of each indicator are above 0.50.

Discriminant validity of the reflexive indicator can be seen in the cross loading between the indicator and its construct. The output of the PLS Algorithm cross loading can be seen in the following table:

Table 6. The Output Cross Loading

	BI	EE	FC	PE	SI
BI1	0.864	0.484	0.481	0.195	0.267
BI2	0.828	0.319	385	266	0.311
BI3	0.851	0.536	0.458	0.221	0.181
EE1	0.418	0.799	0.627	0.138	0.171
EE2	0.408	0.779	0.552	0.117	0.047
EE3	0.355	0.817	0.469	0.002	0.151
EE4	0.533	0.874	0.603	0.026	0.209
FC1	0.557	0.635	0.894	0.143	0.198
FC2	0.416	0.659	0.887	0.023	0.117
FC3	0.360	0.498	0.744	0.086	0.162
FC4	0.376	0.510	0.815	0.123	0.138
PE1	0.226	0.015	0.069	0.832	-0.046
PE2	0.234	0.054	0.107	0.845	-0.025
PE3	0.204	0.101	0.091	0.771	0.129
PE4	0.190	0.118	0.109	0.784	0.126
SI1	0.242	0.155	0.242	0.081	0.839
SI2	0.212	0.192	0.113	-0.025	0.815
SI3	0.275	0.116	0.109	0.056	0.843

Based on the output table of cross loading, it can be seen that the correlation of each indicator with its construct is higher than with other constructs. This shows that the latent construct predicts indicators in its own block better than indicators in other blocks.

Another method to assess discriminant validity is to compare the square root value of the Average Variance Extracted ($\sqrt{AVE}$) of each construct with the correlation value between the construct and other constructs (latent variable correlation). The model has sufficient discriminant validity if the AVE root value for each construct is higher than the latent variable correlation value. The root of AVE and latent variable correlation from PLS Algorithm can be seen in the following table of Fornell-larcker Criterion:

Table 7. The Output of Fornell-larcker Criterion

	BI	EE	FC	PE	SI
BI	0.848				
EE	0.534	0.818			
FC	0.524	0.693	0.837		
PE	0.266	0.086	0.115	0.089	
SI	0.295	0.181	0.185	0.049	0.833

Based on the comparison of the AVE roots and the correlation of each construct in the table above, it can be seen that the AVE root value of each construct is higher than the correlation value of each construct to the other constructs. For example, the AVE root value of the SI construct is 0.833 which is higher than the SI and BI correlation value of 0.295, higher than the SI and EE correlation value of 0.181, higher than the SI and FC correlation value of 0.185, which is higher than the correlation between SI and PE of 0.049. So, it can be concluded that all constructs in the estimated model meet the discriminant validity criteria.

In addition to the construct validity test, a construct reliability test was also carried out which was measured by two criteria, namely composite reliability and Cronbach's alpha from the indicator block that measured the construct. The construct is declared reliable if the value of composite reliability and Cronbach's alpha is above 0.70. The output of composite reliability and Cronbach's alpha is as follows:

Chart 1. Composite reliability

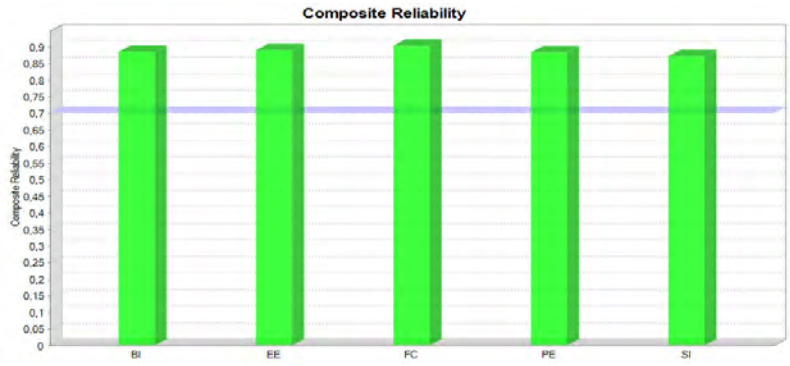
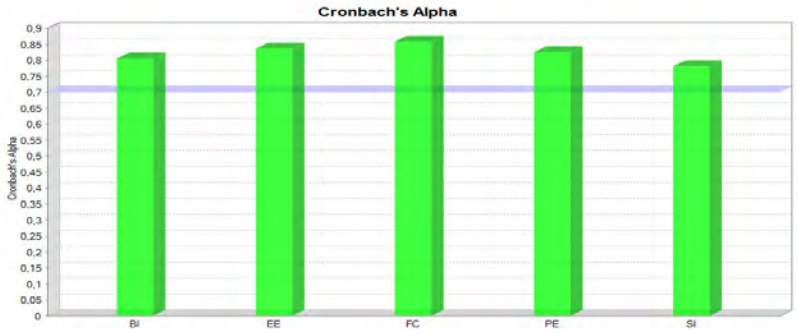


Chart 2. Cronbach's alpha



The output of composite reliability and Cronbach's alpha above shows that the value of each construct is already above 0.70. So, it can be concluded that each construct in the estimated model is reliable.

Inner model evaluation

After the estimated model meets the discriminant validity criteria. Furthermore, testing of the structural model (inner model) is carried out by looking at the value of R-square (R2) on endogenous constructs.

The structural model which has an R-square (R2) of 0.67 indicates that the model is "good", R-square (R2) of 0.33 indicates that the model is "moderate", and R-square (R2) of 0.19 indicates that the model is "weak".

The R-square (R2) value of each endogenous construct from the estimated model can be seen in the following Table:

Table 8. R-square

	R Square
BI	0.404

The results of the R-square (R2) output in the table above indicates that the structural model (inner model) in this study is in "moderate" category

Interpretation of the Output R-square (R2) of the BI endogenous construct on this research model obtained is 0.45. This means that the constructs of EE, FC, PE, and SI can only explain 40% and the rest is explained by other variables outside the model.

Hypothesis testing

Hypothesis testing between constructs, namely exogenous constructs to endogenous constructs (γ) and endogenous constructs to endogenous constructs (β) was carried out using the bootstrap resampling method.

The test statistic used is t statistic or t test. The comparison t value in this study was obtained from the t table. The t-table value with degrees of freedom of 59 and a significance level of 5% was obtained at 2,001.

Hypothesis testing is done by looking at the output path coefficient from the bootstrap resampling results which can be seen in the following Table:

Table 9. Path coefficients (Mean, STDEV, T-Values)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)
EE → BI	0.308	0.327	0.101	3.038
FC → BI	0.254	0.241	0.111	2.291
PE → BI	0.201	0.213	0.084	2.396
SI → BI	0.182	0.186	0.066	2.748

a) Effect of PE on BI. The hypotheses proposed in this study are:
- Ho (nil hypothesis): $\gamma_1 = 0$; it means that there is no positive effect between PE and BI.
- Ha (alternative hypothesis): $\gamma_1 \neq 0$; it means that there is a positive influence between PE and BI.

The output Path Coefficients of the relationship between PE and BI can be seen in the following Table:

Table 10. Path coefficients of PE against BI

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)
PE → BI	0.201	0.213	0.084	2.396

Table 10 shows that there is a positive influence between the PE construct on BI with a coefficient value of 0.21 and is significant at the level of 5%. This is evidenced by the value of t

statistic for the PE construct for BI above 2,001, which is 2,396. So, it can be concluded that Ha is acceptable.

b) Effect of EE on BI. The hypotheses proposed in this study are:
   - Ho (nil hypothesis): $\gamma_1 = 0$; it means that there is no positive effect between EE and BI.
   - Ha (alternative hypothesis): $\gamma_1 \neq 0$; it means that there is a positive influence between EE and BI.

The output Path Coefficients of the relationship between EE and BI can be seen in the following Table:

Table 11. Path Coefficients of EE against BI

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)
EE → BI	0.308	0.327	0.101	3.038

Table 11 shows that there is a positive influence between the EE construct on BI with a coefficient value of 0.32 and is significant at the level of 5%. This is evidenced by the value of t statistic for the EE construct for BI above 2,001, which is 3,038. So, it can be concluded that Ha is acceptable.

c) Effect of SI on BI. The hypotheses proposed in this study are:
   - Ho (nil hypothesis): $\gamma_1 = 0$; it means that there is no positive effect between SI and BI.
   - Ha (alternative hypothesis): $\gamma_1 \neq 0$; it means that there is a positive influence between SI and BI.

The output Path Coefficients of the relationship between SI and BI can be seen in the following Table:

Table 12. Path Coefficients of SI against BI

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)
SI → BI	0.182	0.186	0.066	2.748

Table 12 shows that there is a positive influence between the SI construct on BI with a coefficient value of 0.18 and is significant at the level of 5%. This is evidenced by the value of t statistic for the SI construct for BI above 2,001, which is 2,748. So, it can be concluded that Ha is acceptable.

d) Effect of FC on BI. The hypotheses proposed in this study are:
   - Ho (nil hypothesis): $\gamma_1 = 0$; it means that there is no positive effect between FC and BI.
   - Ha (alternative hypothesis): $\gamma_1 \neq 0$; it means that there is a positive influence between FC and BI.

The output Path Coefficients of the relationship between FC and BI can be seen in the following Table:

Table 13. Path Coefficients of FC against BI

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)
FC → BI	0.254	0.241	0.111	2.291

Table 13 shows that there is positive influence between the FC construct on BI with a coefficient value of 0.32 and is significant at the level of 5%. This is evidenced by the value of t statistic for the FC construct for BI above 2,001, which is 2,291. So, it can be concluded that Ha is acceptable.

Discussion

The effect of PE on BI

Based on the first hypothesis, it is known that the proposed H1 can be accepted. The output path coefficient shows that the t-statistical value for the PE construct on BI is greater than the t-table value (2.001) which is 2.396 so that the effect given by PE on BI is proven to be significant.

The coefficient value of the latent variable PE on the output path coefficient is 0.20, which means that there is a positive influence of 20% on the BI construct. As Venkatesh et al. (2003) defined performance expectancy as the level at which someone believes that using the system will help that person to obtain performance benefits on the job, it can be inferred that the students of pharmacy perceived that they can improve their English performance by using technology in learning English pharmacy. The students' positive perception leads to their Behavior Intention (BI) to use technology in learning English. The higher the benefits obtained by the students, the higher the acceptance and use of technology in teaching English Pharmacy. Logically, it can be perceived that the more helpful and useful a technology in learning will be, the more it is accepted and used by the students. This finding is in line with Tan (2013) who reported that performance expectations, effort expectancy, and social influence have positive effects on behavior intentions and facilitating conditions; behavioral intentions also have positive effects on use behavior on the Taiwanese college students' needs for English E-learning websites.

The level of students' performance expectancy of using technology in learning English can be influenced by a combination of variables such as perceived usefulness, extrinsic motivation, job fit, relative advantage, and outcome expectation. Students might feel that their English performance is improved with the help of technology as Davis (1989) defined perceived usefulness as the extent to which a person believes that using a particular system will improve their performance. Venkatesh et al. (2003) defined extrinsic motivation as the perception that the user wants to carry out an activity because it is considered a tool in achieving valuable results that are different from the activity itself, such as job performance, payments, and promotions. In this context, the students might perceive that they can get high score when they do their assignment with the help of technology. Job fit variable is defined as how the capabilities of a system improve individual job performance (Venkatesh et al. 2003). The students might perceive that their English can improve with the help of technology since they can learn independently by using technology. Furthermore, the students might feel that learning with technology is much better than fully rely on textbooks or teacher's explanation. This is in line with the variable of relative advantage which

is defined as how far using something innovation is perceived to be better than using its predecessor (Moore & Benbasat, 1991).

The effect of EE on BI.

Based on the first hypothesis, it is known that the proposed H1 can be accepted. The output path coefficient shows that the t-statistical value for the EE construct on BI is greater than the t-table value (2.001) which is 3.038 so that the effect given by EE on BI is proven to be significant.

The coefficient value of the latent variable EE on the output path coefficient is 0.30, which means that there is a positive influence of 30% on the BI construct. The higher the benefits obtained by the students, the higher the acceptance and use of technology in teaching English Pharmacy. Logically, it can be perceived that the more convenience the students feel using technology in learning will be, the more it is accepted and used by the students. The result of this research is in line with what Venkatesh et al. (2003) defined that Effort expectancy is the level of convenience use of systems that will reduce effort (effort and time) individual in doing his job. In this context, the students' might feel that the technologies used in learning English are quite simple and easy to use.

The effect of SI on BI

Based on the first hypothesis, it is known that the proposed H1 can be accepted. The output path coefficient shows that the t-statistical value for the SI construct on BI is greater than the t-table value (2.001) which is 3.038 so that the effect given by EE on BI is proven to be significant.

The coefficient value of the latent variable EE on the output path coefficient is 0.18, which means that there is a positive influence of 18% on the BI construct. The higher the influence exerted by people who are important to students, the higher the acceptance and use of a technology in teaching English Pharmacy. Logically, it can be perceived that the more encouragement to use technology in learning, the more it is accepted and used by the students. Venkatesh & Davis, (2000) stressed that the more influence an environment has on prospective users of information technology to use a new information technology, the greater the interest that arises from the prospective user's personal in using information technology because of the strong influence of the surrounding environment. In this context, the students might get recommendation from teachers or friends to use certain technology that can help them learning.

The effect of FC on BI

Based on the first hypothesis, it is known that the proposed H1 can be accepted. The output path coefficient shows that the t-statistical value for the SI construct on BI is greater than the t-table value (2.001) which is 2,291 so that the effect given by EE on BI is proven to be significant. The coefficient value of the latent variable FC on the output path coefficient is 0.25, which means that there is a positive influence of 25% on the BI construct. The higher the level of ease of using a technology in learning, the higher the value of students' trust in the available organizational and technical infrastructure, the higher the acceptance and use of a technology by students in learning English Pharmacy. Venkatesh et al. (2003) defined Facilitating conditions as the extent to which a person believes that the organizational and technical infrastructure is available to support the system. In this case, the facility like free internet connection provided by university and free credit provided by government to support online learning are very helpful for them to use technology in their learning

Conclusion

This study aims to analyze the acceptance and use behavior of users (students) on the application of ICT based Instruction in teaching English Pharmacy in one of private University in Makassar. The model used to determine the factors that influence user acceptance of the implementation of the ICT based instruction in study is the Unified Theory of Acceptance and Use of Technology (UTAUT). The method used to analyze the relationship between constructs is the SmartPLS method. Based on the analysis of research results and discussion in the previous section, it can be concluded that all of the four constructs such as Performance Expectancy (PE), Effort Expectancy (EE) Social Influence (SI), and Facilitating Condition (FC) construct have positive effect on the Behavior Intention (BI) to use technology.

For researchers who want to continue this research, it is recommended that they can expand to other faculties or one university to find out whether the level of acceptance and use in other faculties or one university has a significant effect or not. Based on the results of the study, it can be seen that all the main factors or constructs in the Unified Theory of Acceptance and Use of Technology (UTAUT) model have a positive effect on acceptance and use by users (students) at the Faculty of Pharmacy which can further indicate user acceptance of the use of technology in learning. For that reason, the campus or university should be able to increase the benefits and usability of technology as a learning resource by developing its own Learning Management System (LMS) which is easy to use.

Declaration of conflicting interest
No potential conflict of interest was reported by authors.

Funding acknowledgment
The author received no specific funding for this work.

References

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211.

Compeau, D. R., Higgins, C., & Huff, S. (1999). Social Cognitive Theory and Individual Reactions to Computing Technology: A Longitudinal Study. *MIS Quarterly*, *23*(2), 145–158.

Davis, F., Bagozzi, R., & Warshaw, P. (1992). Extrinsic and Intrinsic Motivation to Use Computers in The Worksplace. *Journal of Applied Social Psychology*, *22*(14), 1111–1132.

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, *13*(3).

Fishbein, M. (1980). A Theory of Reasoned Action: Some Applications and Implications. In H. Howe & M. Page (Eds.), *Nebraska Symposium on Motivation* (pp. 65–116). University of Nebraska Press.

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). *The Different Between Emergency Remote Teaching and Online Learning*. https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teachingand-online-learning

Mohan, M. M., Upadhyaya, P., & Pillai, K. R. (2020). Intention and barriers to use MOOCs: An investigation among the post graduate students in India. *Education and Information Technologies*, *25*(6), 5017–5031. https://doi.org/10.1007/s10639-020-10215-2

Moore, G., & Benbasat, I. (1991). Development of an Instrument to Measure the Perceptions of

Adopting an Information Technology Innovation. *Information System Research*, *2*(3), 192–222.

Pardede, P. (2020). EFL Secondary School Students' Perception of ICT Use in EFL Classroom. *Journal of English Teaching*, *6*(3), 246–259. https://ucc.idm.oclc.org/login?URL=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1273051&site=ehost-live

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.

Rukmana, D. (2014). *Quota Sampling BT - Encyclopedia of Quality of Life and Well-Being Research* (A. C. Michalos (ed.); pp. 5382–5384). Springer Netherlands. https://doi.org/10.1007/978-94-007-0753-5_2393

Sihar, Z., Aziz, A. A. S., & Sulaiman, Z. A. (2011). Design and Development of Semiconductor Courseware For Undergraduate Students. *Journal of Applied Sciences*, *11*(5), 883–887. https://doi.org/10.3923/jas.2011.883.887

Tan, P. J. B. (2013). Applying the UTAUT to understand factors affecting the use of english e-learning websites in Taiwan. *SAGE Open*, *3*(4). https://doi.org/10.1177/2158244013503837

Thompson, R., Higgins, C., & Howell, J. (1991). Personal Computing: Toward a Conceptual Model of Utilization. *MIS Quarterly*, *15*(1), 124–143.

Tsai, S. (2015). Implementing courseware as the primary mode of task-based ESP instruction: a case study of EFL students. *Computer Assisted Language Learning*, *28*(2), 171–186. https://doi.org/10.1080/09588221.2013.818554

Venkatesh, V., & Davis, F. (2000). A Theoritical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, *45*(2), 186–204.

Venkatesh, Viswanath, Morris, M., Davis, G., & Davis, F. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, *27*, 425–478. https://doi.org/10.2307/30036540