FACTORS AFFECTING THE ADOPTION OF MOBILE LEARNING IN VOCATIONAL HIGH SCHOOLS AND HIGH SCHOOLS USING EXTENDED UTAUT

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ABSTRACT

M-Learning is a learning process that uses technology or mobile devices such as smartphones, tablets or wearable devices to support the learning process. This is still being done because there are many different theoretical models proposed. However, there is no model that can be generally accepted as an established theoretical model in the application of M-learning in vocational and high school education environments in Sidoarjo. This research is expected to make a significant contribution to the development of a better theoretical understanding of the determining factors that influence M-learning adoption using the Unified Theory of Acceptance and Use of The Technology (UTAUT). To collect data, researchers distributed questionnaires to respondents using Google Form. The data used were 444 M-learning users. Theoretical model research was carried out using Structural Equation Modeling (SEM) analysis, then SPSS and Amos as analysis support. There are seven factors that determine the results of acceptance of M-Learning adoption in this research, namely Facilitating Condition, Performance Expectancy, Effort Expectancy, Perceived Convenience, Social Influence, School Management Support. The six factors that show a positive and significant relationship are Facilitating Condition, Performance Expectancy, Effort Expectancy, Perceived Convenience, Social Influence, School Management Support. Perceived Convenience has the first strongest positive and significant value, and Performance Expectancy has the second strongest value. Each factor has a moderate influence on Intention to Use. This factor is the most influential in implementing M-Learning in vocational and high schools in the Sidoarjo area.

| KEYWORDS | *M-Learning, Mobile Learning, UTAUT, Structural Equation Modelling, AMOS* |

INTRODUCTION

The utilization of technology in the field of education is implemented to overcome limitations in accessing information and learning materials, especially spatial and temporal constraints. Nowadays, almost all students own gadgets and have internet access. Moreover, formal educational institutions are starting to implement the use of technology to facilitate the teaching and learning process. Provision of facilities such as electronic devices and internet access, learning materials, platforms, or execution media both independently and through subscriptions, is considered crucial. Several studies have shown that the acceptance of mobile learning by students is a crucial step in enhancing the use of this technology. Mobile learning, known as electronic learning made mobile, complements e-learning with the advantage of learning anywhere and anytime (Ozuorcun & Tabak, 2012). Currently, mobile phones have become essential tools not only for communication but also for learning, given the advancement of smart devices; however, m-learning technology is still considered a secondary learning method (Pramana, 2021).

M-Learning makes the education process more acceptable to students, especially among the younger generation who are more inclined to pursue and use new technology. Indeed, m-learning enables students to learn independently without the need for a teacher, which enhances their interaction level with users and other information. Additionally, it eliminates the need to perform these operations in the same place but rather anywhere and anytime (Izkair & Lakulu, 2021). The role of the teacher still remains fundamental in education due to several social and technical considerations. However, the results of previous research indicate that many students still desire to use mobile devices because it enhances communication speed with their teachers and peers more than the currently available traditional methods (Sánchez-Prieto et al., 2016).

Many studies conducted in the field of mobile learning often overlook technical factors. Many of these studies have utilized various acceptance models, some applying original models, while others use modified ones. One study found that although students may benefit from the services provided through mobile education and the importance of their acceptance of this type of education, the acceptance of this type of education remains relatively low in some countries (Almaiah et al., 2019). One incentive for using mobile education is the ease of access to materials regardless of physical and time constraints, especially if there is a high level of user trust and if this educational form is compatible with student devices. Some researchers have proposed the use of Mobile Learning Adoption Model (MLAM) and found that self-efficacy in technology is a crucial factor in encouraging students to accept M-Learning. In another study, it was found that one of the success factors of mobile education among students coincides with the school institution's knowledge in implementing this type of education and utilizing its capabilities. Although the choice to learn using mobile devices lies with the students, there is still a need to investigate the factors influencing students' acceptance of mobile education. As mentioned, the acceptance of mobile education among students is still relatively low in some countries. Therefore, it is necessary to identify the necessary factors that will encourage students to effectively use mobile learning.

Based on previous research, the dominant technology adoption theory is the Unified Theory of Acceptance and Use of Technology (UTAUT). The output varies. Several common factors have been found in these studies. These six factors support an individual's adoption of M-learning: Facilitating Condition, Performance Expectancy, Effort Expectancy, Perceived Convenience, Social Influence, and School Management Support.

This research is conducted because there are still few similar studies conducted in developing countries like Indonesia, especially in the Sidoarjo region, and specifically addresses the research questions: (a) Identifying the factors influencing students' intention to use M-Learning for learning activities, (b) The relationship between these factors. There are many different theoretical models proposed for M-learning adoption, but there is no model that has been universally accepted as a solid theoretical model for M-learning adoption in Vocational High Schools (SMK) and High Schools (SMA). With this condition, this study is expected to make a significant contribution to the development of a better theoretical understanding of the determinant factors influencing M-learning adoption by using the Unified Theory of Acceptance and Use of Technology (UTAUT). Furthermore, educational institution management can use the results of this research to introduce and develop M-learning with more effective strategies for students (Hafidz, 2022). The structure of this paper consists of an introduction, literature review, research methodology, results and discussion, and conclusion.

Literature Review

This chapter will explain various terminologies underlying this research and discuss previous research, focusing on the research focus, proposed theoretical models, and the resulting outputs. M-Learning or Mobile Learning is an approach to learning that utilizes mobile technology, such as smartphones and tablets, as tools in the teaching and learning process. M-Learning allows access to learning content anytime and anywhere, providing flexibility and connectivity crucial in this digital era. Currently, mobile phones have become essential tools not only for communication but also for learning. Despite the advancement of smart devices, m-learning technology is still considered a secondary learning method (Pramana, 2021). In this chapter, a comprehensive literature review on m-learning research focusing on the adoption of m-learning systems by students will be provided and discussed.

UTAUT "Unified Theory of Acceptance and Use of Technology" is a theory used to understand the factors influencing the acceptance and use of technology in various contexts, including the use of software, hardware, applications, and other technological innovations. The UTAUT theory was developed by Venkatesh, Morris, Davis, and Davis in 2003 (Venkatesh et al., 2003). UTAUT has four key constructs: Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Condition, which influence the behavioral intention to use technology. We adapted these constructs and definitions from UTAUT in the context of technology acceptance and use to understand learning intentions. The original constructs of UTAUT are depicted in Figure 1.
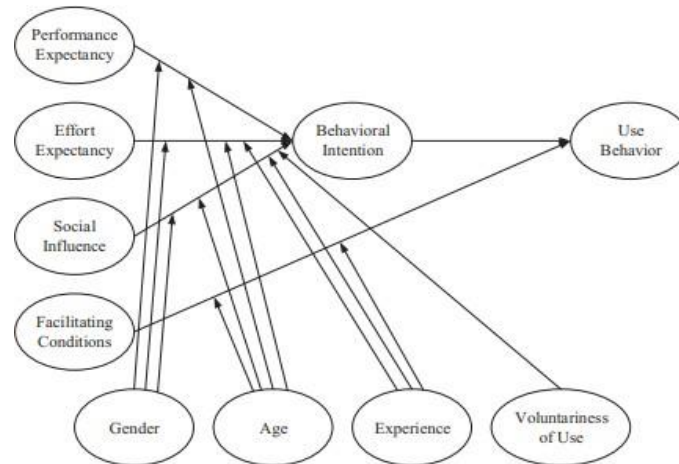
Figure 1. Unified Theory of Acceptance and Use of Technology (UTAUT) Venkatesh (2003)

In the discussion of M-Learning, several previous studies have been conducted, which can be summarized in Table 1.

Table 1. Previous Studies Conducted

Research Title	Researchers
Experience moderator effect on the variables that influence intention to use mobile learning	Izkair, A. S., & Lakulu, M. M,(2021) (Izkair & Lakulu, 2021)
Towards Sustainable Mobile Learning: A Brief Review of the Factors Influencing Acceptance of the Use of Mobile Phones as Learning Tools	Alghazi, et al.,(2022) (Alghazi et al., 2020)
Applying the UTAUT Model to Explain the Students' Acceptance of Mobile Learning System in Higher Education	Almaiah, et al.,(2019) (Almaiah et al., 2019)
Factors Determining the Behavioral Intention to Use Mobile Learning: An Application and Extension of the UTAUT Model	Chao, C. M,(2019) (Chao, 2019)
Determinants of The Adoption of Mobile Learning Systems Among University Students In Indonesia	Pramana, (2018) (Pramana, 2018)
An Empirical Investigation of Reasons Influencing Student Acceptance and Rejection of Mobile Learning Apps Usage	Al-Bashayreh, et al.,(2022) (Al-Bashayreh et al., 2022)
Extended UTAUT Model for Mobile Learning Adoption Studies	Chand, et al.,(2022) (Chand et al., 2022)
Behavioral intention to use e-learning and its associated factors among health science students in Mettu university, southwest Ethiopia: Using modified UTAUT model	Hunde, et al.,(2023) (Hunde et al., 2023)

Factors That Influence Mobile Learning among University Students in Romania	Voicu, M. C., & Muntean, M,(2023) (Voicu & Muntean, 2023)
Factors influencing students' adoption and use of mobile learning management systems (m-LMSs): A quantitative study of Saudi Arabia	Alfalah, A. A,(2023) (Alfalah, 2023)
Adoption of mobile learning at Universities using the extended technology acceptance model	Aziz,(2022) (Hafidz, 2022)
The Acceptance of Mobile Learning: A Case Study of 3D Simulation Android App for Learning Physics	L Lisana & M F Suciadi (2021) (Lisana & Suciadi, 2021)
What drives the adoption of mobile learning services among college students: An application of SEM-neural network modeling	Tarhini, et al.,(2024)(Tarhini et al., 2024)
Educators' Utilizing One-Stop Mobile Learning Approach amid Global Health Emergencies: Do Technology Acceptance Determinants Matter?	M. Salem & I.Elshaer,(2023)(Salem & Elshaer, 2023)

From the previous research conducted, several factors considered important and significantly influential are Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Condition on Intention to Use. Some conclusions from previous studies on these additional factors have similarities and differences, so this research is expected to provide more significant and useful evidence for future studies.

Facilitating Condition refers to individuals' perceptions of the resources and support offered to perform a behavior. Facilitating Condition (FC) is also presented in the UTAUT model and categorized as "the extent to which users believe that the necessary infrastructure is available to support the use of the technology system" (Venkatesh et al., 2003). FC can encompass anything successful in implementing evaluation methods such as technical or organizational support, knowledge, administrative resources. Studies show that Facilitating Conditions have a significant impact on the intention to use mobile learning.

H1: Facilitating Condition has a direct, positive, and significant influence on Intention to Use Mobile Learning.

Performance Expectancy can be understood as individuals' perceptions of using an information system to complete a task and receive good performance from that information system (Venkatesh et al., 2003). Performance Expectancy encompasses system efficiency, system accuracy, and speed in completing tasks (Venkatesh et al., 2003). Performance Expectancy refers to the extent to which someone believes that using technology will help them gain benefits in job

performance or tasks. It reflects the user's perception that a technology will be useful and provide benefits to enhance productivity and effectiveness (Izkair & Lakulu, 2021).

H2: Performance Expectancy has a direct, positive, and significant influence on Intention to Use Mobile Learning.

Perceived Enjoyment allows individuals to enjoy learning activities with mobile devices. Perceived enjoyment is defined as "the extent to which using something specific is perceived as enjoyable. Additionally, the system is considered enjoyable in itself from any performance consequences resulting from system use." Therefore, in this study, we explore the positive and negative effects of perceived enjoyment on m-learning. The effect of perceived enjoyment on system use has been confirmed in previous research (Hunde et al., 2023).

H3: Perceived Enjoyment has a direct, positive, and significant influence on Intention to Use Mobile Learning.

H8: Perceived Enjoyment has a direct, positive, and significant influence on Performance Expectancy.

H9: Perceived Enjoyment has a direct, positive, and significant influence on Effort Expectancy.

Effort Expectancy refers to the level of ease associated with using a specific system or technology. It describes how easy or difficult it is for users to leverage the system and integrate it into their routine activities. Effort Expectancy is defined as "the level of ease associated with using mobile learning" (Chand et al., 2022).

H4: Effort Expectancy (EE) has a direct, positive, and significant influence on Intention to Use Mobile Learning (IU).

Perceived convenience can be defined as the level of ease perceived by customers in using mobile learning. The easier the use of mobile learning, the higher the perceived convenience users feel in using mobile learning. Perceived convenience has been used in various technology acceptance studies in the field of mobile learning. Perceived Convenience refers to the extent to which the use of mobile learning apps is perceived as convenient and time-saving for students. "the extent to which someone believes that using mobile learning apps will save time and effort" (Al-Bashayreh et al., 2022).

H5: Perceived Convenience (PC) has a direct, positive, and significant influence on Intention to Use Mobile Learning (IU).

Personal Innovativeness refers to an individual's willingness to try new information technology. As per the article, it is defined as "an individual's willingness to try new information technology" (Pramana, 2018).

H6: Personal Innovativeness has a direct, positive, and significant influence on Intention to Use Mobile Learning.

Social Influence refers to the extent to which students perceive that important others, such as family, friends, and colleagues, believe that they should use a

particular technology or system. As per the article, it is defined as "the extent to which students feel that important others believe that they should use a new mobile learning system" (Almaiah et al., 2019).

H7: Social Influence has a direct, positive, and significant influence on Intention to Use Mobile Learning.

School Management Support refers to the extent to which university management provides support and leadership for the integration of m-learning into teaching and learning. It is defined as "the extent to which university management provides the necessary support and leadership for the integration of m-learning into teaching and learning" (Alfalah, 2023).

H10: School Management Support has a direct, positive, and significant influence on Performance Expectancy.

H11: School Management Support has a direct, positive, and significant influence on Effort Expectancy.

Based on the 11 hypotheses outlined above, a theoretical model can be depicted as shown in Figure 2.
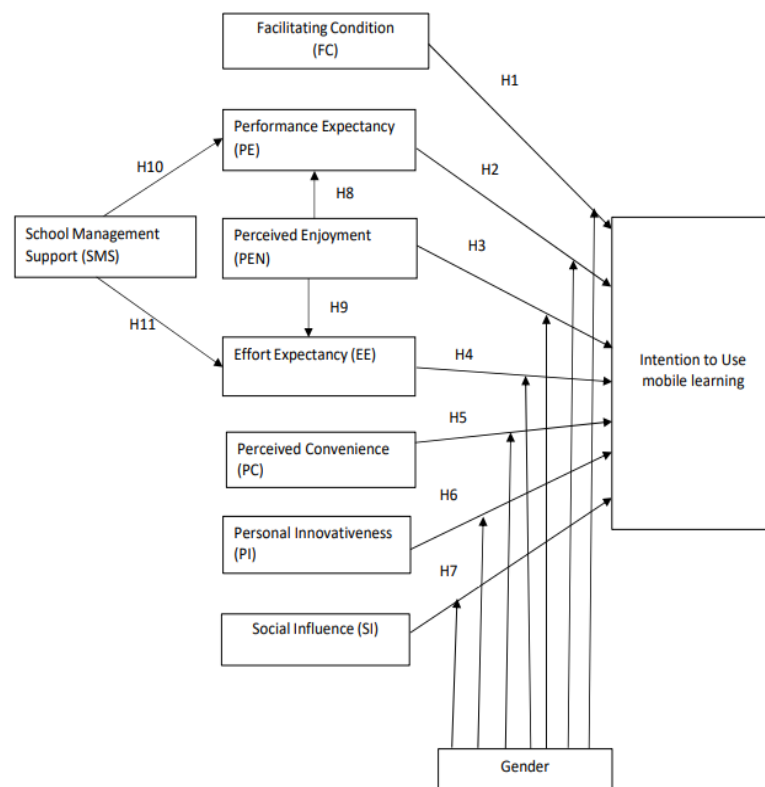

Figure 2. Theoretical Model

RESEARCH METHOD

The analysis method employs Structural Equation Modeling (SEM) using SPSS AMOS as the analysis software. Data collection was conducted using a self-administered questionnaire. This research utilizes quantitative confirmatory research methodology. It involves the collection of quantified data subjected to statistical treatment to support or refute hypotheses. The procedures used in this research will be discussed sequentially, following the recommended workflow. At this stage, a review of the theory conducted in previous studies will be made, focusing on continuance and its influencing factors.

Self-administered questionnaires, or surveys, are data collection techniques involving sending a list of questions to be independently filled out by respondents. These questionnaires are used to measure the variables in the theoretical model. The target of this questionnaire is all students from vocational high schools (SMK) and general high schools (SMA) who have previously used M-Learning. The questionnaire is prepared in an online form.

The subjects of this research are respondents aged at least 15 years old who have engaged in mobile learning. Respondents come from all segments of high school students in the Sidoarjo area. The target for this research questionnaire is 400 respondents. This sample size also meets the required number of samples to ensure the statistical validity of this research.

The data collected from the questionnaire are then prepared and analyzed following the steps below:

1. Accuracy of input data on the data spreadsheet is manually checked by searching for missing values or incomplete data. Variables from respondents that are incomplete or meet the missing values criteria will be deleted.
2. Further examination involves outliers, which are data points with values that significantly deviate from the general trend, meaning they are extreme values. Outliers can affect the results of assumption tests such as tests for normality, linearity, and homogeneity of variance. Outliers are handled by removing questionnaire responses from the data.
3. Construct Validity using Factor analysis aims to identify the main factors that most influence the endogenous variables from a set of exogenous variables through a series of analyses.
4. Reliability tests indicate the extent to which measurement results with the tool can be trusted. Measurement results should be reliable, demonstrating consistency and stability after repeated testing on the same subjects and conditions.

Structural Equation Modeling (SEM) involves creating a model in a study to observe and analyze the relationships between each variable. The purpose of modeling using SEM is to determine the extent to which the proposed theoretical model is supported by the collected data from respondents. If the analyzed data supports the research model, hypotheses can be formed. However, if it does not support the model, changes or modifications to the theoretical model are necessary or even further development and testing are required.

RESULT AND DISCUSSION

The questionnaire distributed yielded a total of 507 responses, exceeding the required 400 responses. Respondents who participated in this research were those who had used M-Learning for at least one month, with the condition that they were still active students in vocational high schools (SMK) and general high schools (SMA). The majority of respondents in this study were aged between 15 and 20 years old. The gender distribution of respondents consisted of 51.8% male and 48.2% female. The profiling of age, field of study, grade level, devices, and applications used can be seen in Table 2.

Table 2. The profiling of age, field of study, grade level, devices, and applications

Gender	Frequency
Male	230
Female	214
Total	*444*
Age	**Frequency**
15	69
16	81
17	140
18	151
19	1
20	2
Total	*444*
Field of Study	**Frequency**
Light Vehicle Engineering	1
Motorcycle Engineering	1
Computer Network Engineering	41
Software Engineering	127
Visual Communication Design/Multimedia	159
Office Management	91
Financial Accounting Institutions	1
Science	19
Social Studies	4
Total	*444*
Class Level	**Frequency**
X	130
XI	150
XII	164
Total	*444*
Devices	**Frequency**
Mobile Phone	440
Laptop	4
Total	*444*
Applications	**Frequency**

Google Classroom	423
Moodle	9
Edmodo	12
Total	*21*

Out of the 507 respondent data obtained, 100 randomly selected data were examined using SPSS Statistic software to verify the accuracy of input data on the worksheet. The results from the random data showed no errors or missing data, indicating good data quality. During the data elimination stage based on outliers, 63 outlier data points were found, resulting in the removal of some data points from the sample. The clean sample data obtained amounted to 444.

The next step was factor analysis to test construct validity (discriminant and convergent). The results showed that the Effort Expectancy factor could not demonstrate discriminant position, although it had converged (it was still in the same column as Personal Innovativeness). Since Personal Innovativeness had a lower value than Effort Expectancy, it was decided to remove this factor. The factor analysis process was then repeated until all factors showed convergent and discriminant positions. In the second iteration of the factor analysis process, the results showed discriminant positions, although they had converged. As Perceived Enjoyment had not yet shown discriminant positions, it was decided to remove this factor. The factor analysis process was then repeated until all factors showed convergent and discriminant positions, and the results can be seen in Table 3.

For the Reliability Test results using Cronbach's Alpha, latent variables should have Cronbach's Alpha values above 0.7 as the lower limit. Latent variables with Cronbach's Alpha values above 0.7, indicating good reliability, included Facilitating Condition, Performance Expectancy, Effort Expectancy, Perceived Convenience, Social Influence, School Management Support, and Intention to Use. With these eliminations, the previously proposed theoretical model changed. The modified theoretical model after undergoing factor analysis and reliability tests can be seen in Figure 3.

Tabel 3. Hasil *Factor Analysis* dan *Cronbach Alpha*

Indica-tor	Variable Laten							Cronbach Alpha
	Intention to Use	Performance Expectancy	School Management Support	Social Influence	Effort Expectancy	Facilitating Condition	Perceived Convenience	
IU1	0,859							
IU3	0,852							0,972
IU2	0,839							
PE2		0,858						
PE1		0,857						0,951
PE3		0,848						

SMS3	0,831					
SMS1	0,817					0,893
SMS2	0,783					
SI1		0,826				
SI2		0,783				0,874
SI3		0,773				
EE3			0,802			
EE1			0,791			0,874
EE2			0,768			
FC1				0,806		
FC3				0,795		0,838
FC2				0,741		
PC2					0,787	
PC1					0,773	0,842
PC3					0,728	

In addition to the modified theoretical model, the formulation of the hypothesis also changes. In the initial hypothesis formulation in this study there are 11 hypotheses. However, after passing the factor analysis and realibility test stages, the variables Personal Innovativeness (PI) and Perceived Enjoyment (PEN) were removed from the modification hypothesis and became 7 hypotheses as illustrated in Figure 3.
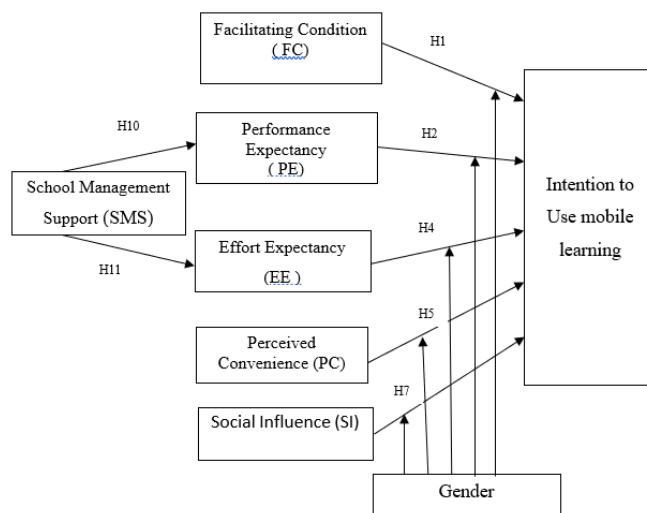

Figure 3. Modified Theoretical Model

After the model is analyzed through the stages of factor analysis and reliability test, then, the theoretical model is analyzed using AMOS software and

calculated by SEM analysis. Theoretical models are drawn on AMOS and processed to produce calculations that support decision making. For the Theoretical Model in which the form that can be described in AMOS can be seen in Figure 4.

Each variable depicted in the theoretical model, has an error associated with each indicator in the indicator group. In the process of drawing a model using AMOS, the naming of each item (variable name, indicator name, error, and distortion) must be different and the direction of the error arrow only leads to one indicator.
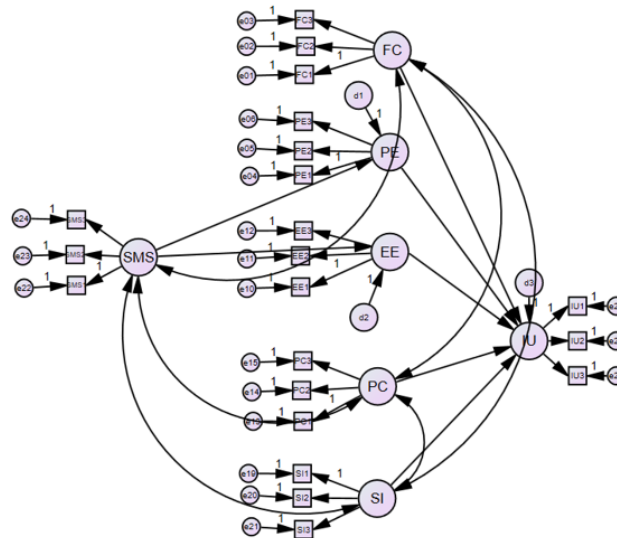

Figure 4. Theoretical Models on AMOS

The results of SEM analysis showing direct effect can be seen in Figure 5. The Direct Effect in this theoretical model shows the value of the Unstandardized Effect, followed by statistical significance. In statistical significance there are several symbols, including "*" means $p \leq 0.05$, "**" means $p \leq 0.01$, "***" means $p \leq 0.001$ and "NS" means $p > 0.05$ or not statistically significant. For the sign "()", the value of the standardized effect first, then indicated the value of interpretation of the magnitude of the standardized effect. There are three levels of magnitude interpretation values, including Small (S) for magnitude values < 0.1, Medium (M) for magnitude values between 0.1 and 0.5, and Large (L) for magnitude values $\geq$ 0.5.
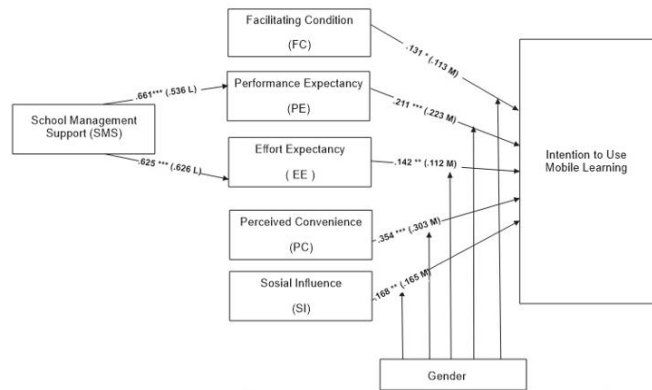
Figure 5. Direct Effect on Theoretical Models

Table 4 shows that all hypotheses show significance, while H1 has significance "*", H4 and H7 have significance "**", and for H2, H10 and H11 have significance "***".

Table 4. Statistical Data of Theoretical Models

Indicator	Estimate	S.E.	C.R.	P	Hypothesis to-
FC -> IU	.131	.063	2.083	.037	H1
PE -> IU	.211	.040	5.327	***	H2
EE -> IU	.142	.054	2.646	.008	H4
SI -> IU	.168	.057	2.953	.003	H7
SMS -> PE	.661	.060	11.083	***	H10
SMS -> EE	.625	.052	12.039	***	H11

Table 5 shows the Fit Statistic number above 0.90 in the variables GFI, AGFI, NFI, IFI, and CFI. This means that it is good enough and in accordance with the theoretical model. The R2 value shows Performance Expectancy (PE) value of 0.287 (28.7%), Effort Expectancy (EE) 0.392 (39.2%), and Intention to Use (IU) 0.478 (47.8%). It can be concluded that latent variables in theoretical models have an influence of 28.7% on Performance Expectancy, 39.2% on Effort Expectancy, and 47.8% on Intention to Use or it can be said that the theoretical model with selected factors has a not strong enough influence on an individual's intention to adopt M-Learning.

Tabel 5. Fit Statistic Model Teoritis

N	NC($\chi 2$ / df)	RMR	GFI	AGFI	NFI	IFI	CFI	RMSEA
444	468.790/176=2.664	.087	.901	.869	.941	.962	.962	.061
	R2 : PE (.287), EE (.392), IU (.478)							

While the magnitude of effects uses the provisions of [21] with three interpretation values, namely Small (S), Medium (M) and Large (L). From the theoretical models and hypotheses formed, the variable Perceived Convenience has

a major influence on respondents' interest in doing Intention to Use. and Performance Expectancy variables also have a strong influence to influence respondents' interest in Intention to Use. While the School Management Support variable has a major effect on Performance Expectancy. So that the pleasure felt towards an increased use of M-Learning will affect the intention to re-use M-Learning. In this study, the variable Perceived Convenience has a positive and significant influence on Intention to Use. This relates to the similarity felt when using M-Learning in learning. Table 6 shows the direct impact in theoretical models on men and women.

Table 6. Male and Female Comparison

Hypothesis	Effect	Male				Female			
		Unstandard-ize Estimate	Statistical Signal	Standardize Estimate	Magnitude of Effect	Unstandard-ize Estimate	Statistical Signal	Standardize Estimate	Magnitude of Effect
H1	FC -> IU	.102	NS	.085	S	.181	NS	.163	M
H2	PE -> IU	.179	***	.195	M	.212	***	.220	M
H4	EE -> IU	.268	***	.228	M	.029	NS	.025	S
H5	PC -> IU	.328	***	.287	M	.382	***	.318	M
H7	SI -> IU	.187	*	.167	M	.144	NS	.157	M

Table 6 is a direct comparison of respondents' sex hypotheses between men and women. Based on the data above, it can be seen that there is an insignificant hypothesis, namely in Hypothesis 1. To ensure there is a significant difference in the proposed hypothesis can be seen in the comparison of parameters that will be presented below.

Table 7. Pairwise Value

Hypothesis	Effect	Male and Female Comparison		
		Standardize Estimate Difference (Male and Female)	Critical Difference Pairwise parameter	Statistical Signal
H1	FC -> IU	-0.078	0.621	NS
H2	PE -> IU	-0.025	0.413	NS
H4	EE -> IU	0.203	-2,23	**
H5	PC -> IU	-0.031	0.377	NS
H7	SI -> IU	0.01	-0,374	NS
H10	SMS-> PE	-0.111	0.708	NS
H11	SMS-> EE	-0.07	0.628	NS

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Based on the obtained values, there is a significant difference ** between male and female respondents in the relationship between Effort Expectancy and Intention to Use. Based on the table above, if the pairwise value is negative, then the first group has a significant influence, and vice versa. The pairwise value in the relationship between Effort Expectancy and Intention to Use is negative, indicating that the male group has a significant influence **. Male users tend to use mobile learning with ease in adopting or using the mobile learning platform or application.

Practical Implications

The findings of this research are important for M-Learning platform operators who are faced with challenges of students discontinuing their use of M-Learning. This study offers insights into the factors and relationships between factors underlying sustained intention to use M-Learning. M-Learning platform operators should provide high-quality courses such as courses from reputable institutions and universities to enhance students' Facilitating Condition level, which in turn will positively impact their intention to continue using M-Learning. Additionally, operators should extensively display their peer reviews online to enhance the effect of Social Influence. Preparing and encouraging students to join online community forums is another way to enhance social influence and engagement, leading to the intention to continue using M-Learning. In short, by understanding the results of this research, operators can design and operate their platforms with features that enhance the diversity of the research constructs, which will further drive the sustainability of M-Learning usage.

Table 8. Instrument Measurement

Factor	Item	Reference
Facilitating Condition (FC)	*I have the resources necessary to use m-learning*	Pramana (2018)
	I have the knowledge necessary to use m-learning	
	Help is available when I get problem in using m-learning applications	
Performance Expectancy (PE)	*Using the m-learning would improve my learning performance*	Chao (2019)
	Using the m-learning would allow me to accomplish learning tasks more quickly	
	Using m-learning increases my chances of achieving learn that are important to me	
Perceived Enjoyment (PEN)	*M-learning is interesting*	Pramana (2018)
	I have fun using m-learning	
	Using m-learning is enjoyable	
Effort Expectancy (EE)	*Learning how to use m- learning is easy for me*	Chao(2019)
	My interaction with the m-learning would be clear and understandable	
	I find m-learning easy to use	
Social Influence (EE)	*People who influence my behavior think that I should use m-learning*	Pramana(2018)

	People who are important to me think that I should use m-learning	
	In general, my school has supported my use of m-learning	
Personal Innovativeness (PI)	*I like experimenting with new information technologies such as M-Learning*	Pramana(2018)
	Among my colleagues, I am usually the first to try out new innovations in M-Learning technology	
	New technologies like M-Learning appeal to me	
Perceived Convenience (PC)	*M-learning is convenient since I may use it whenever I want*	Al-Bashayreh at al(2022)
	It is convenient to use M-learning because I can take it with me everywhere I go	
	M-Learning As are convenient because they are not complicated	
School Management Support (SMS)	*School management provides support for the use of M-Learning*	Alfalah(2023)
	In general, my school uses m-learning management	
	School management provides feedback or evaluation of the use of M-Learning	
Intention to Use (IU)	*If m-learning is available to me in the future then I would like to use it*	Pramana (2018)
	Whenever I have the opportunity I will use m-learning	
	I would like to use m-learning again in the future	

CONCLUSION

The conclusion drawn from the research on the theoretical model and hypotheses proposed, regarding the factors that can influence an individual to adopt M-Learning, indicates that all six hypotheses are accepted. The following are the factors mentioned in these hypotheses: Perceived Convenience, Performance Expectancy, Social Influence, Effort Expectancy, Facilitating Condition, all have a significant influence on Intention to Use. In this study, Perceived Convenience is the factor that has the greatest influence on Intention to Use. Where convenience is one aspect that affects the level of user satisfaction in Mobile Learning. The next finding is that Performance Expectancy is the second largest factor influencing Intention to Use. This perception suggests that using mobile learning platforms will help achieve learning goals and enhance understanding of the material being studied. Next is the relationship between factors where School Management Support significantly influences Performance Expectancy and Effort Expectancy, which are very good with a large effect size. The final finding is that Perceived Convenience is a significant factor when viewed from the total effect. The total direct effect with significance at the *** level and a medium effect size causes the total effect of Perceived Convenience on Intention to Use to be significant. This can be considered in the development of theoretical models for future research.

There are several limitations to this study. Firstly, the limited research area. Sidoarjo is a vast area with various levels of regional development, and the community in each area also has different educational backgrounds. The

implementation and mastery of technology also vary. Although data collection was done by distributing questionnaires online and could reach potential respondents widely, it is highly recommended to clarify the scope more, such as focusing this research on Vocational High Schools (SMK) and High Schools (SMA) in the Sidoarjo region, so that the data can represent the research target and be used in schools to determine policies for using M-Learning, which is crucial in the current era of technological learning. Additionally, regarding the factors influencing individuals to adopt M-Learning, Facilitating Condition was found to have the smallest significant influence on Intention to Use. This still needs to be further investigated to see the position of Facilitating Condition, considering there are studies showing the opposite results.

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