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RESEARCH ARTICLE

Exploring University Accounting Students' Perceptions and Preferences on Hybrid Learning: A TAM Model Approach

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ABSTRACT

The COVID-19 pandemic disrupted the education system and forced many universities to shift to online and hybrid learning to minimize the risk of infection (Dhawan, 2020; Rapanta et al., 2020). Hybrid learning, which combines face-to-face and online learning, offers significant flexibility for students. This study aims to explore the perceptions of accounting study program students toward hybrid learning using the Technology Acceptance Model (TAM) (Davis, 1989). The TAM model measures Perceived Ease of Use and perceived Usefulness against Interest in Use, with Attitude toward Using as a moderating variable. The research was conducted on primary data obtained from distributing questionnaires to students of the Accounting Study Program Class of 2022, the majority of whom were taking accounting courses in the 2023-2024 odd semester. The results show that perceived Usefulness has a positive and significant effect on interest in use directly, but the mediating variable Attitude toward Usingdoes not show a significant effect. Perceived Ease of Use also has a positive and significant effect on interest in use directly, but if through the mediating variable, perceived Usefulness does not show a significant effect. Finally, perceived Usefulness has a positive and significant effect on interest in use directly, but the mediating variable attitude towards using does not show a significant effect. The better the perceived Ease of hybrid learning, the better/increased interest in using hybrid learning. However, the attitude of use here on the use of hybrid learning is not an important factor in encouraging respondents to use it, but there are other mediating factors that are not described in this study.

INTRODUCTION

The pandemic has disrupted the education system, adding to the workload of faculty and staff and forcing many colleges, universities, and schools to remain closed or operate with very limited resources to minimize the risk of infection (Dhawan, 2020; Rapanta et al., 2020). While we should remain hopeful, it should be noted that extreme care and lesson-planning activities need to be undertaken to provide students with an optimal learning experience (Powell, 2021). Hybrid learning combines the benefits of both distance/online learning modes and face-to-face learning modes (AlNajdi, 2014). According to Halverson et al. (2012), hybrid learning modes are diverse and expand areas of design and inquiry that combine traditional face-to-face modes of instruction with online modes. Also, Qi & Tian (2011) presuppose that teaching modes have four features, which are a mixture of individual and collective learning opportunities, a mixture of asynchronous and synchronous learning, a mixture of self-directed and group learning formats, and a mixture of formal and non-formal learning that interferes with the incorporation of lifelong learning and/or settings in hybrid formats.

Hybrid learning causes students to enjoy the opportunity to physically meet with their course lecturers and peers to discuss, debate, and ask questions, among others, for further learning and other reasons, during the physical or face-to-face mode aspect. In the distance or purely online mode, the courses taught do not provide the physical aspect of the student experience as found in the hybrid mode of teaching and learning. In the hybrid mode, lecturers play the role of facilitators, guiding and assisting their students wherever and whenever needed. (Olurinola & Adelana, 2022).

The abrupt shift to emergency distance learning, which was not the norm before the lockdown, not only disrupts the higher education landscape (Iglesias-Pradas et al., 2021) but also greatly affects the learning experiences of lecturers and their students (Grant & Gideon S, 2020). Just as students experience certain problems during the transition, so do their lecturers, as both find the transition to a new mode of teaching uncomfortable at first (Grant & Gideon S, 2020). There are challenges related to access to good computers, stable internet service, and more, all of which are essential for accessing course materials. (Tick, 2019). In addition, sitting for hours on their devices to study is another challenge, as the situation is awkward for many. Since traditional modes of instruction are practically useless during lockdown periods, teachers and their students have to suddenly switch to this mode because it is the only alternative at that time (Müller et al., 2021).

The TAM model was originally proposed by Davis (1989). Researchers have employed TAM to help explain and predict whether users accept or intend to use information technology (Legris et al., 2003), (Legris et al., 2003). In addition, researchers can use the model as a basis for tracking how various external factors affect perceived Ease of use, perceived usefulness, attitudes, intention to use, and actual use of technology. The model shows that there are four stages, namely perceived Usefulness, perceived Ease of use, attitude towards usage, and behavioral intention to use (attitude usage) (Davis, 1989). According to Davis (1989), perceived usefulness (PU) is "the extent to which a person believes that using a particular system will improve his performance" (Davis, 1989, cited in Mamattah, 2016, p.12), and perceived usefulness is also defined as the extent to which users believe using online learning will enhance their learning or be useful for their learning. (Mamattah, 2016). On the other hand, Ease of use, in the TAM model, is defined as the extent to which a user believes he or she will be able to use a particular technology without much effort and thus finds it easy to use. Davis (1989). Perceived Ease of use and perceived Usefulness can influence the user's attitude towards using the technology, and the attitude will then influence the intention to use and then the actual use of the technology (Davis, 1989). (Davis, 1989).

There is a need to examine students' perceptions of modes of instruction, in this case, online and hybrid modes of instruction. Nowadays, many universities are making online/distance learning one of the ways to reach out to their students, while a combination of face-to-face and online (hybrid) is now also in vogue. Despite the fact that the pandemic has slowed down to some extent, with some countries easing strict sanctions, the fact remains that distance learning and hybrid forms of learning persist. Given this, the need arises to assess and find out the perceptions and preferences of students, especially students of the S1 Accounting study program, towards hybrid learning using the TAM method as a mirror for future learning with an increase in the number of students.

LITERATURE REVIEW

1.1 Technology acceptance model (TAM)

Technology Acceptance Model (TAM) Davis (1989) developed the Technology Acceptance Model (TAM) model, where theory examines the extent to which a technology is accepted and its perceived benefits by a user. The TAM model by Davis proposes two exogenous variables, namely perceived benefits and perceived Ease of use. The Technology Acceptance Model includes endogenous variables, namely attitude, and interest in using technology.

Perceived usefulness

Perceived Usefulness is defined by Davis (1989) as the degree of belief in a technology that the technology will improve their performance or productivity. Thompson & Howell (2015) define perceived Usefulness as the expectation that the benefits of a technology will make work easier.

Perceived ease

Perceived Ease is defined by Davis (1989) as an individual's belief that the use of a technology does not require great effort. Wibowo (2017) defines perceived Ease as the degree of one's belief that technology will be easily understood and used and able to improve one's work performance.

Attitude of use

Attitude is a positive or negative attitude that a person feels when deciding to act on something (Jogiyanto, 2008, p. 36). When someone has a higher positive attitude toward using new technology, behavioral intentions will be relatively higher (Chuang et al., 2016).

Interest in use

Interest in use, according to Davis (1989), is the tendency of a user to be loyal to using a technology. Wulandari (2019) defines usage interest as the user's desire to behave in a certain way with the aim of owning, disposing of, and using a product or service.

1.2 Research roadmap

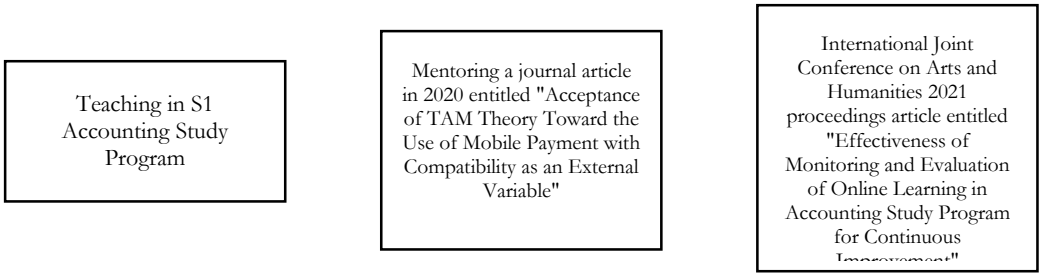


Figure 1: Research roadmap

RESEARCH METHODS

Research types and data sources

This research is quantitative research using a questionnaire in Google Forms as a research instrument. Quantitative research emphasizes statistical procedures for testing theories through variables and numbers (Indriantoro & Supomo, 1999: 12).

Population and sample

The population in this study were students of the Faculty of Economics and Business, Surabaya State University. The sample in this study were students of the Accounting Study Program Class of 2022, the majority of whom were taking accounting courses in the 2023-2024 odd semester. Sampling in this study uses a purposive sampling technique. The criteria for respondents in this study were active students in undergraduate accounting programs who were taking accounting-based courses. The test tool in this study uses Structural Equation Modeling with four constructs, so the minimum sample size that can be processed is 100 data (Hair et al., 2014, p. 574).

Research variables and operational definitions

The research variables used in this study used 2 (two) exogenous variables and 2 (two) endogenous variables. The exogenous variables in this study are Perceived Ease of Use (X1) and Perceived Usefulness (X2). Meanwhile, the endogenous variables in this study are Attitude towards Using (Y) and Interest in Use (Z). Questions on exogenous and endogenous variables are given a Likert scale assessment score of 1 to 4 (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree).

Data collection techniques

The research uses survey techniques by distributing questionnaires online to students of the Accounting Study Program Class of 2022 to obtain data directly.

Data analysis techniques

Descriptive Analysis Descriptive analysis contains respondent data. The descriptive analysis also includes mean, maximum, and standard deviation (Sugiyono, 2016, p. 148).

Measurement model, structural model, and hypothesis testing

Measurement models, structural models, and hypothesis testing were carried out with the help of the SmartPLS 3.3.0 application.

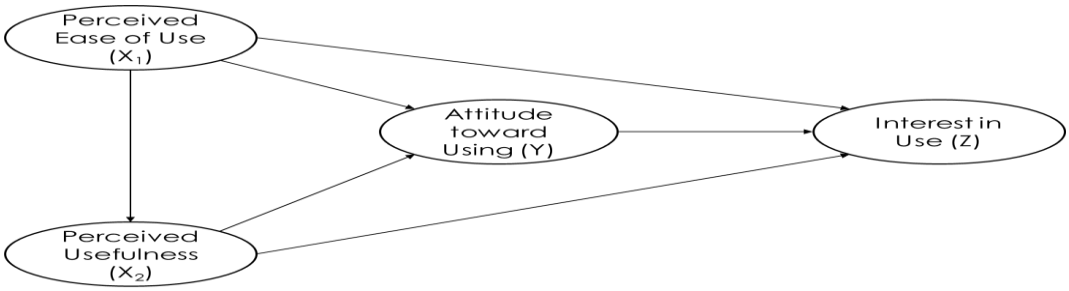


Figure 2: Research module

Hypothesis 1

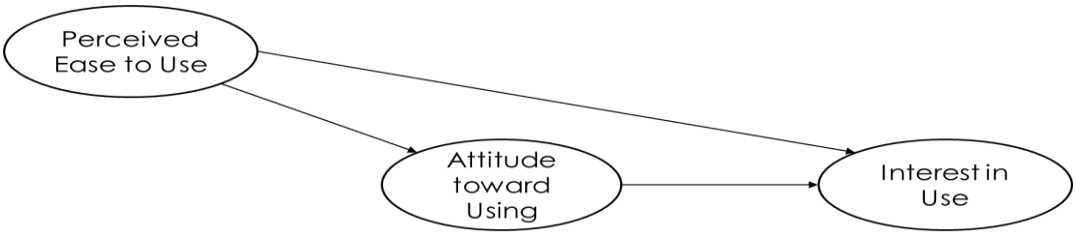


Figure 3: Hypothesis 1

Perceived Ease of Use will affect Interest in Use either directly or indirectly with the mediation of Attitude toward Using.

Hypothesis 2

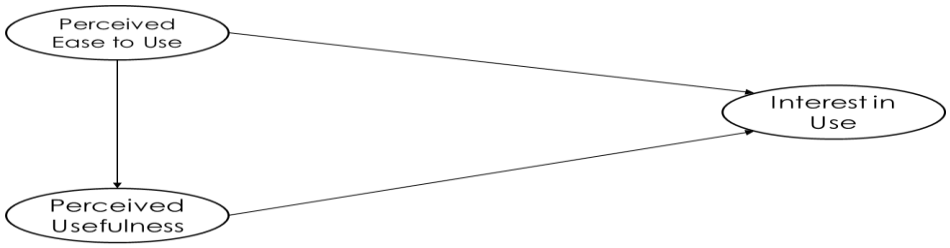


Figure 4: Hypothesis 2

Perceived Ease of Use will affect Interest in Use either directly or indirectly with the mediation of Perceived Usefulness.

Hypothesis 3

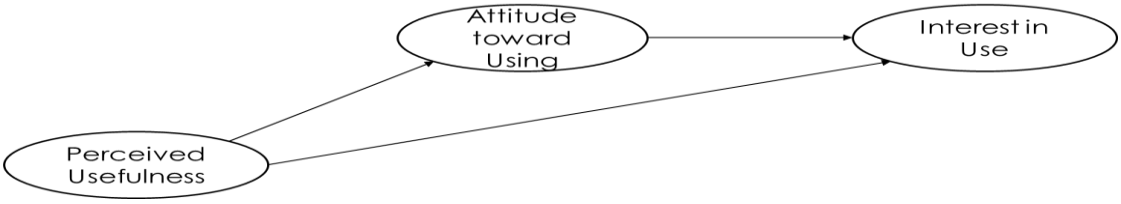


Figure 5: Hypothesis 3

Perceived Ease of Use will affect Interest in Use either directly or indirectly with the mediation of Attitude toward Using.

SEM formula

$f(x2) = \beta 1\ x1 + ei$

$f(y) = \beta 2\ x1 + \beta 3\ x2 + ei$

$f(z) = \beta 4\ x1 + \beta 5\ x2 + \beta 6\ y + ei$

Type of research

This research is quantitative research using a questionnaire in Google Forms as a research instrument. Quantitative research emphasizes statistical procedures for theory testing through variables and numbers (Indriantoro & Supomo, 1999: 12). This study aims to provide empirical evidence regarding accounting students' perceptions of hybrid learning using the TAM model. Data analysis in this study was conducted using variant-based Structural Equation Modeling (SEM) using the PLS tool.

The research variables used in this study used 2 (two) exogenous variables and 2 (two) endogenous variables. The exogenous variables in this study are Perceived Ease of Use / Perceived Ease to Use and Perceived Usefulness (ξ1Perceived Usefulness (ξ2). Meanwhile, the endogenous variables in this study are Attitude towards Using and Interest in Use (η1) / Interest in Use (η2). Questions on exogenous and endogenous variables are given a Likert scale assessment score of 1 to 4 (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree).

Description:

Y: The manifest variable for the endogenous latent variable

X: The manifest variable for the exogenous latent variable

η : (eta), endogenous latent variable

ξ : (ksi), exogenous latent variable

ε : (epsilon), the measurement error associated with Y

δ : (delta), the measurement error associated with X

ζ : (zeta), measurement error in the structural equation.

λ: (lamda), the value that connects latent variables.

Population and sample

The population in this study were students of the Faculty of Economics and Business, Surabaya State University. The sample in this study were students of the Accounting Study Program Class of 2022, the majority of whom were taking accounting courses in the 2023-2024 odd semester. Sampling in this study uses a purposive sampling technique. The criteria for respondents in this study were active students in undergraduate accounting programs who were taking accounting-based courses. The test tool in this study uses Structural Equation Modeling with four constructs, so the minimum sample size that can be processed is 100 data (Hair et al., 2014, p. 574).

Interpretation (testing) result

Interpretation of the analysis results is done using the significance of each path coefficient. This study uses an alpha (α) significance level of 5%. If the resulting significance number is less than 0.05 or p-value <0.05, then the research hypothesis is accepted. Vice versa, if the resulting significance number is more than 0.05 or p-value> 0.05, then the research hypothesis fails.

RESULTS AND DISCUSSION

Results

Population is an individual un, it or element that has certain characteristics set by the researcher. The population in this study is a business unit of medium and large manufacturing companies in East Java engaged in the creative industry. The sampling will be done with a purposive sampling technique. According to Sugiyono (2016: 85), purposive sampling is a data source sampling technique with certain considerations.

The data in this study are primary. The definition of primary data, according to Sugiyono (2015), is a data source that directly provides data to data collectors. Primary data was obtained by distributing questionnaires to students of the Accounting Study Program Class of 2022, the majority of whom were taking accounting courses in the 2023-2024 odd semester.

The data is then analyzed with SmartPLS.3. The first step in this process is to look at the reliability value of each indicator, which can be seen in the following table:

Table 1: Outer loadings test results

	Perceived Ease of Use	Perceived Usefulness	Attitude toward Using	Interest in Use
PEU 1	0.915			
PEU 2	0.841			
PEU 3	0.874			
PEU 4	0.857			
PEU 5	0.902			
PEU 6	0.902			
PEU 7	0.897			
PEU 8	0.900			
PEU 9	0.845			
PEU 10	0.879			
PUF 1		0.835		
PUF 2		0.865		
PUF 3		0.934		
PUF 4		0.759		
PUF 5		0.909		
PUF 6		0.863		
PUF 7		0.709		
PUF 8		0.877		
PUF 9		0.899		
PUF 10		0.777		
ATU 1			0.915	
ATU 2			0.841	
ATU 3			0.874	
ATU 4			0.857	
ATU 5			0.902	
ATU 6			0.902	
ATU 7			0.897	
ATU 8			0.900	
ATU 9			0.845	
ATU 10			0.879	
IIU 1				0.846
IIU 2				0.738
IIU 3				0.652
IIU 4				0.840
IIU 5				0.850
IIU 6				0.805
IIU 7				0.811
IIU 8				0.840
IIU 9				0.553
IIU 10				0.846

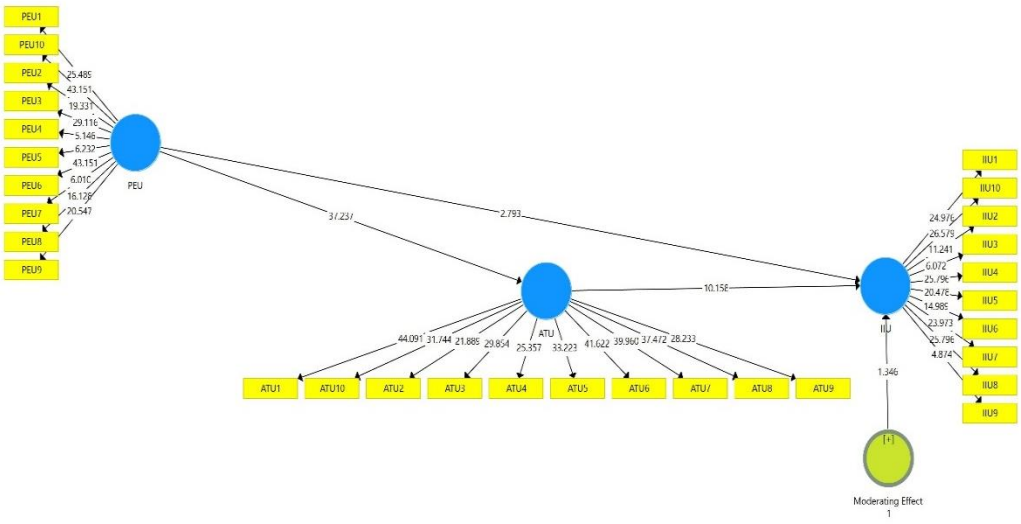
Source: Researcher processed data

Based on the book written by Hair et al., 2017, the minimum threshold of indicator reliability value is 0.7000. The value of outer loadings in the range between 0.4000 and 0.7000 is included in the researcher's judgment. This means that researchers can choose to keep using or removing these indicators while considering the quality of the final results of the study. In the table above, considering the number of indicators that have a value below 0.7000, the researcher then sets the minimum indicator reliability limit value of 0.5000.

Hypothesis testing

Hypothesis I

Perceived Ease of Use will affect Interest in Use either directly or indirectly with the mediation of Attitude toward Using.



Flow map 1: Hypothesis test I

Table 2: Path coefficients direct effect H1

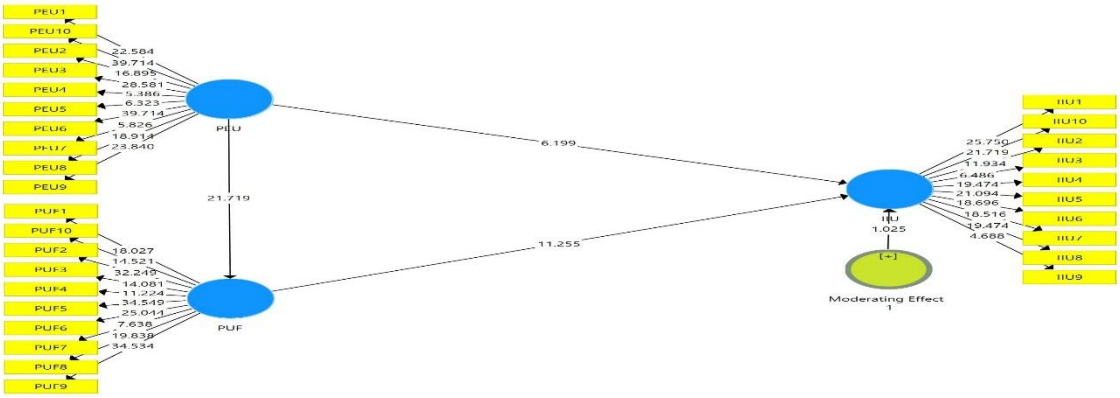
	Original sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
ATU→ IIU	0.762	0.764	0.075	10.158	0.000
Moderating effect→ IIU	0.037	0.037	0.028	1.346	0.179
PEU→ ATU	0.885	0.888	0.024	37.237	0.000
PEU→ IIU	0.218	0.214	0.078	2.793	0.005

Source: Researcher processed data

From the table above, it can be seen that the direct effect of Perceived Ease of Use on Interest in Use shows a T statistic value of 2.793 and p values of 0.005. Meanwhile, if through the mediating variable Attitude towards Using, it shows a T statistic of 1. 346 and p values of 0.179. From the test results, it can show that Perceived Ease of Use has a positive and significant effect on Interest in Use directly, but if through the mediating variable Attitude towards Using, it does not show a significant effect.

Hypothesis II

Perceived Ease of Use will affect Interest in Use either directly or indirectly with the mediation of Perceived Usefulness.



Flow Map 2: Hypothesis test II

Table 3: Path coefficients direct effect H2

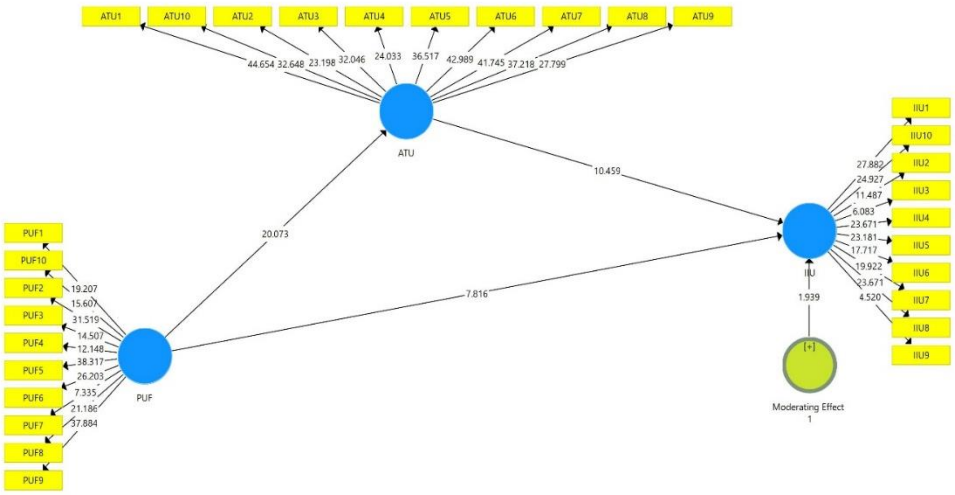
	Original sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
Moderating effect→ IIU	0.023	0.021	0.023	1.025	0.306
PEU→ IIU	0.360	0.359	0.058	6.199	0.000
PEU→ PUF	0.829	0.830	0.038	21.719	0.000
PUF→ IIU	0.640	0.642	0.057	11.255	0.000

Source: Researcher processed data

From the table above, it can be seen that the direct effect of Perceived Ease of Use on Interest in Use shows a T statistic value of 6,199 and p values of 0.000. Meanwhile, if through the mediating variable Perceived Usefulness, it shows a T statistic of 1.025 and p values of 0.306. The test results can show that Perceived Ease of Use has a positive and significant effect on Interest in Use directly, but through the mediating variable, Perceived Usefulness does not show a significant effect.

Hypothesis III

Perceived Usefulness will affect Interest in Use either directly or indirectly with the mediation of Attitude toward Using.



Flow map 3: Hypothesis test III

Table 4: Path coefficients direct effect H3

	Original sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
ATU→ IIU	0.566	0.570	0.054	10.459	0.000
Moderating effect 1→ IIU	0.026	0.023	0.013	1.939	0.053
PUF→ ATU	0.851	0.851	0.042	20.073	0.000
PUF→ IIU	0.452	0.448	0.058	7.816	0.000

Source: Researcher processed data

From the table above, it can be seen that the direct effect of Perceived Usefulness on Interest in Use shows a T statistic value of 7,816 and p values of 0,000. Meanwhile, if through the mediating variable Attitude towards Using, it shows a T statistic of 1.939 and p values of 0.053. The test results can show that Perceived Usefulness has a positive and significant effect on Interest in Use directly, but through the mediating variable Attitude towards Using, it does not show a significant effect.

DISCUSSION

Perceived ease of use (perceived ease to use) hybrid learning will affect interest in use either directly or indirectly with the mediation of attitude toward using on undergraduate accounting students.

The test results can show that Perceived Ease of Use hybrid learning has a positive and significant influence on Interest in Use directly, but if through the mediating variable Attitude toward Using does not show a significant influence. The better the perceived ease of hybrid learning, the better/increased the interest in using hybrid learning. However, the attitude of use here on the use in accessing hybrid learning is not an important factor to encourage respondents to use it but there are other mediating factors that are not described in this study. This result supports the research results of Venkatesh and Morris (2000) which show that perceived convenience has a significant effect on interest in use.

Perceived ease of use hybrid learning will affect interest in use either directly or indirectly with the mediation of perceived usefulness in undergraduate accounting students.

Perceived Ease to Use hybrid learning has a positive and significant influence on Interest in Use directly, but if through the mediating variable Perceived Usefulness does not show a significant influence. The better the perceived ease of hybrid learning, the better/increased the interest in using hybrid learning. However, the perception of usefulness here in accessing hybrid learning is not an important factor to encourage respondents to use it but there are other mediating factors that are not described in this study. This result supports the research results of Venkatesh and Morris (2000) which show that perceived convenience has a significant effect on interest in use.

Perceived ease of use (perceived ease to use) hybrid learning will affect interest in use either directly or indirectly with the mediation of attitude toward using on undergraduate accounting students.

Perceived Usefulness has a positive and significant influence on Interest in Use directly, but if through the mediating variable Attitude toward Using, it does not show a significant influence. The better the perceived ease of hybrid learning, the better/increased the interest in using hybrid learning. However, the attitude of use here in accessing hybrid learning is not an important factor to encourage respondents to use it but there are other mediating factors that are not described in this study. This result supports the results of Venkatesh and Morris (2000) research which shows that perceived convenience has a significant effect on interest in use.

CONCLUSIONS AND SUGGESTIONS

Conclusion

1. Perceived Ease of Use Hybrid Learning has a positive and significant influence on Interest in Use directly, but through the mediating variable, Attitude toward Using does not show a significant effect.
2. Perceived Ease of Use Hybrid Learning has a positive and significant effect on Interest in Use directly, but through the mediating variable, Perceived Usefulness does not show a significant effect.
3. Perceived Usefulness of Hybrid Learning has a positive and significant effect on Interest in Use directly, but if through the mediating variable Attitude toward Using, it does not show a significant effect.

This research has significant implications for higher education policy, particularly in the design and implementation of hybrid learning. Based on the findings on how students perceive this learning method, it is expected that stakeholders in educational institutions, including lecturers and curriculum managers, will be more adaptable in developing learning strategies that combine face-to-face and online learning. By understanding the challenges and benefits perceived by students, educational institutions can make adjustments to infrastructure, teaching materials and assessment methods to ensure more inclusive and effective learning and more equitable access for all students, regardless of technological limitations and digital literacy.

This research contributes to the development of hybrid learning theory and practice by providing deeper insights into students' perspectives. Through analysing students' experiences of learning that combines online and offline elements, this study enriches the literature on the effectiveness of hybrid learning in the context of higher education. In addition, this study contributes to building an understanding of the factors that influence students' acceptance of this method, such as comfort level, trust in technology, and active engagement in the learning process. The findings can be used as a basis for designing educational policies that are more responsive to students' needs in the digital era.

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