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DETERMINE THE PERCEIVED USEFULNESS TOWARD E-LEARNING ACCEPTANCE AMONG LOCAL STUDENT IN MALAYSIA.

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ABSTRACT

The global issue of the Covid-19 pandemic has led to a significant shift in the delivery of education services, particularly in traditional higher education institutions, which are now adopting digital alternatives. E-learning is widely regarded as the most suitable and efficient approach for delivering knowledge in accordance with the prevailing academic demands. This study examines the primary factors that impact the intentions of students in higher education institutions in Malaysia to utilize e-learning, in light of the emergence of the novel Covid-19 epidemic. The study was conducted inside the Ampang Indah community, utilizing a sample size of 122 participants. The study utilized a quantitative research approach, employing a standardized questionnaire and conducting statistical analysis. The research findings indicate that there is a significant relationship between perceived usefulness and intention to employ e-learning. Nevertheless, it was shown that subjective norms did not provide a statistically significant impact on the intention to utilize e-learning within the specific setting of Malaysia. The Covid-19 pandemic has necessitated the use of e-learning methods, regardless of individual perceptions. The perceived usefulness of a certain entity or concept has a notable and positive impact on an individual's attitude towards it. The aforementioned findings provided educational institutions with recommendations for the effective integration of e-learning systems into their educational practices, particularly in situations where traditional in-person instruction is not feasible. These suggestions aim to contribute to the establishment of resilient and enduring education system.

ARTICLE INFO

Keywords:

Perceived usefulness,
Higher education
institutions,
Individual
perceptions,
Students' intentions,
E-learning acceptance

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1.0 INTRODUCTION

The utilization of e-learning has gained significant popularity as a pedagogical approach, mostly attributed to its convenience and the capacity to sustain educational pursuits during periods of institution closures. The Covid-19 epidemic has necessitated the closure of universities' physical campuses and the implementation of online platforms for course delivery. The education sector is increasingly incorporating digital video conferencing platforms such as Zoom, the Microsoft platform, Webex Blackboard, and Google Classroom, hence promoting worldwide e-learning (Ng et al., 2021). E-learning systems offer cost-free access, hence facilitating uninterrupted knowledge acquisition throughout the Covid-19 pandemic.

The implementation of e-learning systems has been found to have a substantial impact on reducing the operational effort required for educational institutions, as well as streamlining lecture preparation, minimizing the need for physical attendance, and facilitating class leave procedures. Students develop the capacity for self-directed learning by engaging in a continual process of gaining information at their own convenience. The utilization of e-learning platforms facilitates the acquisition and development of knowledge and skills through the exposure of students to extensive amounts of material.

Additionally, e-learning platforms contribute to the enhancement of teamwork abilities and the establishment of enduring relationships that support the process of learning. Nonetheless, a contentious issue resolves around the dissemination of e-learning materials to the general public, which may yield enhanced educational achievements in some types of collaborative evaluations. The assessment of the adoption and effectiveness of e-learning systems often hinges on the perceived utility of such technologies.

Perceived usefulness pertains to the extent to which individuals acknowledge that a certain technology yields advantages for students, such as augmenting their academic performance, comprehension, autonomy, self-regulation, and learning motivation, as well as facilitating their interactions with peers and instructors (Hong et al., 2021). The perceived efficacy of e-learning is contingent upon a multitude of elements, including the overall perception of the e-course and its alignment with traditional face-to-face instruction. However, previous research has identified significant differences in the conceptual and practical aspects of e-learning acceptance, particularly in higher education contexts (Al-Hajri et al., 2018). Studies have underscored the significance of factors such as task-technology fit, sustainability, and the impact of perceived usefulness on student satisfaction and academic performance in e-learning environments (Alyoussef, 2021).

Perceived usefulness is a critical factor in determining the acceptance of e-learning among local students, reflecting their belief in how e-learning can enhance their learning experience and productivity. This concept is closely linked to perceived ease of use, which indicates the students' expectations of e-learning being user-friendly and requiring minimal effort (Mad et al., 2020; Omar et al., 2022). The level of students' confidence in the usefulness of e-learning and its impact on their learning and performance is a key factor influencing their acceptance of this educational technology (Omar et al., 2022).

Additionally, factors such as system quality, content quality, information quality, accessibility, enjoyment, and student attitudes towards applications significantly influence students' acceptance of e-learning systems (Solichin & Wijaya, 2021). Understanding students' perceptions of the advantages of e-learning and the factors affecting its acceptance is crucial in promoting its effective implementation in educational settings (Yoke & Ismail, 2021). Furthermore, integrating social support theory and the Technology Acceptance Model (TAM) can enhance students' acceptance of e-learning by providing educational and emotional support, thereby

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increasing perceived usefulness and fostering continuance intention (He et al., 2023). However, there is a gap in understanding the nuances of perceived usefulness in the context of e-learning acceptance. Several studies have emphasized the importance of factors such as task-technology fit, cognitive absorption, social presence, and self-efficacy in influencing students' satisfaction, retention, and intention to use e-learning platforms. Despite these contributions, further exploration is needed into the specific aspects of perceived usefulness that impact students' acceptance of e-learning, particularly in the changing landscape of education, including the challenges presented by the COVID-19 pandemic Alyoussef (2021)-Siron et al., 2020).

2.0 LITERATURE REVIEW

2.1 Learning Acceptance

The term e-learning is often used synonymously with computer-assisted instruction. Web-based learning, online learning, internet-based learning or distributed learning (Haleman et al., 2021). Meanwhile, Aljaser (2019) found that students in the e-learning environment had better performance than those in traditional classrooms. The delivery of learning content in the form of texts, images, videos, and audios attracts students' attention to the lesson's content. The study noted that the students' attitude towards learning english in the e-learning environment has improved and increased motivation to learn.

E-learning is one of the most popular learning approaches in higher education today, offering a wide range of learning options for both instructors and students (Latip, M.S.A. et al., 2020). The Covid-19 pandemic has accelerated the adoption of e-learning in higher education institutions in Malaysia, both public and private, as mandated by the Ministry of Higher Education. Several factors influence e-learning acceptance among students, with perceived usefulness being a key determinant (Salloum et al., 2019). Additionally, the influence of educational and emotional support on e-learning acceptance has been highlighted, especially during the COVID-19 pandemic, where students may seek emotional comfort in e-learning to alleviate negative emotions (He et al., 2023). Moreover, factors such as perceived ease of use, perceived enjoyment, and user experience play crucial roles in enhancing e-learning acceptance (AlHamad, 2020; Zardari et al., 2021).

2.2 Perceived Usefulness

Perceived usefulness is a crucial factor in the acceptance of e-learning platforms among students. Research consistently demonstrates that students are more likely to adopt e-learning when they perceive it as beneficial for achieving their educational and personal objectives (Teo et al., 2014). Elements such as convenience learning, useful learning, interesting learning, and technology learning contribute to students' perception of e-learning acceptance (Chou et al., 2018). Moreover, key factors influencing e-learning acceptance include perceived usefulness, perceived ease of use, IT knowledge, perceived playfulness, and facilitating conditions ("Iraqi University EFL Learners", 2016).

Studies have highlighted the impact of perceived ease of use and perceived usefulness on the acceptance of specific e-learning platforms, such as Zoon, with a positive correlation with self-efficacy (Al-Marroof et al., 2021). Gender variations have also been explored, revealing significant associations between perceived enjoyment, perceived ease of use, perceived usefulness, and the adoption of e-learning platforms among college students across different countries (Ramírez-Correa et al., 2015). The Technology Acceptance Model (TAM) theory further supports the notion that perceived usefulness and perceived ease of use are crucial predictors of individual attitudes and intentions towards e-learning (Khafit et al., 2020).

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Cultural dimensions, like uncertainty avoidance, have been identified as moderators influencing the relationship between perceived usefulness and the intention to adopt e-learning, indicating that cultural aspects can impact the acceptance of e-learning technologies (Faqih, 2019). Additionally, factors such as satisfaction, information quality, self-efficacy, and social influence significantly influence students' behavioral intentions regarding the acceptance of e-learning portals (Zardari et al., 2021).

According to the study conducted by Hastuti et al. (2019), perceived usefulness refers to the extent to which an individual holds the belief that utilizing a specific information system would enhance their performance. Perceived usefulness, as defined, represents a perspective pertaining to the process of selection. People will use a system if they have faith in its usefulness. Conversely, individuals are unlikely to utilize an information system if they perceive it to lack sufficient benefits. The concept of “perceived usefulness” pertains to an individual’s subjective evaluation of the extent to which the utilization of a specific technology will enhance their work performance (Yakubu & Dasuki, 2018).

3.0 METHODOLOGY

3.1 Theoretical Framework

Our initial contribution to the field of e-learning research involved emphasizing the significance of reassessing the achievement of e-learning initiatives through the lens of student acceptability. Several recent studies (Bao, 2020; Dhawan, 2020; Grey et al., 2020; Mailizar et al., 2021; Szopinki & Bachnik, 2020) have highlighted the positive impact of e-learning on education accessibility and flexibility. However, it is important to emphasize that the effectiveness of this technology relies heavily on the willingness of users on the demand side to fully engage with it. In this study, we implemented a behavioral model that focuses on the demand side in order to gain a more comprehensive understanding of the cognitive processes involved in students’ acceptance of e-learning amidst the covid-19 epidemic. The result suggests that the Technology Adoption Model (TAM) is a well-recognized and effective framework for understanding students’ adoption of e-learning, as it demonstrates strong explanatory capabilities. According to Hsu et al. (2019), it is imperative to re-examine the demand side of e-learning, specifically the acceptance of students, in order to obtain a comprehensive understanding of the success of e-learning.

This study additionally emphasized the importance of taking into account the technological aspect of e-learning. The present study utilized the proposed Technology Acceptance Model (TAM) to elucidate the variation of attitude and continuance intention among the surveyed student population, accounting for 71.9% and 77.9% respectively. Undoubtedly, e-learning represents the convergence of education and technology, emphasizing the significance of the technological aspect. Based on the empirical findings of this research, it can be concluded that there is a substantial correlation between perceived ease of use (PEOU) and perceived usefulness (PU) with regards to students’ attitudes and intentions to continue using e-learning platform. This implies that e-learning cannot be just regarded as an educational paradigm; rather, as a novel technological advancement, its perceived utility and simplicity of use are of utmost importance.

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3.2 Research Framework

The operational framework for this study involves examining how perceived usefulness, influence e-learning acceptance among participants.

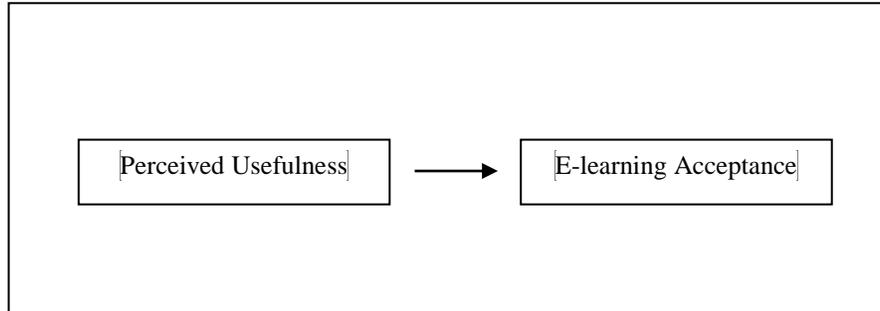


Figure 1: Operational Framework

Based on Figure 1, the research shows the independent variable (IV) and dependent variable (DV) of this research. The research framework consists of two variables such as an independent variable and a dependent variable. The independent variable is perceived usefulness. Meanwhile, the dependent variable is e-learning acceptance. The operational framework shows the relationship between the independent variables that influences the dependent variables.

This study employs a quantitative research approach, utilizes a structured questionnaire, and applies appropriate statistical methods for data analysis. The research design appears to be sound and well-suited to addressing the research questions. The population in this research are students among community in Ampang Indah. This study uses questionnaire and sampling includes 122 respondents. The survey was conducted online via Google Form and shared with the Ampang Indah community head to distribute the online form. The questionnaire consists of 3 parts and total of 14 questions items. All questions were measured using a Five-Point-Likert Scale from 1 (Strongly Disagree) to 5 (Strongly Agree). This article analyzes collected information through data cleaning, organization, and analysis. Cronbach's Alpha values and Pearson correlation coefficient assess data reliability and relationships between independent variables and dependent variables.

4.0 FINDINGS AND DISCUSSION

This section shows the finding of respondent’s demographic information along with reliability analysis

Table 1: Respondent’s Demographic Results.

No	Demographic	Items	Frequency	Percentage (%)
1.	Gender	Male	35	28.7
		Female	87	71.3
	Total		122	100
2.	Occupation	Less than 20 years old	13	10.7
		20-30 years old	89	73
		30-40 years old	8	6.6
		40-50 years old	9	7.4
		Above 50 years old	3	2.5
	Total		122	100
3.	Occupation	Government	17	13.9
		Non-Profit Sector	4	3.3
		Student	58	47.5
		Private	27	22.1
		Others	16	13.1
	Total		122	100
4.	Education	Phd Degree	1	0.8
		Master Degree	1	0.8
		Bachelor Degree	52	42.6
		Diploma	43	35.2
		SPM	15	12.3
		Secondary Schools	7	5.7
		Primary Schools	0	0
		Others	3	2.5
Total		122	100	
5.	Race	Malay	117	95.9
		Chinese	2	1.6
		Indian	3	2.5
		Others	0	0
	Total		122	100
6.	Experience Involved with e-learning	Less than 1 year	31	25.4
		1-2 years	49	40.2
		3-5 years	36	29.5
		More than 5 years	6	4.9
	Total		122	100

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Table 2 shows that the respondent’s demographic data shows a majority of female respondents (71.3%). Respondents in the 20-30 group (73%), mainly students (47.5%) with Bachelor’s degrees (42.6%) also coming from Malay race with (95.9%) and the respondent gain experience involved with e-learning between 1-2 years’ experience for (40.2%).

Reliability Analysis

Cronbach’s Alpha	N of Items
.950	4

Figure 2: Perceived Usefulness

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach’s Alpha if Item Deleted
The e-learning system enhances my learning performance	10.5902	8.161	.869	.938
My productivity is elevated through the utilization of e-learning in my study	10.6639	8.060	.903	.928
Using the e-learning system enhances my learning effectiveness	10.6230	8.088	.915	.924
I find the e-learning system to be useful in my learning	10.4426	8.612	.833	.949

Figure 3: Item Total Statistics

Figure 2 and 3 shows the independent variable reported Cronbach’s Alpha score $\alpha = 0.950$. Therefore, the coefficients generated for these for questions about perceived usefulness influence e-learning acceptance among students were the most reliable among all the variables.

Correlation Coefficient

		PERCEIVED USEFULNESS	E-LEARNING ACCEPTANCE
PERCEIVED USEFULNESS	Pearson Correlation	1	.734**
	Sig. (2-tailed)		< .001
	N	122	122
E-LEARNING ACCEPTANCE	Pearson Correlation	.734**	1
	Sig. (2-tailed)	< .001	
	N	122	122

** . Correlation is significant at the 0.01 level (2-tailed)

Figure 4: Correlation of Perceived Usefulness and E-Learning Acceptance

Based on Figure 4, which shows the correlation relationship result for e-learning acceptance. The research was to determine the perceived usefulness among students towards e-learning acceptance. The positive relationship between perceived usefulness and e-learning acceptance was supported by a highly positive correlation coefficient of 0.734. With both significant values at .001, indicating significance below the 0.05 threshold, the results confirm a statistically significant relationship between perceived usefulness and e-learning acceptance. Therefore, perceived usefulness is accepted.

5.0 CONCLUSION

The study recognizes that e-learning has become an indispensable part of education, and the covid-19 pandemic has accelerated its integration. As a result, the study examined how the pandemic affected the engagement of students in online learning and how established practices were reshaped. Key factors, such as perceived usefulness, are explored within the TAM framework to provide a comprehensive view of e-learning acceptance. The findings are expected to shed light on the intricate dynamics of student acceptance of e-learning, especially in the context of the covid-19 pandemic. The research approach, using a quantitative method and a well-structures questionnaire, ensures the reliability and validity of the data collected. The analysis conducted through IBM SPSS will help reveal the relationships between these variables. The significance of this study extends beyond the realm of education, as technology adoption patterns have implications for various sectors. The acceptance of e-learning can lead to better learning experiences, increased motivation among learners, and the promotion of active and community engagement. It can also contribute to lifelong learning and personal growth. Understanding the factors influencing e-learning acceptance is crucial for shaping the future of education and technology integration. This study contributes to a broader understanding of e-learning acceptance among students and the impact of perceived usefulness on their decision to embrace online education. By addressing the challenges and opportunities in this field, it can inform educators, institutions, and policymakers about optimizing e-learning experiences for the benefit of all stakeholders in education.

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