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English learners' intentions to adopt online learning post-pandemic: Ease precedes usefulness

El aprendizaje en línea de inglés después de la pandemia: La facilidad precede a la utilidad

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ABSTRACT

Adopting online learning as a mandated means of instruction amid the pandemic guaranteed students the opportunity to integrate digital technologies for English language learning. This experience was pivotal in investigating the continuous use of these platforms to facilitate online language learning post-pandemic. However, few studies have focused on this context, especially considering the psychological aspects of language learning through these gained learning experiences. Therefore, this study explores this narrative based on the technology acceptance model and external factors such as confidence in English (CONF), online learning anxiety (ANX), and familiarity with education technology (EdTech). Using the partial least square approach, data from the 530 Malaysian undergraduates analysed revealed that perceived ease of use (PEOU) precedes perceived usefulness (PU) as the most crucial factor influencing attitude and intention to use online learning. Likewise, CONF and ANX had stronger associations with PEOU than PU, but EdTech was found to be inconsequential towards attitude and PU. The results of this study underline the importance of PEOU that heralds PU in determining the continuous use of online tools for English language learning in higher educational institutions.

RESUMEN

La adopción del aprendizaje en línea como un medio de instrucción obligatorio durante la pandemia posibilitó a los estudiantes integrar tecnologías digitales para el aprendizaje del idioma inglés. Esta experiencia fue fundamental para investigar el uso continuo de estas plataformas para facilitar el aprendizaje de idiomas en línea después de la pandemia. Sin embargo, pocos estudios se han centrado en este contexto, específicamente considerando los aspectos psicológicos del aprendizaje de idiomas a través de estas experiencias de aprendizaje adquiridas. Por lo tanto, este estudio explora esta narrativa basada en el modelo de aceptación de tecnología y factores externos como la confianza en inglés (CONF), la ansiedad de aprendizaje en línea (ANX) y la familiaridad con la tecnología educativa (EdTech). Usando el enfoque de mínimos cuadrados parciales, los datos analizados de 530 estudiantes universitarios de Malasia revelaron que la facilidad de uso percibida (PEOU) precede a la utilidad percibida (PU) como el factor más crucial que influye en la actitud y la intención de usar el aprendizaje en línea. Del mismo modo, CONF y ANX tenían asociaciones más fuertes con PEOU que con PU, pero se descubrió que EdTech no tenía consecuencias para la actitud y el PU. Los resultados de este estudio subrayan la importancia de PEOU que anuncia PU para determinar el uso continuo de herramientas en línea para el aprendizaje del idioma inglés en instituciones de educación superior.

KEYWORDS | PALABRAS CLAVE

English as a second language, online learning, confidence in English, online learning anxiety, familiarity with education technology, post-pandemic.

Inglés como segunda lengua, aprendizaje en línea, confianza en inglés, ansiedad de aprendizaje en línea, familiaridad con las tecnologías educativas, postpandemia.

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1. Introduction

English language education in developing countries such as Malaysia has frequently been highlighted as an important qualification to transform the country into a high-income nation (Renganathan, 2023). Hence, English is a compulsory subject taught in primary and secondary schools for 11 years as a second language (Nik-Fauzi et al., 2022) and used as a medium of instruction at the tertiary level in most higher learning institutions. Likewise, due to the exponential growth of technology, Elaish et al. (2023) describe that using technologically assisted language-learning tools has become essential to teaching English as a second language (ESL) as learning behaviour has shifted from passive to active in recent years. Furthermore, technology adoption to support language learning is imperative to cater to the millennials' learning needs (Shadiev & Yang, 2020). Even though this has simultaneously created new opportunities to blend digital technologies for language learning (Buragohain et al., 2023), the pandemic entrusted educators and students to digitalise learning at a whole new level by adopting a distance learning approach. Hence, online learning was no longer merely an option but a necessity to enhance learning with possible merits (Chung et al., 2020) as it gained prominence in education, envisaging higher use intention post-pandemic (Al-Hamad et al., 2021). In Malaysia, pre-pandemic online learning has been regarded as transformative for ESL by integrating tools such as YouTube, Google Classroom, and WhatsApp to complement face-to-face teaching (Haleman & Yamat, 2021; Rahman, 2020). However, post-pandemic, ESL learners have now experienced a higher degree of using online tools for videoconferencing and collaboration, such as Zoom, Skype, and WebEx, as well as tools to manage and communicate online to facilitate learning (Nik-Fauzi et al., 2022). According to Chew and Ng (2021) and Krishan et al. (2020), ESL learners benefited from synchronously using online resources such as Google Translate and dictionaries during virtual classes where the instant access to these tools improved their language skills and confidence in communicating in English. Simultaneously, it also aided constructive and self-directed learning abilities in improving basic language skills, especially for reading, writing, and vocabulary acquisition through tools such as Typely and Grammarly (Buragohain et al., 2023). Consequently, the purpose of these tools shifted from merely an option to complement classroom learning dictated by teaching needs to a critical access point for learning and communicating independently.

In retrospect, modicum studies have addressed ESL students' acceptance and efficacy in independently using these technologies (Zaidan et al., 2021). Likewise, the unexpected switch to online education during the pandemic also prompted similar concerns about how it relates to digital literacy (Alfadda & Mahdi, 2021) and the psychological challenges involved in language learning (Karuppannan & Mohammed, 2020). Uztosun (2020) highlighted the importance of considering these characteristics as a considerable amount of language learning skills, while discrete, highly influences ESL learners' performances. Furthermore, in Malaysia, research on ESL online learning strategies often focuses on the technical angle while neglecting students' opinions, which is vital in improving technology assimilation (Nik-Fauzi et al., 2022). Undoubtedly, students' perception, attitude, and needs towards online learning has also shifted post-pandemic (Alfadda & Mahdi, 2021) which warrants exploration to provide critical insights to maximise learning outcomes (Zapata-Cuervo et al., 2022), especially for teaching and learning ESL (Buragohain et al., 2023). Therefore, Mohtar and Yunus (2022) asserted that the transition makes examining ESL students' perceptions, acceptance, and intention of online learning necessary.

Therefore, Haleman and Yamat (2021) suggested expanding the technology acceptance model (TAM) (Davis, 1985) by considering language-learning factors as external factors. TAM is frequently utilised in investigating users' technology acceptance by shedding light on how technology interaction influences attitude (ATT) and behavioural intention (BI), mainly based on the perceived ease of use (PEOU) and perceived usefulness (PU) of the said technology. TAM theoretically focuses on the effects of technology interaction but could be adapted to predict learning behaviour, intention, and attitude due to technology use (Kumar et al., 2020). Next, regarding external factors, we first considered experience with online learning in higher education post pandemic, as Lazar et al. (2020) and Wei (2022) suggested. As online learning experience rendered familiarity with education technology and online learning anxieties, these two constructs were deemed necessary to predict future intention. According to Hanafiah and Aziz (2022), in Malaysia, very few studies emphasise the psychological attributes of online language learning caused by

the pandemic. Hence, we firstly considered online learning anxiety, as suggested by Wang and Zhang (2021), and secondly, ESL learning confidence, as suggested by Côté and Gaffney (2021). ESL learners' confidence in learning is a primary concern for Malaysian undergraduates (Mohamad, 2020) and exploring this perspective is vital in understanding ESL learners' motivation to adapt to online learning postpandemic (Siok et al., 2023). Therefore, this study explores the acceptance and intention to use online learning to learn English by answering the following research questions:

- RQ1: Which factors significantly influence attitude and behavioural intention to use online learning to learn English based on TAM?
- RQ2: How do external factors, namely confidence in English, online learning anxiety, and familiarity with education technology, influence attitude and behavioural intention to use online learning to learn English?

The following section discusses how the conceptual model was hypothesised by incorporating these factors.

2. Hypotheses development

The hypotheses developed in this study are described in terms of the endogenous and exogenous variables used to predict utilisation attitude and behavioural intention per the general extended technology acceptance model for e-learning (GETAMEL) (Abdullah & Ward, 2016). GETAMEL considers the TAM variables as internal constructs of the model and external constructs as antecedents of the primary internal constructs (PU and PEOU) (Jiang et al., 2021).

2.1. Internal constructs

Davis (1985) introduced TAM founded on the theories of reasoned action and planned behaviour, and it has supported a plethora of studies connected to technology acceptance. TAM has been used to explore BI and ATT for online learning in numerous studies (Annamalai et al., 2021; Chung et al., 2020; Kumar & Silva, 2020; Kumar et al., 2022; Mailizar et al., 2021) where BI is defined as the likelihood of engaging in a behaviour (Han & Yi, 2019) and has a strong relationship with ATT (Mailizar et al., 2021) and PU when learning with technology (Kumar et al., 2020). In this study, BI is defined as the inclination to persist in using online platforms post-pandemic for learning English. Conversely, ATT is defined as the degree of appraisal of an intended behaviour (Ajzen,1991). However, when considering technology utilisation, it can be defined as an emotional reaction attributed to system utilisation (Venkatesh et al., 2003). Next, PU indicates users' conviction in a specific information system to deliver the expected results and has a causal effect with PEOU, which is the degree to which the utilisation is perceived to require minimum physical or mental effort (Davis, 1985). According to Mohtar and Yunus (2022), the acceptance of a learning platform for language learning is often attributed to accessibility, intention, and appreciation of the learning process. Hence, when language learners recognise the benefit of learning technology, they are more likely to use it, which equally influences their ATT (Hashim et al., 2016). Therefore, we hypothesise the following based on the internal constructs:

- H1: PU will significantly influence BI.
- H2: PU will significantly influence ATT.
- H3: PEOU will significantly influence PU.
- H4: PEOU will significantly influence ATT.
- H5: ATT will significantly influence BI.

2.2. External constructs

2.2.1. Confidence in English (CONF)

Confidence is one of the main factors influencing language acquisition (Krashen, 1981). ESL learners tend to be passive when learning online, which can be attributed to low confidence in language proficiency (Putri, 2023) when communicating with their instructor or when singled out in a classroom environment to provide feedback. Nevertheless, integrating technology in the language classroom during the pandemic has been deemed transformative in learning experiences and levels of confidence (Burk, 2021). Therefore,

we theorised CONF as an external variable that may influence usefulness and ease of use in the context of online language learning, as also suggested by Haleman and Yamat (2021):

- H6: CONF will significantly influence PU.
- H7: CONF will significantly influence PEOU.

2.2.2. Online Learning Anxiety (ANX)

One of the most critical emotional aspects influencing university students' English language acquisition due to the pandemic is online learning anxiety: environmental anxiety attributed to information overload, technical factors, and learning difficulties (Wang & Zhang, 2021). According to Zapata-Cuervo et al. (2022), online learning during the pandemic has increased anxiety due to learning challenges, which Abdelwahed et al. (2022) reflect as difficulties in access, technical support, and a lack of technical skills required for learning a language. Hence, anxiety is influenced by ease of use as also suggested by Abdullah and Ward (2016). Additionally, as anxiety is frequently associated with usefulness, the experience of utilising technologies may significantly impact adoption (Binyamin, 2019). Tapsuri and Polyiem (2022) explained that ANX could also be attributed to individual characteristics reflecting learning tool preferences due to their recognised usefulness. Therefore, we hypothesised the following relationships:

- H8: ANX will significantly influence PU.
- H9: ANX will significantly influence PEOU.

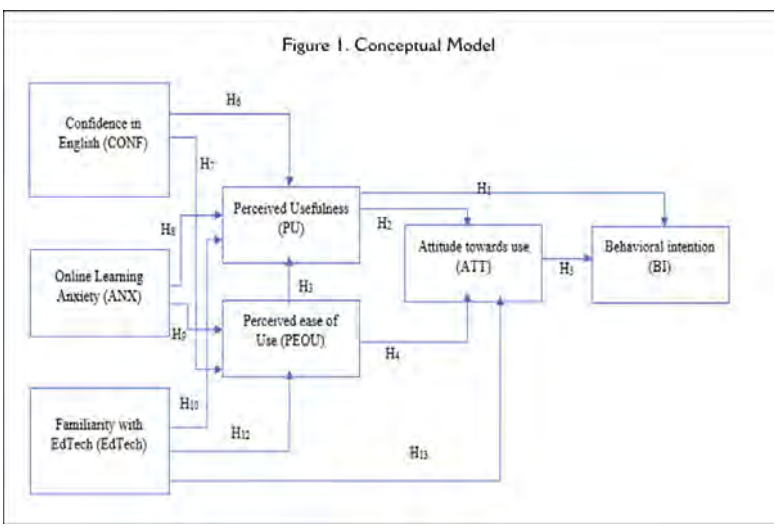
2.2.3. Familiarity with Education Technology (EdTech)

Students' technological competency in learning is determined by the extent and quality of their digital learning experience, which indirectly influences their online learning attitude (Lazar et al., 2020). Buragohain et al. (2023) stated that limited learning technology exposure might influence language pedagogical practises and online learning attitudes, which Alfadda and Mahdi (2021) claim are associated with TAM factors. Likewise, although they had exposure to online learning due to the pandemic, Malaysian ESL undergraduates are not extensively exposed to these technologies to signify strong familiarity with education technologies (Hasnan & Mohin, 2021). Jiang et al. (2021) claimed that familiarity did not influence PU or PEOU in language learning; however, we hypothesise, based on differing views, the following relationships:

- H10: EdTech will significantly influence PU.
- H11: EdTech will significantly influence PEOU.
- H12: EdTech will significantly influence ATT.

Accordingly, based on the hypothesised relationships, we proposed the conceptual model as represented in Figure 1.

Figure 1. Conceptual Model



3. Materials and methods

3.1. Instruments

The questionnaire combines items adapted from Davis (1985) by Haleman and Yamat (2021), focusing on PU, PEOU, ATT, and BI to reflect the perception of learning English using online learning strategies post-pandemic. PU was measured using four items with an example item, such as "Online learning increases my competency in English language learning"; PEOU with five items, for instance, "I find it easy to complete my English homework via online learning"; ATT with three items such as "I think learning the English language via online learning is interesting" and lastly BI with three items, for example, "I feel comfortable using online learning to improve my English". Next, CONF was adapted from Yim and Yu (2011), while ANX and EdTech from Lazar et al. (2020). CONF was evaluated based on five items focusing on student confidence in English class (e.g., "I feel confident when I speak English in class"). As for ANX, online learning anxiety was measured without language motives with three items, for instance, "Working with online learning tools does not make me feel nervous". Lastly, EdTech also has three items and the questions focused on online applications used during the pandemic, such as learning management systems, videoconferencing tools, and synchronous digital tools generally used for learning English, such as "After the pandemic, I am most familiar with videoconferencing applications such as Google Meet, WebEx, Microsoft Meet". All 28 items were measured using a five-point Likert scale ranging from 1=strongly disagree to 5=strongly agree.

3.2. Respondents and sampling

The respondents of this study were polytechnic undergraduates from various semesters and disciplines taking communicative English courses in Malaysia. The ESL language courses are similar for all disciplines and all polytechnics, as the core purpose of language instruction is to create proficient English communication abilities (Mohamad, 2020) that complement technical courses (Radzi & Embi, 2018). Due to the homogenous nature of these courses, this study employed convenience sampling where the respondents were from seven polytechnics from the northern, east, and middle region. One lecturer from each polytechnic was invited to voluntarily aid the research process by electronically distributing the survey link through social media applications or learning management systems. The survey included a consent statement and permission to conduct the study from the Ministry of Higher Education. As the participation was voluntary, the researchers targeted a few institutions to ensure a high response rate that would fulfill the minimum sample size of 146 respondents determined using GPower 3.1 (Faul et al., 2007), based on typical values of α=0.05, effect size f^2 of 0.15, power=0.95, for six predictor variables.

3.3. Research design

This study employed a cross-sectional survey design using a self-administered questionnaire distributed electronically using Google Forms. Two reminders were broadcasted to encourage a higher response rate, based on three-week intervals. Next, the data collected was assessed to determine univariate normality using IBM Statistical Package for the Social Sciences (SPSS), version 27, by running the Kolmogorov-Smirnov test by which all factors were non-normally distributed and therefore suitable for partial least squares - structural equation modelling (PLS-SEM) analysis. PLS-SEM is used when the study focuses on prediction and theory development (Reinartz et al., 2009) and weights causal-predictive analysis. Next, the data was exported to SmartPLS ver. 3.2.8 (Ringle et al., 2015) for further analysis to answer the research question.

4. Analysis and findings

4.1. Demographic and multivariate analysis

A total of 530 respondents participated in this study, where 229 respondents (43.21%) were male students, and 301 were female (56.79%). Most respondents (n=283, 53.40%) were from a technical background, such as engineering, and 46.60 % (n=247) were from non-technical backgrounds, such as commerce and tourism. The number of respondents for the first year (n=217, 40.94%) and final year respondents (n=212, 40.00%) were comparable, whereas only 19.06% (n=101) respondents were from

the second year. The average age of the respondents was between 18 to 25 years old.

Next, to determine correlations between the variables, multivariate normality was measured based on Mardia's test of multivariate normality, accessible at https://webpower.psychstat.org/wiki/tools/index (Zhang & Yuan, 2018). The results indicated the non-normal distribution of data as represented by the skewness (β=507.644, p<0.01) and kurtosis (β=2451.872, p<0.01) results, which was ideal for the measurement and structural model analysis.

4.2. Measurement model

Measurement model analysis determines the model's reliability and validity to observe the relationship between the data and variables. The findings (Table 1) revealed that all reliability values represented by the indicator reliability, composite reliability, and internal consistency were below the threshold value suggested by Hair et al. (2019), signifying that the data had internal consistency.

Table 1. Reliability and validity analysis

Variable	Indicator	Loading	Indicator Reliability	Composite Reliability	Cronbach's Alpha	rho_A	AVE
ANX	ANX1	0.909	0.953	0.946	0.915	0.916	0.855
	ANX2	0.929	0.964				
	ANX3	0.937	0.968				
ATT	ATT1	0.910	0.954	0.958	0.941	0.942	0.850
	ATT2	0.942	0.971				
	ATT3	0.920	0.959				
	ATT4	0.917	0.958				
BI	BI1	0.917	0.958	0.950	0.929	0.930	0.825
	BI2	0.911	0.954				
	BI3	0.901	0.949				
	BI4	0.904	0.951				
CONF	CONF1	0.855	0.925	0.908	0.868	0.878	0.670
	CONF2	0.873	0.934				
	CONF3	0.905	0.951				
	CONF4	0.846	0.920				
	CONF5	0.565	0.752				
PEOU	PEOU1	0.844	0.919	0.940	0.920	0.921	0.758
	PEOU2	0.879	0.938				
	PEOU3	0.889	0.943				
	PEOU4	0.871	0.933				
	PEOU5	0.870	0.933				
EdTech	POST1	0.877	0.936	0.936	0.897	0.903	0.829
	POST2	0.925	0.962				
	POST3	0.929	0.964				
PU	PU1	0.849	0.921	0.939	0.914	0.915	0.795
	PU2	0.915	0.957				
	PU3	0.920	0.959				
	PU4	0.880	0.938				

Note. Perceived ease of use (PEOU); Perceived usefulness (PU); Attitude (ATT); Behavioral intention (BI), Online learning anxiety (ANX); Familiarity with Edtech tools (EdTech); Confidence in English (CONF).

Next, the convergent validity determined, based on the average variance extracted (AVE), signifies that each construct can account for the variation in its elements. Likewise, all Heterotrait-Monotrait (HTMT) values were below the threshold value of 1.00 (Henseler et al., 2015) (Table 2), revealing that respondents could easily differentiate between the constructs. Hence, the measurement model was also acceptable.

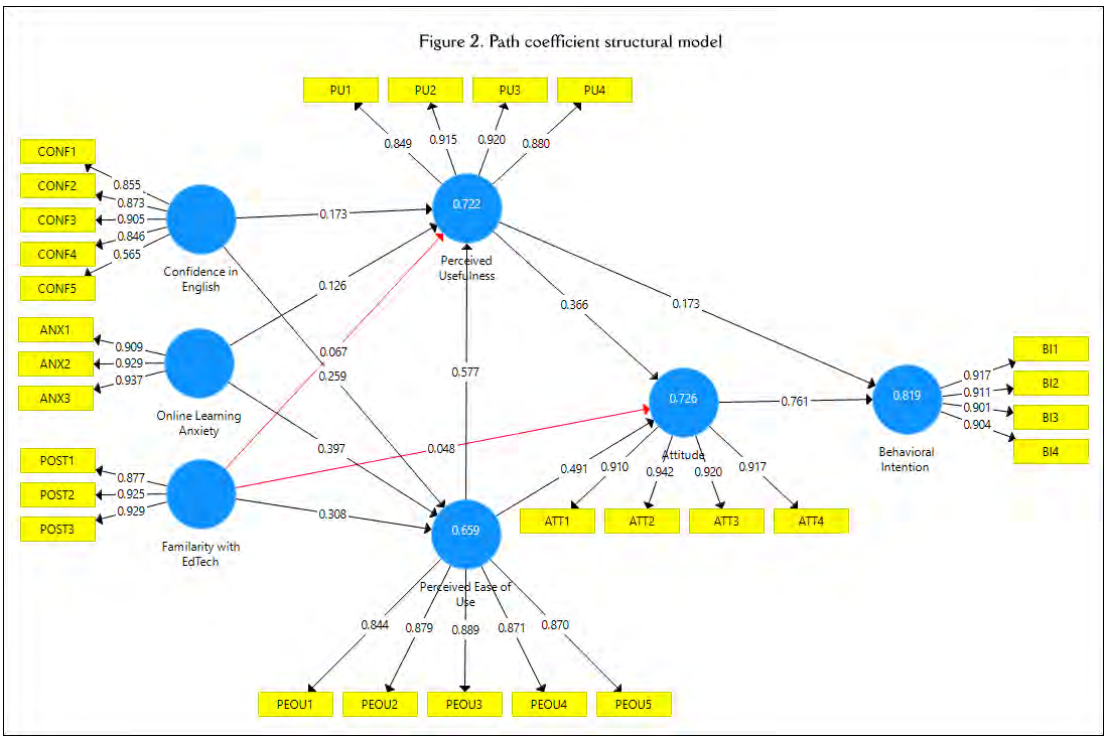
Table 2. HTMT ratio

	ANX	ATT	BI	CONF	EdTech	PEOU	PU
ANX	-						
ATT	0.806	-					
BI	0.805	0.960	-				
CONF	0.748	0.705	0.712	-			
EdTech	0.551	0.625	0.563	0.576	-		
PEOU	0.786	0.884	0.835	0.757	0.701	-	
PU	0.755	0.863	0.848	0.767	0.646	0.9	-

4.3. Structural model

The relationships between the variables and the hypothesised relationships were measured using a structural model. First, the model fit was determined by the standard root mean square residual (SRMR) value, indicating a value of 0.057 which was below the cut-off value of 0.08 (Henseler et al., 2016). Next, the variance inflation factor (VIF) analysis (Table 3) which determines items' correlation with each other, indicated that all values were below the threshold value of 5.0 (Henseler et al., 2016). As both these values were established, the analysis of path coefficients (β) used to determine the correlation and strengths between variables was performed (Wong, 2019), followed by bootstrapping resampling of 5,000 that indicated significant relationships when t-values were above 1.96 (Hair et al., 2019). Hence, the results of all hypothesised relationships based on β, t-value, confidence intervals, and effect size (f2) are presented in Table 3, where non-significant relationships are highlighted in red, as shown in Figure 2.

Figure 2. Path coefficient structural model



The analysis showed that all hypotheses failed to be rejected except for H_{10} (β=0.067, t=1.834, =0.067, f^2=0.009) and H_{12} (β=0.048, t=1.228, =0.220, f^2=0.005) (Table 3).

Table 3. Results for β, t-value, VIF, CI, f^2 and VIF

H	Relationship	β	Stdev	t- value	p-value	CI 2.5%	CI 95%	f^2	VIF	Decision
H_1	PU → BI	0.173	0.034	5.033	0.000	0.104	0.244	0.059	2.791	S
H_2	PU → ATT	0.366	0.055	6.698	0.000	0.259	0.474	0.152	3.236	S
H_3	PEOU → PU	0.577	0.041	13.972	0.000	0.497	0.664	0.409	2.929	S
H_4	PEOU → ATT	0.491	0.067	7.366	0.000	0.363	0.613	0.246	3.584	S
H_5	ATT → BI	0.761	0.031	24.191	0.000	0.693	0.823	1.148	2.791	S
H_6	CONF → PU	0.173	0.041	4.214	0.000	0.089	0.258	0.051	2.121	S
H_7	CONF → PEOU	0.259	0.055	4.699	0.000	0.158	0.367	0.102	1.925	S
H_8	ANX → PU	0.126	0.049	2.590	0.010	0.027	0.215	0.024	2.37	S
H_9	ANX → PEOU	0.397	0.056	7.083	0.000	0.292	0.503	0.242	1.909	S
H_{10}	EdTech→ PU	0.067	0.036	1.834	0.067	-0.008	0.137	0.009	1.715	NS
H_{11}	EdTech → PEOU	0.308	0.042	7.374	0.000	0.228	0.39	0.194	1.437	S
H_{12}	EdTech → ATT	0.048	0.039	1.228	0.220	-0.03	0.124	0.005	1.714	NS

Note. Perceived ease of use (PEOU); Perceived usefulness (PU); Attitude (ATT); Behavioral intention (BI), Online learning anxiety (ANX); Familiarity with Ed-tech tools (EdTech); Confidence in English (CONF); Hypothesis (H); Supported (S); Not-Supported (NS).

Therefore, familiarity with education technology post-pandemic for learning English did not influence attitude and perceived usefulness, but the ease of use of such platforms (H_{11}: β=0.308, t=7.374, =0.000, f^2=0.194). According to Cohen (2013), f^2 values between 0.020 - 0.150 are weak, 0.150 to 0.350 are

medium, and values equal to or larger than 0.350 are large effect size. H_5 (β=0.761, t=24.191, =0.000, f^2=1.148) had the highest effect size, followed by H_3 (β=0.577, t=13.972, =0.000, f^2=0.409) where both were considered as having large effect size. Likewise, H_2 (β=0.366, t=6.698, =0.000, f^2=0.152), H4 (β=0.491, t=7.366, p=0.000, f^2=0.246) and H_9 (β=0.397, t=7.083, =0.000, f^2=0.242) had medium effect size.

Next, the coefficient determination (R^2) indicated that the model could explain 81.9% of BI, 72.6% of ATT, 72.2% of PU, and 65.9% of PEOU. Hair et al. (2019) described R^2 values of 0.75, categorised as strong, 0.50 as moderate, and 0.25 as weak. Based on the findings, it could be determined that the in-sample predictive power is considered strong for BI (0.819) and ATT (0.726). According to Benitez et al. (2020), a high value can be expected when the phenomenon is already well understood.

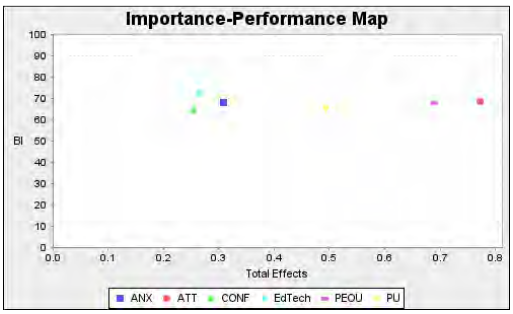
However, to determine the predecessors with a strong overall effect (i.e., those with reasonably high importance for the target construct) and importance, the importance-performance map analysis (IPMA) was conducted (Ringle & Sarstedt, 2016).

Table 4. Importance and Performance Index Values for BI

Factor	Importance	Performances
ANX	0.308	67.870
ATT	0.773	68.323
CONF	0.253	64.653
EdTech	0.264	72.318
PEOU	0.691	67.966
PU	0.493	65.012

Based on the findings as reflected in Table 4 and Figure 3, the importance (total effects) for BI is mainly determined by ATT (0.773) and PEOU (0.691) and less so by CONF (0.253) and EdTech (0.264). IPMA helps to identify areas of improvement in predicting BI, and the performance value of EdTech (72.318), ATT (68.323), and PEOU (67.966) and the area of improvement in future studies.

Figure 3. Importance-performance map on BI



5. Discussion

The findings indicated that the hypothesised model could predict 81.9% of behavioural intention and 72.6% of attitude, which reflects strong in-sample predictive power. Referring to RQ1 for internal constructs, attitude was the strongest predictor of intention in using online learning with a strong impact. These results align with those obtained by Mailizar et al. (2021). Likewise, ease of use was pivotal in determining usefulness and attitude with a high effect corresponding to Annamalai et al. (2021) findings, yet the association between attitude and usefulness differed as a significant but weak effect was observed. Therefore, this reflects a movement away from the relevance of perceived usefulness towards a more significant influence of ease of use. Although language learners' intention to use online learning could be heavily influenced by their ability to access information, internet connection, and technical facilities (Baxter, 2020); Rubaai and Khatib (2020) added that the association between simplicity and usefulness could only be confirmed if they perceive easy access to and means of interaction with learning resources, online collaboration, and authentic instructor feedback. Hence, simplicity in accessing and using online tools is vital in determining utilisation, and we theorised that this could be a behaviour inherited due to

the convenience of using online resources for vocabulary, phrases, sentences, spelling, and grammar for virtual classes during the pandemic.

Next, to answer the second research question (RQ2), focusing on external constructs, the findings indicated that all external factors were positively associated with ease of use but only reflected a medium effect. Confidence in English and online learning anxiety were found to have a weak relationship with usefulness, while familiarity with education technology did not influence usefulness, as observed by Jiang et al. (2021). Additionally, familiarity also did not influence attitude, which contradicted the findings of Abdullah and Ward (2016). Interestingly, even for external constructs, PEOU still precedes PU. According to Kumar et al. (2020), usefulness is more influential than ease in initial platform adoption and not for continuous use. Moreover, due to the pandemic, the online learning experience may have transformed language learners' attitude that focuses on ease of use as online learning has become a substantial norm. Furthermore, the pandemic orchestrated a pivotal movement in using learning technologies by acting as a catalyst for digital transformation in higher education (Cazan & Maican, 2023), where online language learning, which previously focused on distributing informative content and conducting online activities that supplement face-to-face instruction (Azlan et al., 2020), is no longer a norm. Conversely, while Malaysian students were marginally prepared for online learning due to a lack of individual learning experiences and technical difficulties pre-pandemic (Chung et al., 2020), mandatory online learning has positively benefited them (Bervell et al., 2022) during the pandemic, where they are motivated to participate and accept the possibilities of language learning online (Mohtar & Yunus, 2022).

One interesting aspect that emerged from the analysis is the stronger association between confidence in English and online learning anxiety towards ease of use compared to usefulness. Confidence in English mirrors the level of learning participation (Ramsa & Mohd-Rawian, 2019), which reduces learning anxiety (Abdous, 2019). Abdullah and Ward (2016) and Burk (2021) explained that higher levels of language learning confidence could be due to exposure to learning tools. While we did not explore this hypothesised relationship, we rationalise this association based on the precedence of ease of use after the initial introduction of a tool for achieving learning goals which we relate to usefulness. Hence, unsurprisingly, the continuous use of online learning tools has rendered familiarity inconsequential towards usefulness, as also highlighted by Binyamin (2019). Our findings also draw similar conclusions to Abdullah and Ward (2016) and Wang and Zhang (2021), suggesting marginal online learning anxiety associations with factors and challenges related to ease of accessing and using online tools in English language acquisition, contradicting the findings by Tapsuri and Polyiem (2022) emphasising usefulness. Nevertheless, our findings also support Putri's (2023) claims that ESL confidence in learning English online is still a passive experience, and based on the IPMA results, improvement is necessary with online learning experience and anxiety if the goal is to improve intention. Moreover, the results also highlighted the importance of attitude and ease of use towards intention which supports Buragohain et al. (2023) notion that language learning online will continue to acclimate and advance collectively.

6. Conclusions

Therefore, we conclude that the main factor influencing attitude and intention to use online learning for ESL learners is perceived ease of use. Ease of use was vital not only in arbitrating perceived usefulness but also confidence in English, online learning anxiety, and familiarity with education technology towards the endogenous variables. Likewise, external variables had a stronger association with ease of use than usefulness, where familiarity or experience during the pandemic has rendered inconsequential influence on online learning attitude and usefulness. The findings are vital in transforming ESL language learning online, as understanding motivational factors could maximise future intention (Siok et al., 2023) by aiding educators and stakeholders in identifying ideal instructional interventions to support online language learning. Likewise, the findings highlighted the need to explore how technical factors such as complexity, availability, and accessibility of language tools that reflect ease may influence attitude and intention to use online learning post pandemic.

Some limitations should be considered. First, the findings did not represent different levels of education or specific language learning skills, which warrants further exploration. We also highlight the need to

explore factors such as facilitating conditions, behavioural expectations, usability, task–technology fit, habit, and hedonic motivation as the pandemic experience has altered learning experiences and how these variables are associated with ease of use and intention. Next, future studies on the emotional aspect of learning are also recommended, especially considering playfulness and enjoyment in online learning, as we theorised that they may have possible associations with usefulness. Lastly, although the results of this study underline the importance of ease of use, we believe future studies could also consider a mixed-method approach to rationalise the associations between these variables and consider untested language learning variables as mediating or moderating variables.

Authors' Contribution

Idea, I.S, J.A.K.; Literature review (state of the art), I.S, J.A.K.; Methodology, I.S, J.A.K.; Data analysis, I.S, J.A.K, S.O; Results, I.S, J.A.K.; Discussion and conclusions, I.S, J.A.K.; Writing (original draft), I.S.; Final revisions, I.S, J.A.K, S.O.

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