

UNIVERSITI TEKNOLOGI MARA

# **Factors Influencing the Acceptance of Pre-Recorded** Lecture Videos Through a Technology Acceptance Model (TAM) Approach in ESL Blended Learning

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#### ABSTRACT

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With the use of technology in ESL instruction, pre-recorded lecture videos have emerged as a dynamic tool, requiring an understanding of the factors influencing their acceptance. This study examined factors influencing ESL students' acceptance of pre-recorded lecture videos using the Technology Acceptance Model (TAM) in blended learning classrooms. The objectives of the study were to examine the variables' influence and to investigate the relationships among Intention to Use, Perceived Ease of Use, Perceived Enjoyment, Learner-Content Interaction, and Perceived Usefulness in the prerecorded lecture video acceptance. Convenience sampling resulted in 221 responses from Universiti Teknologi Mara Terengganu students. Data was analysed using SPSS software that involved descriptive and regression analyses. Reliability analysis indicated strong internal consistency of the questionnaire items. Analyses of correlation and coefficient of determination revealed strong, positive between variables. The correlations regression analysis emphasised the importance of engaging content by emphasising the crucial role of Learner-Content Interaction in influencing Intention to Use. Perceived Enjoyment and Perceived Ease of Use appeared as important variables, emphasising the importance of user-friendly and enjoyable pre-recorded lecture videos. The study concluded by offering a model incorporating the relationships, providing insights into the literature on ESL learners' acceptance of pre-recorded lecture videos. Recommendations were emphasised for designing ESL instructional content particularly the pre-recorded lecture videos that are interactive, user-friendly, and enjoyable. Future research should employ various sampling methods and investigate longitudinal perspectives for a better understanding of perspectives.

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### **1. INTRODUCTION**

The incorporation of technology has become a fundamental element in forming contemporary instructional practices in the dynamic field of education. Haleem et al. (2022) pointed out that the use of digital technology has already become necessary due to the globalisation of education. Moreover, according to Dziuban (2018), in a pioneering national survey funded by the Sloan Consortium (currently the Online Learning Consortium), 65.2% of participating institutions of higher education (IHEs) provided blended or hybrid courses that require digital learning tools. Globalisation has promoted greater use of digital technology in education, also by the increasing demand for flexible and accessible learning. As the educational environment evolves, there is a need to cater to students' various schedules, preferences, and learning accessibility, emphasising the significance of technology in meeting diverse learning needs. The shift towards blended learning highlights the innovative potential of digital tools in integrating conventional face-to-face interactions with online resources to provide students with flexible and meaningful learning experiences.

Conventional ESL classrooms have traditionally depended on face-to-face interactions, teacher-led instruction, and physical resources such as textbooks. By incorporating technology into the teaching and learning process, blended learning changes this traditional environment. This can include virtual communication tools, instructional apps, multimedia materials, and online platforms. As pointed out by Ramalingam et al. (2021), its main objectives are enhancing the educational process, encouraging participation, and considering the ESL students' diverse learning preferences and styles. The students have varying degrees of English competence and come from a variety of linguistic origins. Blended learning acknowledges that each student has specific difficulties and capabilities that require flexibility and adaptation to solve (Razawi et al., 2023).

In the context of ESL blended learning, the use of pre-recorded lecture videos stands out as a revolutionary development. Razawi et al. (2023) emphasised that the use of pre-recorded lecture videos gives students a level of flexibility and autonomy. It allows students to revisit and interact with course materials at their convenience by overcoming the time and physical constraints of traditional classrooms. This creative teaching tool fits in with the nature of the digital world while also acknowledging each person's learning preferences. Lapitan Jr. et al. (2021) highlighted that in a technologically advanced educational environment, pre-recorded lecture videos provide a dynamic and efficient way to distribute knowledge, improve the entire learning experience, and meet the various demands of students. This innovative educational strategy deviates from traditional teaching techniques by giving the students a sophisticated and adaptable way to interact with the material at their own speed. The adoption of pre-recorded lecture videos becomes an attractive means of bridging the gap between conventional and digital learning as the increasing number of educational institutions throughout the globe shift to adopting blended learning models.

#### 1.1 Problem Statement

Despite the growth of technology integration in ESL blended learning environments, the specific factors influencing the acceptance of pre-recorded lecture videos remain inadequately understood. Numerous research presented conflicting findings concerning factors influencing acceptance. Some studies highlighted technical issues, for example, Lange & Costley (2020). The study highlighted technical issues like video quality, pace, speed of materials,

instructional segmentation, incremental speed controls, audio intelligibility, and visual quality. Another study conducted by Lim (2022) emphasised the importance of instructional design. The faculty members were to prioritise not just creating learning content, but also to concentrate on the pedagogical design of lectures to improve the achievement of learning outcomes. Other than that, a study that was conducted by Islam (2020) highlighting learner preferences. The findings of this study revealed that pre-recorded video lectures were favoured over live Zoom lectures because of their flexibility, convenience, and educational efficacy. This inconsistency indicates a lack of consensus on the key factors that influence acceptance, thus suggesting the need for further research, especially on the relationship between the factors influencing; the Intention to Use, Perceived Ease of Use, Perceived Enjoyment, Learner-Content Interaction, and Perceived Usefulness with the acceptance of pre-recorded lecture videos. Therefore, this study generally aimed to examine the diverse aspects of students' acceptance in an ESL blended learning context, particularly on pre-recorded lecture videos using the Technology Acceptance Model (TAM). The objectives of this study were as stated below:

- 1) To examine the variables influencing students' acceptance of pre-recorded lecture videos.
- 2) To investigate the relationship between the factors influencing; the Intention to Use, Perceived Ease of Use, Perceived Enjoyment, Learner-Content Interaction, and Perceived Usefulness with the acceptance of pre-recorded lecture videos.

This study is significant as it gives suggestions on how to make ESL learning materials better particularly in the blended learning classrooms. It discusses creating videos that are enjoyable, simple to use, and make learning English more engaging. These suggestions may assist lecturers in creating the process of learning English more enjoyable and successful.

# 2. LITERATURE REVIEW

# 2.1 Pre-Recorded Lecture Videos in Classroom Settings

A growing corpus of research investigated the use of pre-recorded lecture videos in ESL classrooms that provided numerous major findings and themes. Pre-recorded lecture videos' flexibility and accessibility allowed learners to engage with information at their own speed, and facilitated understanding through features such as replay, stop, and review options, as discovered in a study conducted by Lapitan Jr. et al. (2021). Other than that, Smith and Francis (2022) conducted a study on the influence of multimedia features on student engagement. It showed that well-designed pre-recorded lecture videos with visual aids and subtitles can increase learner attention. In addition, Razawi et al. (2023) conducted a study on lecture videos in ESL blended learning classrooms. The result demonstrated that pre-recorded videos can be equally or more successful in the ESL blended learning context. When investigated in connection to learner control, pacing, attention, and retention suggested potential improvements for concentration and knowledge retention. This finding was discovered in a study that was carried out by Zhu et al. (2022). Furthermore, Quinn and Kennedy-Clark (2015) investigated pedagogical approaches for pre-recorded lecture videos such as interactive quizzes and conversations. It was revealed that the interactive approaches were able to improve the overall learning results. However, Bui (2022) emphasised that challenges like learner isolation, restricted interaction with instructors, and technological glitches were evident in the use of lecture videos. This highlighted the importance of various perspectives on the use of pre-recorded lecture videos particularly in ESL classroom instruction.

### 2.2 Technology Acceptance Model (TAM) In Educational Research Settings

The Technology Acceptance Model (TAM) has been a foundation in the study of user acceptance of technology, providing a strong framework to discover individuals' attitudes and behaviours in adopting new technological innovations. Originating from the field of information systems, TAM was initially introduced by Davis in the late 1980s and has since developed into a widely adopted theoretical construct for examining technology adoption across various domains (Lai, 2017). Within educational research settings, TAM serves as a valuable lens through which one can explore the factors that influence users' acceptance of educational technology, thus shaping their engagement and interaction with innovative education field have applied TAM to analyse user behaviour and attitudes toward technology adoption. Previous studies have examined factors such as perceived ease of use, perceived usefulness, and external variables influencing individuals' decisions to accept or resist new technologies.

#### 2.3 Variables of The Study

#### 2.3.1 Perceived Usefulness (PU)

Perceived usefulness refers to how much a person believes that using a specific system would improve their job performance (Davis et al., 1989). In a longitudinal investigation, Davis et al. (1989) involved assessments after different time intervals, indicating a longitudinal investigation of perceived usefulness, perceived ease of use, and self-reported usage over time. The regression analyses showed that in Study 1, both perceived usefulness and perceived ease of use indicated significant positive effects on self-reported usage of Electronic Mail and XEDIT. The pooled results across Study 1 showed a consistent positive influence of perceived usefulness on usage, while the effect of perceived ease of use was comparatively lower. Study 2 reflected similar trends, with both perceived usefulness and perceived ease of use significantly contributing to self-reported usage of Chart-Master and Pendraw, and the pooled results reinforced the substantial impact of perceived usefulness.

# 2.3.2 Perceived Ease of Use (PEOU)

Perceived ease of use is the extent to which an application is perceived to be easier to use than another, and that it is more likely to be accepted by users (Davis et al., 1989). Examining students' acceptance of video-based and video-assisted learning in journalism and communication courses, the correlation coefficient discovered by Galatsopoulou et al. (2022) indicated that significant interrelations among key constructs were evident. Perceived usefulness (PU) showed strong positive correlations with variables such as perceived enjoyment (PE), perceived creativity (PCR), relative advantage (RA), satisfaction (S), intention (IOU), perceived ease of use (PEOU), and attitude towards use (ATU). These findings highlighted the interconnected nature of factors influencing students' perceptions and intentions regarding video-based and video-assisted learning. Satisfaction emerged as a key factor. This perspective highlights the importance of considering a complex framework that includes enjoyment, creativity, and satisfaction in designing and evaluating instructions for using video-based and video-assisted learning within journalism and communication courses.

#### 2.3.3 Intention to Use (IU)

Intention to Use (IU) is the probability of utilising a new technology, influenced by individuals' perceptions of its perceived usefulness in enhancing performance and the

perceived ease of use, indicating the effortlessness of utilising the technology (Davis et al., 1989). In exploring factors influencing students' acceptance and usage of the lecture capture system (LCS) ReWIND at a Malaysian university, Nair et al. (2015) conducted a study that used the extended version of TAM, called the Unified Theory of Acceptance and Use of Technology (UTAUT2) model. The analysis employed partial least squares-based structural equation modelling. The key findings in the study highlighted those various factors, including performance expectancy, effort expectancy, social influence, facilitating conditions, price value, hedonic motivation, and habit significantly influenced students' acceptance and usage of ReWIND.

# 2.3.4 Learner – Content Interaction (LCI)

Learner-content interaction (LCI) is the process where learners engage in elaboration and reflection upon course content, with its correlation with improved achievement outcomes (Li & Jhang, 2020). Correlations among independent variables and student satisfaction, as discovered by Kuo et al. (2014), revealed significant associations in the context of the learning environment. Positive correlations were observed between learner–learner interaction and student satisfaction, learner–instructor interaction and satisfaction, learner–content interaction and satisfaction, internet self-efficacy and satisfaction, as well as self-regulated learning and satisfaction. These findings suggested that a more positive engagement among learners, interactions with instructors and course content, higher levels of internet self-efficacy, and greater self-regulated learning are linked with increased student satisfaction.

# 2.3.5 Perceived Enjoyment (PE)

According to Atombo et al. (2017), besides the performance improvements resulting from technology use, Perceived Enjoyment (PE) is defined as the extent to which engaging with a specific technology is considered enjoyable. In the context of e-learning acceptance, Latip et al. (2020) found that self-efficacy positively affected e-learning acceptance, indicating that higher levels of self-efficacy contribute to a more positive attitude toward e-learning. Social influence, perceived enjoyment, and performance expectancy were also identified as significant influencers of e-learning acceptance. Additionally, Dishaw & Strong (1999) compared three models - the Technology Acceptance Model (TAM), Task-Technology Fit (TTF), and an Integrated model. The Integrated model demonstrated superiority in explaining variance and total effects in which it had the highest contributions from perceived usefulness, perceived ease of use, task-technology fit, tool experience, intention to use, and attitude.

In summary, the previous studies presented a comprehensive investigation of factors influencing technology acceptance and usage in diverse educational contexts. These studies provided a detailed understanding of the factors shaping technology adoption in educational The findings from the past studies also provided a contextual framework for settings. addressing the identified gap in the problem statement, specifically the inadequate understanding of factors influencing the acceptance of pre-recorded lecture videos in ESL guiding learning environments, blended the study towards а more comprehensive investigation of student acceptance in this context.

# **3. METHODOLOGY**

# 3.1 Research Design

This study employed a correlational research design and explored the application of the Technology Acceptance Model (TAM) to hypothesise the effects of external variables;

Learner-Content Interaction, and Perceived Enjoyment on the intention to use pre-recorded lecture videos in learning ESL. The research hypotheses focused on establishing relationships and impacts of these factors within the context of the study. The hypotheses of this research were:

H1: Perceived Ease of Use (PEOU) positively influences the Perceived Enjoyment (PE)

H2: Perceived Usefulness (PU) positively influences the Perceived Enjoyment (PE)

H3: Learner-Content Interaction (LCI) positively influences the Perceived Usefulness (PU)

H4: Perceived Ease of Use (PEOU) positively influences the Perceived Usefulness (PU)

H5: Perceived Enjoyment (PE) positively influences the Intention to Use (IU)

H6: Learner-Content Interaction (LCI) positively influences the Intention to Use (IU)

H7: Perceived Ease of Use (PEOU) positively influences the Intention to Use (IU)

H8: Perceived Usefulness (PU) positively influences the Intention to Use (IU)

# 3.2 Data Collection Procedure and Analysis

Data was collected using convenience sampling, a cost-effective method (Hair et al., 2017). To determine the required sample size, the g\*power software was utilised, which suggested a minimum of 74 participants. The survey was distributed via email and WhatsApp group chats, resulting in 221 completed responses, exceeding the number recommended. The questionnaires were distributed through an online survey among Universiti Teknologi Mara Terengganu students at three campuses located in Dungun, Bukit Besi, and Kuala Terengganu. The study was structured with a questionnaire derived from the framework of the study, incorporating five primary variables. The items in the questionnaires were derived from prior research, as indicated in Table 1. The data collected from the questionnaires was then analysed using SPSS, involving descriptive and regression analyses.

Table 1: Survey Items					
Construct	Number of Items	Source			
Perceived Enjoyment (PE)	6	(Latip et al., 2020; Galatsopoulou, 2022;)			
Learner-Content Interaction (LCI)	4	(Kuo et al., 2014; Galatsopoulou, 2022)			
Perceived Ease of Use (PEOU)	6	(Davis et al., 1989; Galatsopoulou, 2022)			
Perceived Usefulness (PU)	3	(Davis et al., 1989)			
Intention to Use (IU)	3	(Lim et al., 2022)			

#### 4. RESULTS

#### 4.1 Reliability Analysis

Cronbach Alpha is a metric used to assess the reliability or internal consistency of a set of test items or a scale. It is calculated based on the average correlation among items within the test. If the items are highly correlated, it indicates they are measuring the same underlying concept, leading to a higher Cronbach Alpha score. Sekaran and Bougie (Sekaran & Bougie, 2013) classify a Cronbach Alpha score of 0.6 as poor, 0.7 as good, 0.8 as very good, and 0.9 as excellent. As shown in Table 2, the Cronbach Alpha values for Perceived Enjoyment (0.966), Learner-Content Interaction (0.907), Perceived Usefulness (0.909), and Intention to Use (0.936) all demonstrated excellent internal consistency, while Perceived Ease of Use (0.894) exhibited good internal consistency. The range of very good and excellent Cronbach Alpha implied that the items within constructs were reliably measuring the intended concepts. This is crucial in research and assessments, as it ensures the validity of the conclusions drawn based on these measurements.

Table 2:	Reliability	Analysis
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Construct	Number of Items	Cronbach's Alpha
Perceived Enjoyment (PE)	6	0.966
Learner-Content Interaction (LCI)	4	0.907
Perceived Ease of Use (PEOU)	6	0.894
Perceived Usefulness (PU)	3	0.909
Intention to Use (IU)	3	0.936

#### 4.2 Correlation and Coefficient of Determination Analysis

Correlation coefficient measures the strength of a relationship between two variables. Values  $\leq 0.35$  are generally considered as weak correlations, 0.36 to 0.67 represents moderate correlations and 0.68 to 1.0 shows strong correlations (Taylor, 1990). The result in Table 3 shows that the relationship between all relationships exhibited strong positive relationships. All the relationships were significant (p-value <0.05).

Table 3: Correlation and Coefficient of Determination Analysis.

Hypothesis	Correlation	Strength	R <sup>2</sup>
Perceived Ease of Use $\rightarrow$ Perceived Enjoyment	0.789	Strong Positive	0.622
Perceived Usefulness $\rightarrow$ Perceived Enjoyment	0.813	Strong Positive	0.661
Learner-Content Interaction $\rightarrow$ Perceived Usefulness	0.818	Strong Positive	0.669
Perceived Ease of Use $\rightarrow$ Perceived Usefulness	0.803	Strong Positive	0.645
Perceived Enjoyment $\rightarrow$ Intention to Use	0.842	Strong Positive	0.708
Learner-Content Interaction $\rightarrow$ Intention to Use	0.852	Strong Positive	0.726
Perceived Ease of Use $\rightarrow$ Intention to Use	0.794	Strong Positive	0.631
Perceived Usefulness $\rightarrow$ Intention to Use	0.779	Strong Positive	0.607

 $R^2$ , or the coefficient of determination, quantifies the extent to which the variation in a dependent variable is accounted for by independent variables. According to Table 3, the variations in Perceived Enjoyment were predominantly influenced by Perceived Ease of Use, explaining 62.2% of its variation, and Perceived Usefulness, accounting for 66.1% of the variance. In the case of Perceived Usefulness, Learner-Content Interaction was responsible for 70.8% of its variation, while Perceived Ease of Use accounted for 64.5%. Regarding Intention

to Use, a significant portion of its variation was attributable to several factors: Perceived Enjoyment (67.8%), Learner-Content Interaction (72.6%), Perceived Ease of Use (63.1%), and Perceived Usefulness (60.7%).

# 4.3 Regression Analysis

Regression analysis serves as a statistical method to evaluate the association between a dependent variable and one or more independent variables. Its primary purpose is to explore the effect of independent variables on the dependent variable. Given that all the relationships depicted in Table 3 were statistically significant, with p-values less than 0.05, it provided a solid basis to proceed with the regression analysis.

As shown in Table 4, the impact of Perceived Ease of Use and Perceived Usefulness on Perceived Enjoyment were both significant (p-value <0.05). The Beta coefficient means that when Perceived Ease of Use and Perceived Usefulness increased by 1 unit, the Perceived Enjoyment will increase by 0.848 and 0.825, respectively.

]	Model Unstandardised Coefficients			Standardised Coefficients	t	Sig.
Dependent Variable	Independent Variable	В	Std. Error	Beta	_	
Perceived	(Constant)	.546	.182		3.004	.003
Enjoyment	Perceived Ease of Use	.848	.045	.789	18.993	.000
	(Constant)	.703	.160		4.405	.000
	Perceived Usefulness	.825	.040	.813	20.662	.000

Table 4: Regression Analysis of Independent Variable vs Intention to Use

As shown in Table 5, the impact of Learner-Content Interaction and Perceived Ease of Use on Perceived Usefulness were both significant (p-value <0.05). The Beta coefficient means that when Learner-Content Interaction and Perceived Ease of Use increased by 1 unit, the Learner-Content Interaction and Perceived Ease of Use will increase by 0.886 and 0.803, respectively.

Table 5: Regression Analysis of Independent Variable vs Perceived Usefulness

]	Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
Dependent Variable	Independent Variable	В	Std. Error	Beta	-	
Perceived	(Constant)	.400	.170		2.351	.020
Usefulness	Learner-Content Interaction	.886	.042	.818	21.024	.000
	(Constant)	.704	.190		3.714	.000
	Perceived Ease of Use	.803	.047	.759	17.244	.000

As shown in Table 6, the impact of Learner-Content Interaction, Perceived Enjoyment, Perceived Ease of Use and Perceived Usefulness were all significant (p-value <0.05). The Beta coefficient means that when Learner-Content Interaction, Perceived Enjoyment, Perceived Ease of Use and Perceived Usefulness increased by 1 unit, the Intention to Use increased by 0.978, 0.878, 0.891 and 0.825, respectively.

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
Dependent Variable	Independent Variable	В	Std. Error	Beta	_	
Intention to	(Constant)	.036	.164		.219	.827
Use	Learner-Content Interaction	.978	.041	.852	24.089	.000
	(Constant)	.461	.153		3.014	.003
	Perceived Enjoyment	.878	.038	0. 842	23.067	.000
	(Constant)	.355	.187		1.896	.059
	Perceived Ease of Use	.891	.046	.794	19.355	.000
	(Constant)	.685	.179		3.820	.000
	Perceived Usefulness	.825	.045	.779	18.393	.000

Table 6: Regression Analysis of Independent Variable vs Intention to Use

To sum up, the regression analysis presents valuable insights into the correlations between the variables. Particularly, there were strong relationships discovered between Perceived Ease of Use and Perceived Usefulness with Perceived Enjoyment, demonstrating that improvements in these categories positively impact users' satisfaction. Similarly, the study found that Learner-Content Interaction and Perceived Ease of Use had significant effects on Perceived Usefulness, highlighting their important role in developing users' perceptions of the system. Furthermore, the study found that Learner-Content Interaction, Perceived Enjoyment, Perceived Ease of Use, and Perceived Usefulness significantly influenced the Intention to Use, emphasising the impact on users' behavioural intentions. These findings highlighted the significance of these factors in determining user perceptions, attitudes, and intentions in ESL pre-recorded lecture videos. In summarising the regression analysis, the model depicted in Figure 1 was established in the course of this study.



Figure 1: Model summary (\*: coefficient significant at p < 0.05).

#### **5. DISCUSSION**

In the context of students studying English using pre-recorded lecture videos, the regression analysis provided valuable insights into the factors influencing their Intention to Use, Perceived Ease of Use, Perceived Enjoyment, Learner-Content Interaction, and Perceived Usefulness.

Intention to Use among these students was significantly influenced by Learner-Content Interaction. The finding aligns with Kuo (2014) who discovered significant correlations between learner-content interaction and student satisfaction in the context of the learning environment. This suggests that when students find the interaction with the pre-recorded lecture videos more engaging, especially in learning a language like English, they are more inclined to continue using these resources. Interactive content in pre-recorded lecture videos, especially for language learning, often includes elements that engage students actively. This notion is consistent with Galatsopoulou et al. (2022) where the study observed that interactivity can increase motivation and interest in the subject matter. For example, interactive exercises or quizzes embedded in pre-recorded lecture videos can make learning more engaging compared to passive watching. This heightened engagement can lead to a deeper understanding and retention of the material, thereby influencing students' intention to continue using these resources. Moreover, interactive pre-recorded lecture videos often allow for a more personalised learning experience. This finding supports the study by Davis et al. (1989), who highlighted that students could pace their learning, revisit challenging sections, and engage with the content in a way that suits their individual learning style. This personalization is particularly important in language learning, where proficiency levels can vary widely.

Perceived Enjoyment and Perceived Ease of Use were found to have an impact on students' intention to use the pre-recorded lecture videos. It aligns with Latip et al. (2020) where it was identified that perceived enjoyment positively affects e-learning acceptance. This implies that the more enjoyable and easier the pre-recorded lecture videos are to use, the more likely students are to engage with them regularly. Enjoyment is a critical factor in the learning process. When students find the pre-recorded lecture videos enjoyable, it can lead to increased intrinsic motivation. This intrinsic motivation is important for sustained engagement with the learning material. Enjoyable learning experiences are more likely to be repeated, therefore if students enjoy the pre-recorded lecture videos, they are more likely to continue using them. Perceived ease of use is a key determinant in technology adoption and continued usage. This is reinforced by Dishaw and Strong (1999) who demonstrated that perceived ease of use had the highest contributions to technology acceptance. If pre-recorded lecture videos are easy to access, navigate, and understand, students are more likely to use them regularly. Ease of use reduces the frustration and time spent figuring out how to use the technology, allowing students to focus more on the actual learning content. When the technological barrier is low, students are more inclined to engage with the material and integrate it into their regular learning habits.

Perceived Usefulness of the pre-recorded lecture videos in learning English was greatly affected by Learner-Content Interaction. This finding is substantiated by the work of Davis et al. (1989) who found that interactive features significantly contributed to users' self-reported usage of technology over time. When the lectures are designed to be interactive, providing opportunities for students to engage with the content, their usefulness in learning English is enhanced. The ease of accessing and navigating these lectures also contributes to their perceived usefulness. Interactive elements in pre-recorded lecture videos, such as quizzes, exercises, or even interactive discussions, can significantly enhance the learning experience.

These interactive components make the learning process more engaging and can aid in better understanding and retention of the language. For instance, interactive exercises allow students to practise the language actively, which is essential for language acquisition.

It was also discovered in this study that Perceived Enjoyment is driven by how easy the lectures are to use and their usefulness. This finding corroborates with the work of Latip et al. (2020). who found that self-efficacy, perceived enjoyment, and performance expectancy were significant influencers of e-learning acceptance. If the pre-recorded lecture videos are straightforward and beneficial in learning English, students find more joy in using them. This is crucial in language learning, where enjoyment can significantly enhance the absorption and retention of new information. When pre-recorded lecture videos are straightforward and easy to use, it reduces the cognitive load on students. They do not have to struggle with the technical aspects of accessing or navigating the lectures. This reduction in frustration and cognitive effort allows students to focus more on the actual learning process. A smooth, hassle-free experience can inherently be more enjoyable as it minimises obstacles and distractions. Moreover, enjoyment in learning creates a positive emotional connection with the material. When students enjoy the process of learning a language through pre-recorded lecture videos, they are more likely to develop a positive attitude towards the language itself. This positive emotional state can enhance the absorption and retention of new information. Enjoyable learning experiences can help in forming stronger memory associations, making it easier to recall and use the language in the future.

Overall, these findings emphasised the importance of creating pre-recorded lecture videos for English learning that are not only interactive and user-friendly but also perceived as useful and enjoyable. Such a combination is key to encouraging ongoing student engagement and fostering a positive and effective learning experience.

# 6. CONCLUSION

In conclusion, the findings of this study shed light on the crucial factors influencing students' Intention to Use and experience when studying English through pre-recorded lecture videos. Learner-Content Interaction emerged as a significant predictor of Intention to Use, emphasising the importance of engaging and interactive elements in these educational resources. Furthermore, the impact of Perceived Enjoyment and Perceived Ease of Use on students' intention to use pre-recorded lecture videos underscores the significance of designing user-friendly and enjoyable learning experiences. The study also emphasised the pivotal role of Learner-Content Interaction in shaping the Perceived Usefulness of pre-recorded lecture videos. In summary, this study highlights the multifaceted nature of factors influencing students' engagement with pre-recorded lecture videos in the context of learning English. By understanding and incorporating elements of interactive content, perceived enjoyment, ease of use, and perceived usefulness, educators and instructional designers can enhance the overall learning experience and promote sustained use of these valuable resources in language learning contexts.

# 7. LIMITATIONS

In this study, focusing on English learning through pre-recorded lecture videos, certain limitations must be acknowledged when considering the conclusions drawn about Intention to Use, Perceived Ease of Use, Perceived Enjoyment, Learner-Content Interaction, and Perceived Usefulness. Firstly, the results were influenced by the specific characteristics of the sample. If the participants represent a limited demographic or educational background, the findings might not be universally applicable to all English learners using pre-recorded lecture

videos. This restricts the ability to generalise the conclusions beyond the study's context. The sampling method used in this study, convenience sampling, presents a key limitation. While this method is efficient, it does not always give a broad and balanced view of all English learners using pre-recorded lecture videos. It often results in a sample that might heavily represent certain groups, like students from a particular school or area, or those with specific technology access, and not others. This means the findings could be more reflective of these specific groups and not necessarily applicable to all students learning English through pre-recorded lecture videos. Furthermore, the study's design might not account for external factors such as the quality of the video content, teaching methods, or technological issues that could significantly affect student engagement and perceptions. These limitations suggest that while the study offers valuable insights, its findings should be interpreted with an understanding of these constraints.

#### 8. RECOMMENDATIONS FOR FUTURE RESEARCH

Future research in the field of English learning using pre-recorded lecture videos should address several key areas to build upon the current study's limitations. One significant recommendation is to employ more diverse and representative sampling methods. Instead of relying on convenience sampling, future studies could benefit from using random sampling techniques. This approach would ensure a broader cross-section of students is included, encompassing various educational backgrounds, geographic locations, and levels of technological access, thereby enhancing the generalizability of the findings. Additionally, conducting longitudinal studies could offer deeper insights into how students' perceptions and Intention to Use evolve over time. This would provide a more dynamic understanding of the factors influencing engagement with pre-recorded lecture videos, capturing changes in attitudes and behaviours that might occur as students become more familiar with the content or as their proficiency in English develops. By addressing these areas, future research can offer more solid and comprehensive insights into the effective use of pre-recorded lecture videos for English learning.

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#### **AUTHORS' CONTRIBUTION**

NAR was responsible for conducting the introduction and literature review sections. NAR and NM gathered and processed the data. NHMN performed data analysis utilising SPSS and prepared the sections pertaining to data methodology, discussion, and implications. NAR and NM meticulously reviewed and proofread the manuscript for errors and inconsistencies. The final manuscript received approval from all authors.

# **CONFLICT OF INTEREST**

None declared.

#### REFERENCES

Atombo, C., Wu, C., Zhang, H., & Wemegah, T. D. (2017). Perceived enjoyment, concentration, intention, and speed violation behavior: Using flow theory and theory of

planned behavior. Traffic Inj. Prev. 18, 694-702. doi: 10.1080/15389588.2017.1307969

- Bui, T. K. L. (2022). Using lecture videos in flipped classroom model. Proceedings of the 18th International Conference of the Asia Association of Computer-Assisted Language Learning (AsiaCALL-2-2021), 621, 269–277. https://doi.org/10.2991/assehr.k.211224.026
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information Systems*, 13(3), 319– 339. https://doi.org/10.2307/249008
- Deng, C., Peng, J., & Li, S. F. (2022). Research on the state of blended learning among college students – A mixed-method approach. *Frontiers in Psychology*, 13. https://doi.org/10.3389/fpsyg.2022.1054137
- Dishaw, M. T., & Strong, D. M. (1999). Extending the technology acceptance model with task-technology fit constructs. *Information & Management*, *36*(1). https://doi.org/10.1016/S0378-7206(98)00101-3
- Dziuban, C., Graham, C. R., Moskal, P. D., Norberg, A., & Sicilia, N. (2018). Blended learning: the new normal and emerging technologies. *International Journal of Educational Technology in Higher Education*, 15(1), 1–16. https://doi.org/10.1186/s41239-017-0087-5
- Galatsopoulou, F., Kenterelidou, C., Kotsakis, R., & Matsiola, M. (2022). Examining students' perceptions towards video-based and video-assisted active learning scenarios in journalism and communication courses. *Education Sciences*, 12(2). https://doi.org/10.3390/educsci12020074
- Granić, A., & Marangunić, N. (2019). Technology acceptance model in educational context: A systematic literature review. *British Journal of Educational Technology*, 50(5), 2572–2593. https://doi.org/10.1111/bjet.12864
- Hair, J. J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: Updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107–123.
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3. 275– 285. https://doi.org/10.1016/j.susoc.2022.05.004
- Islam, M., Kim, D. A., & Kwon, M. (2020). A comparison of two forms of instruction: Prerecorded video lectures vs. live ZOOM lectures for education in the business management field. *Sustainability*, 12(19). https://doi.org/10.3390/su12198149
- Kuo, Y.C., Walker, A. E., Belland, B. R. & Schroder, K. E. E. (2014). Interaction, internet self-efficacy, and self-regulated learning as predictors of student satisfaction in distance education courses. *The Internet and Higher Education*, 20. https://doi.org/10.1016/j.iheduc.2013.10.001
- Lai, P. (2017). The literature review of technology adoption models and theories for the novelty technology. *Journal of Information Systems and Technology Management*, 14(1), 21–38. https://doi.org/10.4301/s1807-17752017000100002
- Lange, C., & Costley, J. (2020). Improving online video lectures: Learning challenges created by media. *International Journal of Educational Technology in Higher Education*, *17*(1). https://doi.org/10.1186/s41239-020-00190-6

- Lapitan Jr. L.D.S., A. B., Tiangco, C. E., Sumalinoga, D. A. G., Sabarillo, N. S., & Diaz, J. M. (2021). An effective blended online teaching and learning strategy during the COVID-19 pandemic. *Education for Chemical Engineers*, 35, 116–131. https://doi.org/10.1016/j.ece.2021.01.012
- Latip, M. S. A., Noh, I., Tamrin, M., & Latip, S. N. N. A. (2020). Students' acceptance for elearning and the effects of self-efficacy in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 10(5), 658–674. https://doi.org/10.6007/ijarbss/v10-i5/7239
- Li, F., & Jhang, F. (2020). The Relationship between Interaction and Student Satisfaction with Online Learning in Social Work Undergraduates in China. *Advances in Social Science, Education and Humanities Research, 505,* 6th International Conference on Social Science and Higher Education (ICSSHE 2020).
- Lim, C. L., She, L., & Hassan, N. (2022). The impact of live lectures and pre-recorded videos on students' online learning satisfaction and academic achievement in a Malaysian private university. *International Journal of Information and Education Technology*, 12(9), 874–880. https://doi.org/10.18178/ijiet.2022.12.9.1696
- Nair, P. K., Ali, F., & Leong, L. C. (2015). Factors affecting acceptance & use of ReWIND: Validating the extended unified theory of acceptance and use of technology. In *Interactive Technology and Smart Education* (Vol. 12, Issue 3). https://doi.org/10.1108/ITSE-02-2015-0001
- Quinn, M., & Kennedy-Clark, S. (2015). Adopting online lecturing for improved learning: A case study from teacher education. *Journal of University Teaching and Learning Practice*, *12*(3), 108–127. https://doi.org/10.53761/1.12.3.9
- Ramalingam, S., Yunus, M. M., & Hashim, H. (2021). Exploring ESL learners' blended learning experiences and its effectiveness through web-based technologies. *International Journal of Evaluation and Research in Education*, 10(4), 1436–1445. https://doi.org/10.11591/IJERE.V10I4.21465
- Razawi, N. A., Mohamed, N., Rahim, A. M. E., M., & Rahim, A. E. M. (2023). Improving the use of lecture videos to increase student engagement in ESL blended learning classrooms. *International Journal of e-Learning and Higher Education (IJELHE)*, 18(2), 71-100.
- Sekaran, U., & Bougie, R. (2013). *Research methods for business: A skill-building approach* (6th ed.). John Wiley & Sons Ltd.
- Smith, D. P., & Francis, N. J. (2022). Engagement with video content in the blended classroom. *Essays in Biochemistry*, 66(1), 5–10. https://doi.org/10.1042/EBC20210055
- Taylor, R. (1990). Interpretation of the correlation coefficient: A basic review. Journal ofDiagnosticMedicalSonography,6(1),35–39.https://doi.org/10.1177/875647939000600106

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# APPENDIX

SOURCE	SURVEY ITEMS
	PERCEIVED USEFULNESS (PU)
Davis et al., (1989)	Using videos makes my learning easier
	Videos support critical aspects of the learning material.
	Using videos enhances my effectiveness in learning.
	PERCEIVED EASE OF USE (PEOU)
Davis et al., (1989)	Interacting with the videos doesn't require a lot of mental
and Galatsopoulou	effort.
(2022)	Overall, I find the videos easy to use.
	I find the videos flexible to interact with
	Videos are easy to use during the educational process
	Learning how to use videos in lessons is easy
	(playback/save/study with texts)
	Using videos does not require much mental effort.
	INTENTION TO USE (IU)
Lim et al., (2022)	I intend to use Video Lecture in the next semesters
	I would recommend my friends to use Video Lecture in the
	next semesters
	I would say positive things about using Video Lecture
L	EARNER CONTENT INTERACTION (LCI)
Kuo et al., (2014)	Online course materials helped me to understand better the
	class content.
	Online course materials stimulated my interest for this course.
	Online course materials helped relate my personal experience

i. Survey Instrument

	to new concepts or new knowledge.
	It was easy for me to access the online course materials.
	PERCEIVED ENJOYMENT (PE)
Latip et al., (2020)	I experience fun using the e-Learning method
and Galatsopoulou	It is exciting to use the e-Learning method
(2022)	The use of the e-Learning method is enjoyable.
	I find it enjoyable to watch videos in class
	I have fun watching videos in class
	Using videos in lessons is a pleasant experience