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A Survey of Non-English Major Students' Usage Behavior on the UNIPUS Platform

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Abstract

Background and Aim: As one of the popular English e-learning tools, Unipus customizes 1,700 universities, 40,000 teachers, and 8,000,000 students in China, thus, it is meaningful to invest the students' perceived perceptions towards Unipus and has a significant impact on the blended learning environment implementation in higher education in China. This study aims to explore the factors that influence the non-English students Behavioral Intention to use Unipus and their actual Use Behavior by developing a framework based on the Unified Theory of Acceptance and Use of Technology (UTAUT), UTAUT2, and Diffusion of Innovation (DOI) model.

Materials and Methods: The study collected 379 non-English student questionnaires in the study. The research utilized structural equation modeling (SEM) for hypothesis testing.

Results: The result demonstrated the factors positively influencing intention to use which include Performance Expectancy($p<0.05$), Social Influence($p<0.001$), Learning Value($p<0.05$), and Facilitating Conditions (FC) ($p<0.001$). Factors positively influencing Use Behavior include FC($p<0.05$) and Behavioral Intention($p<0.001$). The influence coefficients rank from highest to lowest as FC > SI > LV > PE, indicating that FC is the most significant factor driving student usage behavior among all factors, the attitudes of peers and teachers, along with time costs are significant influencing factors, whereas technical proficiency does not impact usage behavior or intention, a high level of behavioral intention typically encourages individuals to adopt and sustain the use of the technology, thereby leading to actual usage behavior. The findings offer insights into the factors that influence the intention and behavior of non-English students towards Unipus.

Conclusion: Generally, if students perceive that Unipus can enhance their grades and is user-friendly, their intention to use the platform will increase. The influence of teachers and peers can positively affect students' attitudes and intentions toward using the platform. Teachers can assign tasks based on students' interests, increasing their motivation to engage with the platform. For platform designers, it is crucial to develop platforms that are efficient in terms of time investment and usability. Platforms characterized by high efficiency and ease of use are more likely to appeal to students.

Keywords: Non-English student; Unipus; Behavioral intention; UTAUT; DOI

Introduction

Research in the academic study and practice of information technology (IT) and information systems (IS) has increased in recent decades across many fields. This phenomenon follows the acceptance of research behavior.

The National English Syllabus Curriculum Standards in China emphasize the development of students' communicative competence and practical language skills (Xu & Fan, 2017). The teachers were encouraged to use multimedia resources, language learning apps, and online materials to improve students' language skills. Besides, teachers are expected to evaluate the effectiveness of the student's performance so that technology can guide future teaching and research, thereby developing students' English language abilities (Hiltz & Turoff, 2005). to use of technology is an important teaching approach to fulfill this aim.

For teachers, an e-teaching system offers a range of services for English language learning, including tutoring for English tests. It provides both online and offline teaching for students (Sun & Liu, 2021). As students learn English in university, the e-learning system can provide specific training in each aspect of listening, speaking, reading, and writing in English study, which aligns to develop students' communicative competence and practical language skills (Sun & Qiu, 2017). The abundance of learning

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resources on the platform extends multiple teaching possibilities and choices to teachers. According to Sun and Liu (2021), the e-learning system enables teachers to track, evaluate, and analyze students' grades and abilities through the use of the system (Zhang et al., 2021). Therefore, teachers can access system data to improve teaching effectiveness, ultimately enabling the accomplishment of learning objectives.

For students, due to limitations in teaching time, location and materials in offline/traditional classes (Hiltz & Turoff, 2005), the e-learning system is devoted to assisting students in enhancing their learning outcomes and motivation in learning English anywhere (Sun & Liu, 2021) Students may utilize the e-learning system for conducting self-directed based on the teacher's assignments, they can study whenever and wherever, for learning foreign languages by self with comprises multimedia courses, establishes a self-learning mode that is guided, and uses self-tests conducted by students to improve their foreign language proficiency (Zhang et al., 2021)Moreover, the benefits for students are also clear, such as getting the target resource more easily than without the use of e-learning tools, enabling them to share ideas and communicate with peers through tools, assisting them understand their strengths and improve weaknesses, to foster the sense of cross-culture and lifelong learning (Rashid & Asghar, 2016).

Objectives

1. To identify the acceptance of the Unipus for non-English students at Jilin Normal Univesity (JLNU).
2. To identify the non-English students' intention of Unipus in terms of performance expectancy, effort expectancy, social influence, learning value, and complexity at JLNU.
3. To identify the use behavior of the non-English students' intention towards Unipus and its use at JLNU.

Literature review

Theory of Planned Behavior

The Theory of Planned Behavior (TPB) developed by Ajzen (1985), extends the Theory of Reasoned Action (TRA) proposed by Ajzen and Fishbein in 1980. The model has been developed to parsimoniously explain informational and motivational influences on behavior, it can be considered a model of deliberative processing, as it suggests that individuals make decisions by carefully considering available information (Conner & Armitage, 1998). In education, it was used to investigate the intention of the student using technology and their behavior in study. It is the basis framework in the model of satisfaction and acceptance intention, such as behavioral intentional models, social influence models, and TAM. The TPB presents behaviors as a function of behavioral intentions and perceived behavioral control (PBC), which is similar to Bandura's (1982) concept of self-efficacy.

The relationship between intentions and behavior indicates that individuals tend to engage in actions that they intend to perform (Rise et al., 2010), nevertheless, the association between PBC and behavior is intricate, if intentions remain consistent, the behavior is more likely to be executed as PBC implies. In education, it is used to evaluate the relationship among attitude, subjective norm, and perceived behavior control. The three components are related to behavioral intention, in the teaching aspect, which is widely used to measure the technology used in class, which supports the research by Czerniak et al. (1999), Chen (2021), Haney and McArthur (2002), the positive feedback has given from these articles. The intensity of belief impacts the continuity of technology use, high-intensity belief will better integrate technology into the classroom and potentially lead to improved outcomes (Afshari et al., 2009). Kidwell and Jewell (2023) confirmed this hypothesis in their study.

Additionally, TPB suggests that when considering technology adoption in the classroom, a positive correlation exists between a student's intention to adopt new technologies and their belief in having sufficient skills to manage them. Students with high technological confidence are more likely to explore and utilize new technologies (Nayanajith & Damunupola, 2020). Moreover, the behavior of using new

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technology is influenced by their confidence in handling potential challenges, which in turn affects their decision-making (Twillert et al., 2020). In general, TPB considers all factors that may impact behavior and reflects an individual's intention to adopt the outcomes of a specific behavior (Ajzen, 1991).

Diffusion of Innovation Theory

The theory of diffusion of innovations (DOI) is the seminal work of communication scholar and sociologist Everette Rogers (1995). The DOI model is well-known in the IS/IT literature. The theory is primarily focused on understanding how innovations are diffused and adopted by individuals and organizations (García, 2020). The DOI tradition aims to explain individual adoption decisions or intentions to adopt, which apply to well-defined innovations and relatively homogeneous populations (García, 2020). As Rogers (1995) notes, the DOI theory primarily concentrates on the perceived features of technologies and the inventiveness of the organizations that choose to adopt them, it is the way individuals perceive the rate of innovation adoption (Rogers, 1995). DOI's can aid in the efficient dissemination and application of educational technology and could evaluate the adoption of the technology (Rogers, 1995).

Moreover, Udeh (2008) improved the constructs to investigate individual technology acceptance. This research contributes to the initial adoption of IT by individuals within organizations, as well as technology diffusion throughout organizations. They included voluntariness of use and image as additional constructs to Roger's model. As a result, the factors of compatibility, perceived usefulness (relative advantage), and ease of use (complexity) were the strongest drivers behind usage decisions. On the other hand, factors such as demonstrability, image, visibility, and trialability did not have a significant impact on individual usage determination., DOI provided a theoretical framework for researchers to understand the dissemination and adoption processes of educational technologies. The model has been provided effectively by Williams et al. (2015); Abdul et al., (2017); Hadwer et al. (2021); and Okour et al. (2021), which effectively analyzes the acceptance levels of educational technologies by elucidating the adoption process of new technologies by teachers and students, and emphasizes the impact of the technology's ease of use and perceived usefulness on its accept. ance

Unified Theory of Acceptance and Use of Technology-2

As UTAUT considers individual differences, it can enhance comprehension of students' and teachers' technology adoption attitudes. Hence, UTAUT and UTAUT2 can be expected to suit the educational sector (Rudhumbu, 2022). UTAUT2 explains 74% of the variance in behavior intention and 52% of the variance in use behavioral, compared to the original UTAUT's 70% and 48% respectively (Venkatesh et al., 2012). The UTAUT model has received criticism for displaying partiality in diverse countries and situations (Dwivedi et al., 2011), Venkatesh et al. (2012) stress the significance of testing UTAUT2 in diverse cultural and contextual settings to increase its applicability and durability. They contend that variables influencing the adoption of a novel information system may differ based on the user group, the technological environment, and the specific context. Hence, three additional factors are hedonic motivations, habit, and price value, while the moderator of voluntariness was omitted in the extended model (Venkatesh et al., 2012).

Moreover, like UTAUT, UTAUT2 still has a significant effect on education field study (Rudhumbu, 2022). Tarhini et al. (2016) apply the model to investigate the culture of individual-level effect on the acceptance and adoption of using IS/IT as a tool of postgraduate students in university students, the result supports the relative of each factor and the effectiveness of the model. Findings in studies of blended learning by Venkatesh et al. (2012), Alalwan et al. (2017), Nikolopoulo et al. (2020), and Gharrah et al. (2021) showed that UTAUT2 is effective in measuring.

Ain et al. (2016) in the research influence of learning value on learning management system extension of UTAUT2, where redefined price value to learning value, in their research, they found many

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researchers ignorance of price value when using UTAUT2 in the education context, therefore, they integrated value construct in their study, and the result showing a good measurement and structural fit.

Performance Expectancy (PE)

PE can be described as the level to which an individual perceives using the new technology will help them achieve a benefit regarding the performance of a task (Venkatesh et al., 2004). It demonstrates individuals' expectations of improved job performance due to new technology usage, which explains a significant factor in technology adoption behavior (Alkhwaldi & Kamala, 2017). The literature generally agrees that PE is an essential influence factor of behavioral intention to accept and use digital educational technology (Kocaleva et al., 2015). Accordingly, the measurement adopted from the previous research which surveys questions about the degree to which a system helps or not to attain gains in performance (Dulle & Minishi-Majanja, 2012).

Effort expectancy (EE)

EE is the degree of ease associated with the use of the system (Venkatesh et al, 2003), which posits that there are correlations between the exertion of effort in the workplace, the resulting performance outcomes, and the accompanying rewards (Ghalandari, 2012). People are more likely to adopt technologies that they perceive as effortless and easy to use. If individuals anticipate that learning and using a new technology will be strenuous, this may reduce their willingness to adopt the technology (Venkatesh et al., 2003). Tosuntas et al. (2015) investigated 158 secondary school teachers in Turkey, the results showing their usage of interactive whiteboards and the relationship between the elements outlined.

Social Influence (SI)

SI is the process by which individuals adapt their opinions, revise their beliefs, or change their behavior as a result of social interactions with other people (Venkatesh et al., 2003). The theoretical foundation of SI can be traced back to social cognitive theory, which postulates that an individual's beliefs and behaviors can be affected by the surrounding social environment and others. SI measures the attitudes, opinions, and pressures of others on individuals who adopt new technologies (Alkhwaldi & Kamala, 2017). Kocaleva (2015) surveyed teaching personnel at every faculty in the University, upon researching Goce Delev in Macedonia, it was discovered that SI played a crucial role in determining one's behavioral intention.

Facilitating condition (FC)

FC is the degree to which an individual perceives the existence of an organization and technical infrastructure that supports the use of the system (Venkatesh et al., 2003). The theoretical basis of FC also comes from social cognitive theory, which emphasizes the influence of environmental factors on individual behavior. FC indicates whether the individual believes that there are sufficient resources and support to use the new technology (Alkhwaldi & Kamala, 2017). In the investigation into the acceptance of technology by academic staff at Aljouf University in Saudi Arabia, Alkhasawneh and Alnazy (2015) discovered that FC was positively correlated with behavioral intention.

Learning Value (LV)

LV refers to the user devoting time and effort to gain benefit from technology. It refers to the time and cost of the target tools, which predict user intention towards technology use, which shows the learning–time and effort relationship (Ain et al., 2016). LV is related to price value (PV), PV is defined as the trade-off that consumers make between the perceived benefits of using the applications and their monetary cost (Venkatesh et al., 2003). Its theoretical foundation can be associated with econometrics principles like price sensitivity and cost-benefit analysis. However, from a student's perspective, the value associated with the learning gained from technology using, which depends on the perceived value of

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technology (Ain et al., 2016). Moreover, the technology is free, and the price is not significant, for such research in teaching and other fields, it extends to LV (Ain et al., 2016).

Complexity (C)

Complexity is the degree to which an innovation is perceived as relatively difficult to understand and use (Roger, 1995). Innovation complexity arises when the desired change in practice requires multiple steps, multiple stakeholders, and actions across various groups and teams within an organization (Rogers, 1995). It can also reflect the degree of difficulty in comprehending and implementing the desired knowledge user behaviors (Rogers, 1995). The fundamentals of Complexity have been from management and organizational behavior theory. Surry and Gustafson (1994) concluded that compatibility, complexity, and relative advantage could be important considerations when introducing an innovation into instructional settings. Complexity is negative relative to intention, cost time and difficulty in handling the instrument will reduce the intention to use the technology (Aşkar, et al., 2006).

Behavioral Intention (BI)

BI has been defined as the degree to which a person has formulated conscious plans regarding whether to perform a specified future behavior (Venkatesh et al., 2003). BI has a theoretical foundation primarily derived from the TAM and TPB. The propensity of individuals to adopt new technologies is measured by BI, which is influenced by factors such as PE, SI, and FC. Both perceived usefulness and perceived ease of use have an influence on behavioral intention to use, which is defined as the degree to which a person has formulated conscious plans to perform or not perform some specified future behavior (Venkatesh et al., 2003).

Use Behavior (UB)

UB refers to the actual behavior of individuals in using a particular technology or educational program, which shows the individual interacting with the technology in real, which also reflects the acceptance of technology (Venkatesh et al., 2003). UB explains the attitude and behavior in technology operation and indicates the continuous commitment to the technology (Venkatesh et al., 2004). UB helps capture the reason underlying action and shows the details reason for users' behavior (Venkatesh, Thong & Xu, 2012).

Conceptual Framework

The conceptual framework of this research is based on DOI, UTAUT, and UTAUT2, which were chosen as fundamental models to establish a structure. Due to the research aim, the conceptual framework is shown in Figure 1.

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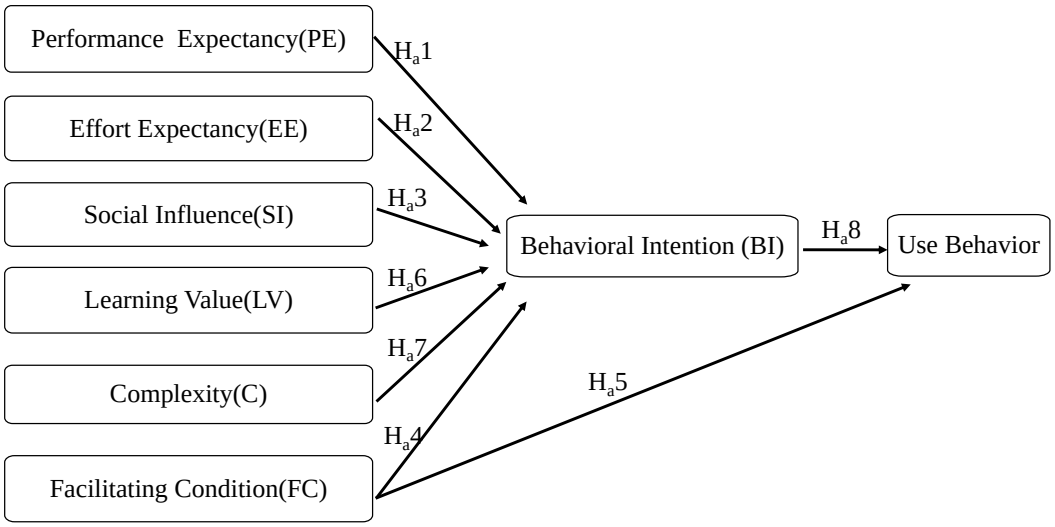

Figure 1 Conceptual Framework of the Research

Hypotheses

Based on the literature review, and the conceptual framework, the hypotheses have been developed as follows.

H_a1: Performance Expectancy influences non-English major students' behavioral intention to study English using Unipus at JLNU.

H_a2: Effort Expectancy influences non-English major students' behavioral intention to study English using Unipus at JLNU.

H_a3: Social Influence influences non-English major students' behavioral intention to study English to use Unipus at JLNU.

H_a4: Facilitating Condition influences non-English major students' behavior and intention to study English to use Unipus at JLNU.

H_a5: Facilitating Condition influences non-English major students' use behavior to study English to use Unipus at JLNU.

H_a6: Learning Value influences non-English major students' behavioral intention to study English to use Unipus at JLNU.

H_a7: Complexity influences non-English major students' behavioral intention to study English to use Unipus at JLNU.

H_a8: Behavioral Intention influences non-English major students' use behavior to study English to use Unipus at JLNU.

Methodology

Considering the research philosophy and approach, the quantitative methods were selected. The Index of Item-Objective Congruence (IOC) has been employed as a means of evaluating the content validity of the questionnaire. Three experts who are professional and hold doctoral degrees are professional and have experience in the area of education and English. Moreover, Cronbach's coefficient alpha was used to check the reliability of all the variables. An Alpha coefficient higher than 0.7 is

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generally viewed as good internal consistency (Bland & Altman, 1997), which means the variables are reliable for the research.

The research applies a collection online software called Wenjuanxing to distribute and collect digital questionnaires to the target sample. Wehnjuanxing is easy to get and posted on social network platforms in China.

The questionnaire was designed in two parts. There are 4 questions in the first part which contains demographic information, while the second part contains 34 items that measure variables. Likert scales are employed for the assessment of each item, with responses ranging from 5 (strong agreement) to 1 (strong disagreement). The data was gathered using Wenjuanxing, which was selected for its ease of use and cost-effectiveness, considering the limitations of time and resources available for the research. A questionnaire form was sent out via the Internet to the students, and responses were received online between 30 March and 4 April 2024.

All of the questionnaire was designed with a cover letter that included information about the research content and objectives to ensure that every participant understands the purpose of this research. Furthermore, participants were informed that their participation was voluntary and that they had the right to withdraw without any consequences. All respondents were made aware that their personal information would be protected and kept confidential, and any data involving personal information was used exclusively for academic research purposes. There were 413 total respondents. After the SPSS scale was measured, the unusual combinations were identified, they were recorded as outliers, and then removed from the data set, so 379 remained.

Statistics Package for Social Science (SPSS) 20.0 software was utilized to analyze the research data. Descriptive statistics were employed to ascertain the demographic characteristics of the sample, expressed as frequencies and percentages. Furthermore, the mean and standard deviation for the variable were presented as each item. The hypothesis testing was conducted using the Confirmatory Factor Analysis (CFA) and Structural Equation Model (SEM).

Results

The results are presented in three sections. The demographic information is subjected to statistical analysis to ascertain the proportion of relevant information to the population. The results of the descriptive statistical analysis of CFA demonstrate the interrelationships between the items and variables. The SEM serves to verify the proposed hypothesis and to provide data support for the conceptual model proposed in this study.

Demographic Information

Of all 379 respondents, 89 were male, occupying 23.5% of the total number of respondents, and 290 were female occupying 76.5% of the total number. In the year of study, English in the university 236 of them were freshmen, representing 62.3% of the total; 143 of them were sophomores, representing 37.7% of the total. Three level English classes are, 57 respondents in A-class which are 15.1% of total respondents, 251 in B-class (66.2%), and 71 in C-class (18.7%).

Mean and Standard Deviation of the Variables for Unipus at JLNU

Table 1 shows that the questionnaire for Unips at JLNU agrees on the highest mean of "Performance Expectancy" (Mean 3.88, S.D. = 0.92). This was followed by "Complexity" (Mean 3.85, S.D. = 0.98), "Effort Expectancy" (Mean 3.69, S.D. = 1.08), "Use Behavioral" (Mean 3.66, S.D. = 1.08), "Behavior Intention" (Mean 3.65, S.D. = 1.08), "Learning Value" (Mean 3.64, S.D. = 1.05), "Facilitating Condition" (Mean 3.64, S.D. = 1.04), and "Social Influence" (Mean 3.64, S.D. =1.05). The overall result from the questionnaire for Unipus at JLNU reveals that agrees with the Mean 3.71 and S.D. = 1.04.

Table 1 The Mean and Standard Deviation of Questionnaire for Unipus at JLNU

Variables	Mean	S.D.	Interpretation
Performance Expectancy	3.88	0.92	Agree

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Variables	Mean	S.D.	Interpretation
Effort Expectancy	3.69	1.08	Agree
Social Influence	3.64	1.05	Agree
Facilitating Condition	3.64	1.04	Agree
Learning Value	3.64	1.05	Agree
Complexity	3.85	0.98	Agree
Behavior Intention	3.65	1.08	Agree
Use Behavioral	3.66	1.08	Agree
Average	3.71	1.04	Agree

Hypotheses Testing

The present study employed the techniques of Confirmatory Factor Analysis (CFA) and Structural Equation Model (SEM) to test all of the hypotheses. All the analyses utilized SPSS Software version 20.0 to calculate the statistics for the hypotheses testing.

Normality of Data

To assess the distribution of the data, the skewness and kurtosis statistics are employed to ascertain the normality of the data collected from the items in question. According to the absolute value of the sample data skewness is less than 3 and the absolute value of the kurtosis is less than 10, it can be posited that the observed variable essentially adheres to a normal distribution. Table 2 shows the skewness of kurtosis of all items in Hair et. al. (2012) standard, as a result, the data is considered normally distributed.

Table 2 The Skewness and Kurtosis n of Questionnaire for Unipus at JLNU

	N	Minimum	Maximum	Skewness	Kurtosis
PE	379	1.00	5.00	-1.307	0.411
EE	379	1.00	5.00	-0.785	-0.443
SI	379	1.00	5.00	-1.036	-0.263
FC	379	1.00	5.00	-0.983	-0.252
LV	379	1.00	5.00	-1.034	-0.249
C	379	1.00	5.00	-1.258	0.354
BI	379	1.00	5.00	-0.934	-0.395
UB	379	1.00	5.00	-0.908	-0.399

Discriminant Validity

The discriminant validity of each construct is also tested before the structural equation model analysis. According to Fornell and Larcker (1981), the discriminant validity can be based on the comparison of the correlation coefficient of each construct to the square root of the Average Variance Extracted (AVE). The results of the square root of AVE need to be larger than the correlation coefficient of the construct to ensure that the discriminant validity is obtained.

Table 3 Discriminant Validity

	PE	EE	SI	FC	LV	C	BI	UB
PE	0.746							
EE	0.315	0.889						

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	PE	EE	SI	FC	LV	C	BI	UB
SI	0.514	0.217	0.768					
FC	0.520	0.402	0.430	0.779				
LV	0.308	0.262	0.394	0.452	0.746			
C	0.319	0.204	0.468	0.302	0.269	0.758		
BI	0.494	0.300	0.519	0.593	0.472	0.351	0.755	
UB	0.618	0.304	0.480	0.442	0.245	0.269	0.435	0.765

Modified Confirmatory Factor Analysis

After the removal of Variable (Effort Expectancy, EE) item 1, a new confirmatory factor analysis was conducted to evaluate the model on its adjustment values. The new confirmatory factor analysis (CFA) is shown in Table 4.

Table 4 Modified Confirmatory Factor Analysis

Factor	Indicator	Estimate	SE	Z	p	Stand. Estimate	CR	AVE
PE	PE1	0.638	0.054	11.792	< .001	0.451	0.883	0.556
	PE2	0.511	0.047	10.825	< .001	0.356		
	PE3	0.521	0.043	12.085	< .001	0.490		
	PE4	0.512	0.045	11.350	< .001	0.402		
	PE5	0.556	0.047	11.850	< .001	0.458		
	PE6	0.843	0.069	12.166	< .001	0.503		
EE	EE2	0.604	0.050	12.098	< .001	0.359	0.918	0.790
	EE3	0.102	0.035	2.902	0.004	0.060		
	EE4	0.343	0.037	9.167	< .001	0.209		
SI	SI1	0.708	0.065	10.939	< .001	0.420	0.852	0.590
	SI2	0.534	0.050	10.749	< .001	0.405		
	SI3	0.610	0.059	10.294	< .001	0.372		
	SI4	0.769	0.069	11.185	< .001	0.442		
FC	FC1	0.648	0.058	11.262	< .001	0.381	0.885	0.607
	FC2	0.653	0.055	11.808	< .001	0.440		
	FC3	0.575	0.051	11.282	< .001	0.383		
	FC4	0.634	0.058	10.883	< .001	0.349		
	FC5	0.561	0.048	11.584	< .001	0.414		

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Factor	Indicator	Estimate	SE	Z	p	Stand. Estimate	CR	AVE
LV	LV1	0.735	0.070	10.569	< .001	0.444	0.834	0.556
	LV2	0.705	0.066	10.757	< .001	0.458		
	LV3	0.730	0.068	10.768	< .001	0.459		
	LV4	0.749	0.074	10.123	< .001	0.412		
C	C1	0.545	0.048	11.227	< .001	0.434	0.871	0.574
	C2	0.516	0.047	10.984	< .001	0.412		
	C3	0.701	0.061	11.574	< .001	0.470		
	C4	0.571	0.055	10.280	< .001	0.359		
	C5	0.766	0.067	11.428	< .001	0.454		
BI	BI1	0.656	0.077	11.172	< .001	0.477	0.798	0.570
	BI2	0.642	0.073	11.539	< .001	0.514		
	BI3	0.739	0.056	9.004	< .001	0.337		
UB	UB1	0.571	0.065	8.755	< .001	0.380	0.808	0.585
	UB2	0.769	0.078	9.910	< .001	0.442		
	UB3	0.726	0.070	9.574	< .001	0.423		

Remark: CR = Composite Reliability, AVE = Average Variance Extracted

The results of the modified CFA showed that all of the variables obtained a CR greater than .7 and AVE values greater than .5. Thus, the values were at an acceptable level.

Structural Equation Model

To test the hypotheses of causal relationship among variables proposed. The Structural Equation Model (SEM) was applied to the model. It can be seen that PE, SI, FC, LV, and FC have an influence on BI, and FC and BI have an influence on UB. EE and Complexity do not influence BI.

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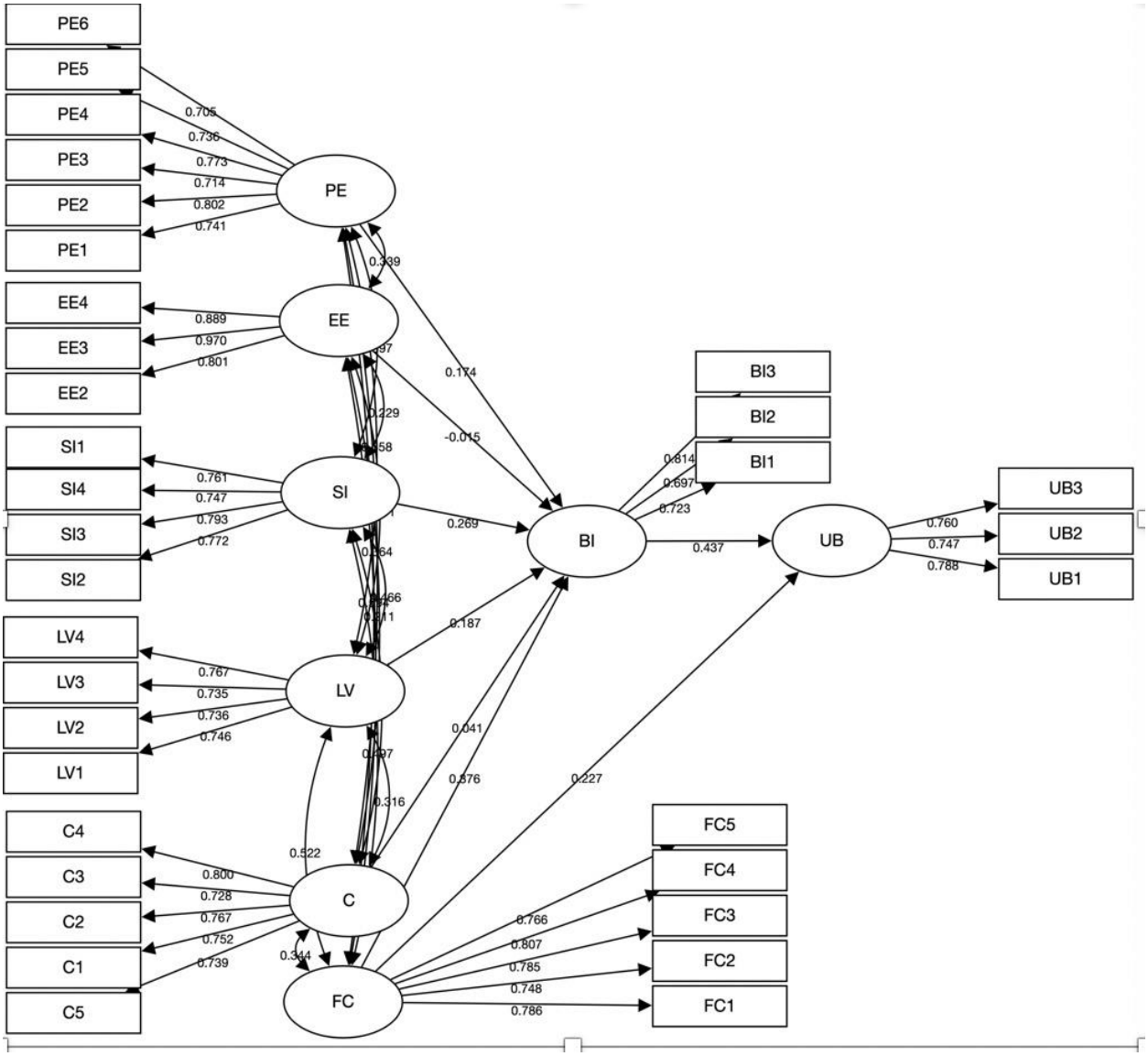

Figure 2 Structural Equation Model

Research Hypothesis Testing

The following are the results of the hypotheses testing of the model when $p<0.05$ means have significant influence, otherwise, there is no influence of variables.

Table 5 Hypothesis Testing Result of the Structural Model

Hypothesis	p	z - value	Result
H_a1: Performance Expectancy influences non-English major students' behavioral intention to study English using Unipus at JLNU.	0.008	2.662	Supported

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Hypothesis	p	z - value	Result
H_a2: Effort Expectancy influences non-English major students' behavioral intention to study English using Unipus at JLNU.	0.752	-0.316	Not Supported
H_a3: Social Influence influences non-English major students' behavioral intention to study English to use Unipus at JLNU.	***	3.749	Supported
H_a4: Facilitating Condition influences non-English major students' behavior and intention to study English to use Unipus at JLNU.	***	5.397	Support
H_a5: Facilitating Condition influences non-English major students' use behavior to study English to use Unipus at JLNU.	0.009	2.605	Supported
H_a6: Learning Value influences non-English major students' behavioral intention to study English to use Unipus at JLNU.	0.001	3.215	Supported
H_a7: Complexity influences non-English major students' behavioral intention to study English to use Unipus at JLNU.	0.451	0.754	Not Supported
H_a8: Behavioral Intention influences non-English major students' use behavior to study English to use Unipus at JLNU.	***	4.704	Supported

*** = P<.001

Conclusion and Discussion

The objective of the research is to evaluate the intention and use behavior of non-English students utilizing the Unipus in English language learning at JLNU. A total of 379 questionnaires were collected for analysis. It was expected that the findings would provide valuable insights for educators and platform designers, enabling them to enhance the efficacy of their teaching methodologies and technology functionality. The result of the data would then support future studies in the scope.

The study demonstrates that FC is the most significant factor influencing student use behavior, followed by SI, LV, and PE. This finding could be linked to Tan's (2013) study, suggesting that when students perceive conducive learning environments and adequate learning resources, they are more likely

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to embrace technology. This indicates that students are more inclined to utilize technology when they perceive a conducive learning environment and sufficient resources. Similarly, SI, which was identified as the second most influential factor, has an external impact on behavioral intention that is comparable to that of FC. Previous research has considered SI and FC as analogous influencing factors in their analyses (Al-Shafi et al, 2009; Ghalandari, 2012). LV and PE demonstrate that students prioritize time costs and effectiveness in their technology choices. This is associated with the availability of comparable technologies where time efficiency plays a pivotal role. This result is linked to the learning behavior of students, when the context of a multitude of technological options offering comparable outcomes, the time cost plays an important role in determining their technology choices (Ain et al, 2016).

In contrast to other research findings (Ajzen,1991; Lowenthal, 2010), the present study indicates that both EE and complexity do not exert a significant influence on BI. Sutenchan and Hareebin (2024) point out students are not interested in the system's ease of use, it was a similia result in this study, that students can address technical issues without affecting their use of Unipus, indicating that technical challenges do not influence their intention to use the technology. Moreover, this study investigates the factors affecting students' intention and behavior in using Unipus, which is supported by (Al-Shafi et al, 2009). It finds that BI has a greater impact on Use Behavior than FC. BI is influenced by SI, LV, and PE, which in turn affect UB. The study shows that a strong behavioral intention leads to increased actual usage. Therefore, students' attitudes toward PE, SI, LV, and FC are crucial for understanding their Unipus usage. Notably, peer and teacher attitudes and time costs are significant, while technical proficiency does not affect usage behavior or intention.

Implications for practice

Generally, if students perceive that Unipus can improve their academic performance and is user-friendly, their intention to engage with the platform is likely to increase. According to usage behavior theory, students are more inclined to use platforms that align with their perceived needs and ease of operation. Additionally, the influence of teachers and peers plays a crucial role in shaping students' attitudes and usage intentions. Teachers can leverage students' interests to tailor assignments, thereby enhancing their motivation to use the platform. From a usage habits perspective, platform designers should prioritize features that reduce time investment and maximize usability. Platforms that demonstrate high efficiency in these aspects tend to be more attractive to students, fostering frequent and consistent engagement.

Recommendation for Future Research

This study examines students' use of Unipus in an educational setting, where it is mandated by teachers rather than chosen by students themselves. Students' attitudes towards Unipus are influenced by this compulsory context, and their behavior might differ if they had alternative platforms. Future research should consider how changing the usage context could impact the relationships and effects in the model. Additionally, the study notes that the university's limited purchase of Unipus modules affects student performance and attitudes. This limitation should be addressed in future studies. The research uses a cross-sectional design, collecting data from a specific point in time, which is cost-effective and easy to implement. However, this design does not capture changes over time, which is crucial for understanding dynamic student behavior. A longitudinal approach is recommended for future research to track changes in user behavior over different periods, providing a more comprehensive understanding of students' sustained use of the platform. While cross-sectional studies are efficient, including a temporal factor is essential for research on usage behavior to account for variations over time.

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