# Factors Affecting English Majors' Intention Of Using Apps In Oral English Practice: A Case Study Of Panzhihua University

Yaling Huang<sup>1</sup>, Shuhan Yang<sup>1</sup>

(School of Foreign Languages and Cultures, Panzhihua University, China)

#### Abstract:

Mobile learning has entered a stage of rapid development with the growth of modern education technology. The development of mobile learning also requires the assistance of mobile learning Apps. In this background, various English mobile learning Apps have also emerged in vigorous development, helping increasing number users to achieve their personalized English learning needs. Due to the importance of spoken English in language learning, English-speaking Apps have received continuous attention from users. However, as a novel learning method, users need some time to accept it. Therefore, understanding users' intention to use Englishspeaking Apps is an important issue worth paying attention to. Through analyzing and comparing the research status of English-speaking Apps at home and abroad, it is found that domestic research mostly focused on the functions, development, and value of existing English-speaking Apps. There is a lack of research on the factors affecting the intention to use English-speaking Apps. Therefore, this study took English majors from Panzhihua Univerity as the research participants and investigated the factors affecting participants' intention to use English-speaking Apps. The author used SPSS26.0 to analyze the questionnaire data of 221 English majors from Panzhihua University. The study found that perceived usefulness, perceived ease of use, learning motivation, learning resources, satisfaction and social impact factors affect English majors' intention to use Englishspeaking Apps. The results of this study have certain enlightening effects on improving English majors' intention to use English-speaking Apps and on English teachers at Panzhihua University.

Key Word: English-speaking Apps; intention to use; affecting factors; Panzhihua University.

Date of Submission: 06-07-2023 Date of Acceptance: 16-07-2023

# I. Introduction

English is the most widely spoken language in the world and has become increasingly important with social and economic development. In our country, families, schools, and society have begun to emphasize the importance of English. As a language, the importance of spoken language in communication is self-evident. As the times are constantly changing, technology is being updated, and people's concepts are constantly changing. In this background, English-speaking learning Apps have attracted great attention from users and there is lack of study, so exploring the factors affecting the English majors' intention to use English-speaking Apps is an important issue.

# Research Background

Currently, China's higher education has changed from elite to public education, from learning knowledge to developing ability and enhancing comprehensive quality. The teaching task of English majors in colleges and universities has changed from teaching language to using language and integrating spoken English learning into the course content so that students can skillfully use English for communication. With the development of science and technology, network technology has been widely used, and network-based independent learning has become an important learning method for college students. The Ministry of Education's "Requirements for the Teaching of University English Courses" also advocated that learning methods should "develop in the direction of individualized planning and independent learning". Moreover, the characteristics of mobile learning are that learning time and space are not limited, and the rich content is an important reason for people to choose it. For English majors learning content is not only above the classroom but also extracurricular learning. The role of any language is communication. English is a common international language, and its essential function is communication. Mastering fluent spoken English is crucial for every student whose major is English. However, from the analysis of reports, learning oral English has always been the weakness of English majors. Due to the particularity and complexity of oral learning, the learning process is easily affected by the following factors<sup>2</sup>. Learning context, motivation, phonetic aspects, and vocabulary are

important factors affecting students' ability to learn oral English. In addition, students learn English mainly to prepare for exams and neglect the practice of oral English. At the same time, the content of classroom learning lacks systematization and integrity. Besides, class time is limited. And teachers need to point out students' pronunciation problems one by one. However, with the contemporary development of technology, mobile learning gradually emerged among students. And in the late 90s of the 20th century, mobile technology commenced to be used to assist language learning, PDAs, MP3 players, portable electronic dictionaries, mobile phones, and tablets became the carrier of learning<sup>3</sup>. Kukulska-Hulme<sup>4</sup> and other scholars defined mobile learning as formal or informal learning using a handheld device as a medium, regardless of time and place. Wong and other scholars clarified the function of mobile learning: handheld mobile devices function as "learning hubs". Currently, mobile learning is becoming more and more popular, and some English-speaking teachers are introducing mobile learning into the classroom. Teachers began to apply English-speaking Apps to practice English in the school, such as, KeKe English App, FIF App, ShanBay App, etc. With the help of the English-speaking Apps, students have realized personal and independent learning and allowed students to completely get rid of the limitations of time and space, which has become an effective way to learn to improve spoken English quickly. Although science and technology continue developing and English-speaking Apps are quickly gaining popularity, some factors will also affect students' intention to use English-speaking Apps.

#### Literature Review

DOI:10.9790/7388-1304021123

Due to advanced technology, foreign research on mobile learning started earlier than domestic research. In 1994, Wireless Andrew's research at Carnegie University in the United States pioneered study abroad<sup>6</sup>. The research direction of mobile learning in foreign countries is mainly in two major directions. First, how learning is promoted with the help of mobile devices. Second, it is issued by educational institutions to apply mobile learning methods to students' daily lives. In contrast, domestic mobile learning research was exceedingly late compared to Western developed countries. In 2000, Dr. Desmond Keegan introduced the concept of "mobile learning" to China for the first time with a report entitled from E-leaning to M-learning<sup>7</sup>. In 2007, the mobile campus of Shanghai TV University took the first step towards actual "mobile interactive teaching" Subsequently, more and more scholars in China have gradually become involved in this field. In recent years, under the background of the rapid development of the Internet and mobile technology, many research institutions of universities and enterprises have also actively studied mobile learning in order to meet the requirements of the public for advanced technology. Although there is currently no uniform and precise definition of mobile learning, the characteristics are indeed the same. This study gives priority to the factors affecting English majors' intention to use English-speaking Apps. And English-speaking Apps belong to the category of mobile learning.

On the CNKI platform, inputting the keyword "mobile learning" as of February 2023, there are 13971 articles related to China and 5985 papers in foreign. The first stage, from 2000 to 2006, was the initial stage of domestic research on mobile learning. During that period, scholars greatly collated and summarized the results of foreign mobile learning, and the number of kinds of literature was relatively small. At that time, technology was not mature and most people were unfamiliar with mobile learning. The second stage, from 2006 to 2013, was the rapid development of mobile learning when many scholars began a lot of research based on other foreigners and domestic scholars. At the same time, the development of technology during this period also prompted many people to innovate the concept of mobile learning. Smartphones appeared, and the network refresh speed was faster. At this stage, scholars gradually applied network technology to education, multimedia teaching in the classroom, and so on. For instance, Xiao Peng and Chen Yan9 analyzed the concepts and functions of 3G technology, discussed the characteristics of mobile learning, and elaborated on the new changes and procedures of mobile learning supported by 3G technology. The third stage, from 2013 to the present, was a sound stage of mobile learning research, and the rapid development of technology gradually popularized smart mobile devices. The research at this stage mainly focused on practical application, educational development, industry training. And the study also detailed the auxiliary role of a single mobile learning App in education. For example, Pan Jinxia, Lu Qiaohong, and Wang Chunhong<sup>10</sup> studied the application of Internet + mobile mode in nurses' TCM nursing. Studies have found a significant improvement in nurses' learning satisfaction. Scholar Lu Shan<sup>11</sup> studied the application of mobile learning Apps in university English oral teaching, and learned that mobile-based oral education breaks the time and space limitation, improves teaching efficiency, and cultivates students' independent learning ability. These studies provide a reference for developing and expanding mobile learning resources.

On the CNKI platform, there are 19 pieces of relevant literature at home and abroad with the keyword "intention to use English learning Apps". Since 2016, domestic scholars have begun to study the intention to use Apps in English. However, little literature exists on the intention to use English-speaking Apps. Scholars mainly used mobile English learning devices, electronic English resources, and mobile English classrooms to study students' intention to use mobile devices or whether using individual English-speaking Apps can effectively

improve students' oral expression skills. Scholar Liu Kehang<sup>12</sup>, taking the AI-based English learning APP-Speaking 100 as an example, established a research model to capture the relationship between performance expectation, effort expectation, hedonistic motivation, intention to communicate, interaction with artificial intelligence, and intention to continue to use AI-based applications. Scholar Liu Yang<sup>13</sup>, using the expectation confirmation theory as the basic framework, proposed taking college students' satisfaction with English App as an intermediate variable to study the relationship between motivation and intention to continue to use. Based on the technology acceptance model theory, Shen Yaomin<sup>14</sup> studied the user's usage intention of English vocabulary memorization applications. Gao Jinhuan<sup>15</sup> studied the influencing factors of the continuous intention of learning software-take Liulishuo as an example based on the technology acceptance theory.

Research on mobile learning Apps at home and abroad has been carried out for many years, but research on mobile Apps and development trends has been studied. There are few studies on the factors influencing the intention to use mobile learning Apps. There are fewer articles involving the use of English majors to study the intention to use English-speaking Apps. Therefore, this study took English majors of Panzhihua University as the research object to explore the factors affecting the intention of English majors to use English-speaking Apps.

#### Research Significance

Mobile learning is convenient, contextual, and personalized, effectively supporting second language acquisition. The combination of technology and language teaching has fully developed mobile-assisted language learning and has become a hot field in English learning research. Based on the technology acceptance model, combined with other related theories and mobile learning English-speaking Apps, this paper studied the intention to use English-speaking Apps, and analyzed the factors affecting the use of English-speaking Apps by English majors through quantitative research and proposed corresponding strategies to improve students' oral expression ability and intention to use speaking Apps.

In terms of theory, there are currently studies in English in the field of intention to use word memory Apps, but there are few studies on the influencing factors of the use of spoken English Apps. This paper investigated and analyzed English majors' intention to use English-speaking Apps, which can enrich the content and provide a reference.

In practice, by studying the affecting factors of the intention of English majors at Panzhihua University to use English-speaking Apps, English majors can adjust their learning according to the relevant factors to achieve better results. Secondly, this study has significance for improving the English majors' experience of mobile learning, improving service quality for mobile education practitioners, and actively promoting the information construction of English-speaking classrooms at Panzhihua University.

## II. Theoretical Framework

This chapter describes the theoretical basis of this study, including technology acceptance model and expectation confirmation theory.

# **Technology Acceptance Model**

In 1975, Fishbein and Ajzen proposed the theory of reasoned action 16. The theory holds that attitudes and subjective norms influence individual will, affecting behavior. In 1989, the Technology Acceptance Model (TAM) was a model proposed by Davis when using rational behavior theory to study users' acceptance of information systems. The main content of the model is perceived usefulness and perceived ease of use, which are the two factors that mainly affect users<sup>17</sup>. In 1993, Davis and his collaborators improved the original model, abandoning behavioral intent. They believed that the attitude of use could determine the actual use of the technology system, which was itself affected by functional cognition and perceived ease of use cognition, and the modified model realized a series of psychological acceptance processes such as "external stimuli, cognitive response, emotional response, and behavioral response"18. In 1997, Venkatesh and Davis made another largescale revision of the TAM model, introducing social influence and cognitive instrumental processes as determinants of practical cognition in technological systems<sup>19</sup>. The TAM model proposes that the intention to use a system depends on two key factors: perceived usefulness, which reflects the extent to which a person believes that using a specific system will improve his work performance; perceived ease of use demonstrates the degree to which a person finds it easy to use a specific system. Perceived usefulness is determined by a combination of perceived ease of use and external variables, and external variables determine perceived ease of use. External variables include system design characteristics, user characteristics (including perceived forms and other personality characteristics), task characteristics, the nature of the development or execution process, policy implications, and organizational structure. Venkatesh and Morris proposed a complete unified theoretical model of technology acceptance based on technology acceptance models and related theories to further study users' the acceptance of new technologies<sup>20</sup>. This model was divided into four core dimensions: performance expectation,

effort expectation, social impact, and convenience dimension. Now, in the field of information technology management, the technology acceptance model has become a classic theory. Many scholars established a connection with the intention to use Apps from the perspectives of users' perceived practicality, perceived usefulness, and perceived consistency<sup>21</sup>. Moreover, the empirical test of researchers found that the unified model of scientific and technological acceptance and use can explain the user's behavior of individuals by 70%, which is better than any theoretical model<sup>22</sup>. Some scholars at home and abroad have studied the intention of college students to use the technology acceptance model, such as Ronny Scherer and Fazilat Siddiq used this model theory to explain teacher's choice behavior regarding digital teaching in education<sup>23</sup>. Du Yihua<sup>24</sup> used this model to study the influencing factors of college students' MOOC intention. Therefore, this paper decided to take the technology acceptance model as the theoretical basis and continue to delve into other theories to analyze the factors affecting English majors' intention to use English-speaking Apps.

# **Expectation Confirmation Theory**

Oliver<sup>25</sup> proposed the expectation confirmation theory to study the basic theory of consumer satisfaction research. Bhattacherjee<sup>26</sup> changed the "degree of non-confirmation" in the expectation non-confirmation theory to the "degree of confirmation", formally forming the classic expectation confirmation theory. The theory includes five ideas: expectation, perceived performance, degree of confirmation, satisfaction, and willingness to repeat purchases. The model was used to determine user satisfaction by comparing users' perceptions and expectations of them. Satisfaction is a cognitive evaluation produced by consumers according to the degree of expected confirmation, and the difference between the two is the degree of confirmation. User satisfaction is higher when users' expectations are met. Similarly, for English-speaking Apps, learners' satisfaction is also high when their expectations are met, and their usefulness perception is high. Zou Ni<sup>27</sup> used the expectation confirmation theory model to study the influencing factors of continuous use of mobile learning App. Therefore, this paper also decided to use the expectation confirmation model theory to study the factors affecting English majors' intention to use English-speaking Apps.

# III. Research Design

This chapter primarily introduces the research design, including the research participants, methods, tool, data collection and analysis.

#### **Research Participants**

This study employed quantitative research method and the survey was conducted among students who majored in English at Panzhihua University. A total of 222 English students from Panzhihua University were selected for this study. Through quantitative research, the author has learned that every student has a smartphone, and most of them are aware of the existence of speaking Apps and have an urgent need and intention to improve their speaking skills. Therefore, the research conditions of this study were met.

#### **Research Methods and Research Tools**

The purpose of the questionnaire is to know the basic information about students' intention to use English-speaking Apps and explore the main affecting factors of English majors using English-speaking Apps. This paper adopted the questionnaire method and completed the questionnaire with the help of the WenJuanxin. The questionnaires were mainly distributed to English majors of Panzhihua University through QQ groups and WeChat groups. Students using English-speaking Apps were used as survey subjects for data collection, and 221 valid questionnaires were collected. The questionnaire consists of two parts. The first part of the questionnaire is English majors' basic situation to obtain accurate information on learner variables, such as grade, gender, time of using English-speaking Apps, etc. In the questionnaire of personal information, the data are mainly used for descriptive statistical analysis of this research sample.

The second part of the questionnaire is mainly about the factors that affect English majors' intention to use English-speaking Apps, and this part is the subject of the questionnaire.

According to this study's needs and the research participants' characteristics, this paper designed a questionnaire by reading literature and combining the technology acceptance model theory proposed by Davis and the expectation confirmation theory proposed by Bhattacherjee. And to ensure the reliability and validity of the questionnaire, this paper fully referred to the scale corresponding to the index and made appropriate adjustments according to the characteristics of English-speaking Apps and users. And the correspondence between the questionnaire questions and the reference scale is shown in Table 3-1. And the Likert Scale 5 scale form was modified to allow respondents to choose between "strong agreement, agreement, general, disagreement, and strong disagreement" according to their own experience. And each option is scored as "5, 4, 3, 2, 1".

**Table 3.1** The reference source of questions.

Variable Names	Reference Source	Questionnaire Questions		
Perceived usefulness	Gao Jinhuan <sup>15</sup>	Q8 Using Apps can enhance my knowledge. Q9 Using Apps can broaden my knowledge. Q10 Apps can boost my interest in learning. Q11 Apps can help me learn.		
Perceived ease of use	Gao Jinhuan <sup>15</sup>	Q12 It is easy to find what you need. Q13 Learning records are clear. Q14 It is easy to use App.		
Learning motivation	Shen Yaomin 14	Q15 I want to improve my English expression through Apps. Q16 It is important to learn English well. Q17 Other activities do not affect my learning English. Q18 Apps help me get the certificates.		
Learning resources	Gao Jinhuan <sup>15</sup>	Q19 The content of my English-speaking App is reasonable and rich. Q20 Simulation exercises in the English-speaking App are conducive to learning. Q21 The rich learning formats and content of my English-speaking App help me learn spoken English. Q22 The English-speaking APP courses can be repeated, which is conducive to my learning.		
Social impact	Wu Chenguang <sup>28</sup>	Q23 The recommendations of my classmates and teachers will affect my use of the speaking Apps.  Q24 Recommendations from family and friends around me will affect my use of speaking Apps.  Q25 Celebrities and blogger's recommendations will affect my use of speaking Apps.  Q26 The ranking of the App store affects my use of the speaking App.		
Satisfaction	Bhattacherjee <sup>26</sup>	Q27 I find it very satisfying to use the English-speaking App. Q28 I find it a pleasure to use an English-speaking App. Q29 I think using English-speaking App is a smart decision.		
Intention to use English-speaking Apps	Bhattacherjee <sup>26</sup>	Q30 I am willing to stick with the spoken language App. Q31 I will continue to use the English-speaking Apps. Q32 I would like to promote the English-speaking Apps to others.		

#### **Data Collection and Analysis**

In order to facilitate the collection of data, the authors explained to the participants in the introductory part of the questionnaire, and the data obtained by the survey were only used as first-hand information for the researchers to write the paper, and their identities were not shown to ensure the validity of the questionnaire and the authenticity of the data. A total of 222 questionnaires were distributed and 221 valid questionnaires were collected, with a questionnaire efficiency of 99%. The results of the compiled questionnaire were analyzed by SPSS26.0, using statistical methods such as descriptive statistical analysis and correlation analysis and ridge regression analysis.

## IV. Research Results and Discussion

The author has investigated the factors affecting the intention to use speaking Apps. The data of this study are analyzed in the following part. And based on the analysis, the author discussed the factor affecting English majors' intention to use English-speaking Apps.

# **Research Results**

#### Descriptive Statistical Analysis of Respondents' Basic Information

This study's statistical variables include grade, gender, major, frequency of use of speaking Apps, and installed English-speaking Apps. The results of the data collected are shown in Table 4.1. Table 4.1 presents the results of demographic characteristics and usage statistics. A total of 221 valid questionnaires were recovered, of which were 45 males, accounting for 20.27% and 117 were females, accounting for 79.73%. The gender structure of English-speaking Apps is unbalanced, and female users are more common, which also conforms to the fact that females are more inclined to language learning than males. And this is also in line with the fact that there are fewer male majors in English at Panzhihua University.

From the grade level, the freshman accounted for 7.21%, sophomores accounted for 43.69%, juniors accounted for 39.19%, and seniors accounted for about 9.91%. The use of English-speaking Apps is mainly used by junior and senior students. This situation may show that the sophomore and junior students pay more attention to spoken English than other grades and are more likely to accept different learning modes.

Based on the analysis of the frequency and time of using English-speaking Apps by the surveyed users, it is found that 30.18% of the users use English-speaking Apps for two-three times a week. This may be because of the arrangement of speaking classes in schools. And the time is suitable, so most English majors can generate

their intention to use English-speaking Apps. And most students use English-speaking Apps for one to two years. There may be a higher requirement for spoken English; therefore, students pay more attention to speaking and learning.

And from the installed and used English-speaking Apps aspect, most people chose the YiTa App and LAXI App, which accounted for 34.68% and 31.08% respectively. That may be related to the design, learning content, and ranking of the English-speaking Apps.

#### Reliability and Validity Test

Reliability reflects the reliability and stability of the measurement questionnaire. Validity referred to the degree to which a measuring tool or means can accurately measure variables. In this study, the Cronbach  $\alpha$  coefficient and KMO value of the questionnaire scale was measured by SPSS26.0, and the measurement results are shown in the table below.

Table 4.1 Demographic characteristics and usage statistics of English-speaking App

Items	Category	Frequency	Percentage
Gender	Male	45	20.27
Gender	Female	117	79.73
	Freshman	16	9.18
Grades	Sophomore	97	43.69
	Junior	87	39.19
	Senior	22	9.91
	English Major	128	57.66
Major	Business Major	73	32.88
	Translation	21	9.46
	Once a day	52	23.42
	Multiple times a day	31	13.96
The frequency of using the speaking app	Two-three times a week	67	30.18
The frequency of using the speaking app	Two-three times a month	61	27.48
	Once a month or less	11	4.95
	FIF App	46	20.72
	LAXI App	69	31.08
	ShanBay App	44	19.82
Installed and used speaking app	English Fun Dubbing	64	28.83
	VOA English App	51	22.97
	English Parody	55	22.47
	YiTa App	77	34.68
	Another oral App	27	12.16
	Less than a year	45	20.27
	1-2 years	95	42.79
Duration of continuous use	2-3 years	71	31.98
	3-4 years	8	3.6
	4 years or more	3	1.35

From the results of reliability, the overall Cronbach  $\alpha$  coefficient value of the affecting factors survey scale is 0.957. According to the standard, the reliability coefficient of the scale is above 0.8, indicating that the internal consistency of the test or scale was good

**Table 4.2** Reliability of the questionnaire

Cronbach's Alpha	Amount
0.957	31

According to the KMO, the closer the value is to 1, the better the validity of the questionnaire. According to the Table 4.2, the value of KMO is 0.974, which indicates that this questionnaire is suitable for factor analysis and validity of the questionnaire is high.

**Table 4.3** Validity of the questionnaire

KOM and Bartlett Test					
Sampling Suitability Quantity 0.974					
	Approximate chi-squre	2970.097			
Bartlett test's sphericity	df	300			
	P	0.000			

#### **Factors Affecting Intention of Using English-Speaking Apps**

The results obtained by the author's descriptive statistical analysis of student survey data are shown.

The above statistics show that the minimum value of the affecting factors is 1 and the maximum value is 5. According to the rules of the Likert scale, the more significant the mean score is, the bigger the effect will be. The average score of each influencing factor was greater than 3 points, corresponding to the Likert 5 scale designed in this study, and more than 3 points expressed agreement, indicating that the respondents agreed with each affecting factor on the use of English-speaking Apps. From the perspective of mean scores, the learning resources with the highest score indicate that the quality of course content has a greater impact on the choice of sApp by English majors. Ranking second on average for perceived ease of use, it can be concluded that user respondents generally consider using English-speaking Apps to be simple.

In general, the closer the coefficients of the skewness and kurtosis to 0, the better it is. Because the test for normal distribution is very strict, it is usually impossible to meet. Therefore, if the absolute value of kurtosis is less than 10 and the absolute value of skewness is less than 3, it can be considered that although the data is not absolutely normally distributed, it can be basically accepted as normally distributed<sup>29</sup>. As can be seen from the above table, the kurtosis of the variables is all less than 10 in absolute value, and the total value of skewness is all less than 3. Therefore, the data of the sample meets the standard of normal distribution.

**Table 4.4** Descriptive statistics of affecting factors

Factors	N	Minimum	Maximum	Mean	Sta. Deviation	Skewness	Kurtosis
Perceived usefulness	221	1	5	3.909	1.055	-1.680	1.592
Perceived ease of use	221	1	5	3.932	0.945	-1.596	1.615
Learning motivation	221	1	5	3.854	0.937	-1.539	1.368
Learning resources	221	1	5	3.976	1.026	-1.742	1.865
Social impact	221	1	5	3.922	1.011	-1.656	1.656
Satisfaction	221	1	5	3.930	1.014	-1.548	1.397

N=Number

In the following part, the detailed information on each factor is to be further analyzed

# (1) Perceived usefulness

According to the measurement results, the detailed information can be seen in Table 4.5. The mean score of the item Q11 "English-speaking Apps can help me learn" is the highest one (3.97) that primarily affected English majors using the English-speaking Apps. And item Q10 "Using the English-speaking Apps can increase my learning interest" is the second one (3,92). The mean score of items Q9 "Using English-speaking Apps can enhance my knowledge" and Q8 "Using Apps can broaden my oral English knowledge" are scored 3.91 and 3.84, respectively.

**Table 4.5** The statistics of perceived usefulness

One-Sample Statistics					
Item	N	Mean	Std. Deviation	Std. Error Mean	
Q8	221	3.84	1.220	0.082	
Q9	221	3.91	1.241	0.084	
Q10	221	3.92	1.337	0.099	
Q11	221	3.97	1.291	0.0869	

N=Number

#### (2) Perceived ease of use

According to the definition of perceived ease of use in the theory of technology acceptance model, the following measures are set in the questionnaire to clarify the aspects of perceived ease of use. The perceived ease of use factor, which is assembled by item Q12, item Q13, and item Q13, among them the mean score of the item Q14 "It is easy to use English-speaking Apps" is the highest one (4.05). That means that using English-speaking Apps are easy for many English majors. And the second one is the item Q12 "It is easy to find what you need" that is scored 3.96. The last is the item Q13 "Learning records is clear" which scored 3.79.

**Table 4.6** The statistics of perceived ease of use

	= mart 110 = 110 mm = F = 110 mm = 1 mm					
	One-Sample Statistics					
Item N Mean Std. Deviation Std. Error Mean						
Q12	221	3.96	1.1050	0.0743		
Q13	221	3.79	1.096	0.0736		
Q14	221	4.05	1.182	0.0795		

N=Number

#### (3) Learning motivation

As the data is shown in Table 4.7, there are 4 items to the "learning motivation factor": items Q15 to Q18. The mean score of the item Q16 "It is important to learn English well" reaches the first place (3.91). The item Q17 "Other activities do not affect me learning English" and Q15 "I want to improve my English expression throng Apps" are in second and third place respectively. The last place is the item Q18 "Apps help me get certificates".

**Table 4.7** The statistics of learning motivation

	One-Sample Statistics					
Item	N	Mean	Std. Deviation	Std. Error Mean		
Q15	221	3.86	1.151	0.077		
Q16	221	3.91	1.112	0.075		
Q17	221	3.88	1.245	0.084		
Q18	221	3.77	1.029	0.069		

N=Number

#### (4) Learning resources

According to the Table 4.4, the learning resources factor is the first place to influence the users using English-speaking Apps. And in Table 4.8 the item Q19 "The content of my English-speaking App is reasonable and rich" and Q21 "The rich learning formats and content of my English-speaking Apps help me learn spoken English" scored 4.05 and 4.00 respectively. The mean score of items Q20 "Simulation exercises in the English-speaking App are conducive to learning" and Q22 "The English-speaking App courses can be repeated, which is conducive to my learning" are the same (3.93).

**Table 4.8** The statistics of learning resources

	One-Sample Statistics					
Item	N	Mean	Std. Deviation	Std. Error Mean		
Q19	221	4.05	1.253	0.084		
Q20	221	3.93	1.187	0.079		
Q21	221	4.00	1.171	0.078		
Q22	221	3.93	1.225	0.082		

N=Number

#### (5) Social impact

There are five items to use to test the social impact factor. The item Q25 "Celebrities and blogger's recommendations will affect my use of speaking Apps" is the highest one. And the other items' difference is not significant. All of them are higher than 3 points.

**Table 4.9** The statistics of social impact

	Tuble is the statistics of social impact						
	One-Sample Statistics						
Item N Mean Std. Deviation Std. Error Mean							
Q23	221	3.89	1.135	0.076			
Q24	221	3.93	1.234	0.082			
Q25	221	3.97	1.281	0.086			
Q26	221	3.90	1.250	0.0840			

N=Number

#### (6) Satisfaction

Satisfaction is also an important factor affecting English majors' intention to use English-speaking Apps. After analyzing the items of satisfaction in this questionnaire can know clearly the user's satisfaction with English-speaking Apps. The mean score of item Q27 "I find it very satisfying to use the English-speaking Apps" is the highest one (3.99). And item Q29 "I think using English-speaking App is a smart decision" is the second one (3.96). And the last one is item Q28 "I find it a pleasure to use an English-speaking App," whose score is 3.84.

In conclusion, all the item scores are higher than 3, which indicates the respondents agreed with the items of each factor.

Table 4.10 The statistics of satisfaction

	One-Sample Statistics					
Item	Std. Error Mean					
Q27	221	3.99	1.206	0.081		
Q28	Q28 221 3.84		1.160	0.078		
Q29	221	3.96	1.190	0.080		

N=Number

# **Correlation Analysis**

The results of correlation analysis showed that the correlation coefficients of perceived usefulness, perceived ease of use, learning motivation, learning resources quality, social impact, and satisfaction, which are 0.846, 0.812, 0.840, 0.838, 0.853, 0.799, and the corresponding P-values were lower than 0.01, which had statistical significance. The correlation coefficients in the table indicated that the variables were positively correlated. That means the higher score of perceived usefulness, perceived ease of use, learning motivation, learning resources quality, social impact and satisfaction, the more significant impact on users' intention to use English-speaking Apps.

Table 4.11 Analysis of intention of use and affecting factors

		I WOIC IIII	mary sis or in	icontion of abo	and antectin	g ractors	
		Perceived	Perceived	Learning	Learning	Social	Satisfaction
		usefulness	ease of use	motivation	resources	impact	
Intention	r	0.846**	0.812**	0.840**	0.838**	0.853**	0.799**
to use English- speaking	P	0.000	0.002	0.000	0.000	0.000	0.0018
Apps							

\* P < 0.05, \*\* P < 0.01

As can be seen from Table 4.12, the correlation of each affecting factor is greater than 0.8. That means there is a collinearity between the independent variables.

**Table 4.12** Correlation analysis of affecting factors

	Perceived	Perceived ease of	Learning	Learning	Social	Satisfactio
	usefulness	use	motivation	resources	impact	n
Perceived usefulness	1					
Perceived ease of	0.858**	1				
use						
Learning motivation	0.851**	0.822**	1			

Learning resources	0.873**	0.832**	0.849**	1		
Social impact	0.844**	0.819**	0.840**	0.859**	1	
Satisfaction	0.826**	0.813**	0.830**	0.828**	0.824*	1
					*	

<sup>\*\*</sup> represent significance levels of 5%

#### Ridge Regression Analysis of User's Intention and Affecting Factors

Based on the data shown in Table 4.4, the data of the sample meets the standard of normal distribution. And the data are shown in Table 4.12, and there is collinearity between the independent variables. Therefore, ridge regression was used in this study to analyze the relationship between the independent and dependent variable.

The results of ridge regression showed that the significance P value based on the F test was 0.000\*\*\*, which showed significance at the level of 1%, indicating that there was a regression relationship between the independent variable and the dependent variable in the Table 4.13. Therefore, there are significant relations between the factors and the intention to use English-speaking Apps.

**Table 4.13** Ridge regression analysis of user's intention and affecting factors

K=0.318	В	SE	Beta	t	P
Constant	0.34	0.126	-	2.687	0.008***
Perceived usefulness	0.162	0.035	0.175	4.684	0.000***
Perceived ease of use	0.121	0.038	0.117	3.139	0.002***
Learning resources	0.192	0.039	0.184	4.912	0.000***
Learning motivation	0.137	0.036	0.144	3.863	0.000***
Social impact	0.22	0.036	0.227	6.081	0.000***
Satisfaction	0.085	0.036	0.089	2.384	0.018**
R2	0.799		•	•	•
	1				

<sup>\*\*\*, \*\*, \*</sup> represent significance levels of 1%, 5%, and 10%, respectively.

#### **Discussion**

The study's results show a significant positive correlation between perceived ease of use, perceived usefulness, learning resources, social impact, learning motivation, satisfaction, and intention to use. The users strongly agree that each factor would affect them to use English-speaking Apps. According to the value of the scale, they are all greater than 3, indicating that most users agree that these factors will affect their use of speaking App. (Table 4.4, Table 4.13). This finding was consistent with that of Shen Yaomin<sup>[14]</sup>, Gao Jinhuan<sup>[15]</sup>, Zhou Ni<sup>[27]</sup>. They all believed that those factors could affect user's intention to use mobile learning Apps. Certainly, English-speaking Apps as mobile learning App has the same characteristics, too. But there are different rankings of each factor. Wu Chengguang<sup>[28]</sup> believed that the social impact has the greatest impact on the user's intention to use. In this study, the learning resources is the greatest impact on the user's intention to use it. That may be because the users surveyed are different.

The first factor is learning resources that can positively affect English majors to use English-speaking Apps. As what is mentioned in the Table 4.4 that learning resources is the first factor affecting the intention to use English-speaking Apps. English majors believed that "The content of my English-speaking App is reasonable and rich" that is the highest one (4.05) in the Table 4.8. And useful simulation exercises that can meet the user's requirements for repetitive learning can arouse the user's interest and intention to use English-speaking Apps. The more abundant and reasonable the resources, the more students will have strong intention to use English-speaking Apps. In this regard, the learning content of English-speaking Apps should meet the students' requirement and customize course according to their needs. The setting of various module exercise should be reasonable and rich.

The second factor is perceived ease of use. This is the second important factor that influences the intention to use English-speaking Apps. The users expressed that using English-speaking Apps is simple and easy. The item Q14 "It is easy to use English-speaking Apps" is the highest one (4.05). Meanwhile, the clear and concise search for required course, smooth page operation, and precise descriptions can all increase the intention to use English-speaking Apps. And the simpler the operation of the speaking App, the more students use it. In this regard, the design of English-speaking Apps should meet the demand for simple and easy operation, with smooth and clear page setting.

The third factor is satisfaction. This is also an important factor in the intention to use English-speaking Apps. According to the survey, students are delighted with using the English-speaking App, scoring 3.99 (Table 4.10). In Table 4.10, the student believed that they feel happy and satisfied when they use English-speaking Apps. That is to say, the user's satisfaction with the App is high, and the user's intention to use words also increases. The English-speaking Apps should make learning methods flexible and interesting, which will break the barriers of time and space and really let English majors speak English anywhere and anytime. Thus, can improve the satisfaction of English majors.

The fourth factor is social impact. According to Table 4.4, social impact is the primary factor which indicates that users are often influenced by many social factors when choosing to use English-speaking Apps. The item recommendations from celebrities and bloggers most influenced students' intention to use English-speaking Apps scored 3.97, likely due to the current emergence of various social platforms. From Table 4.9, the English majors expressed that they would choose English-speaking Apps recommended by their friends, teachers, and families. Therefore, teachers can recommend to student various English-speaking Apps with abundant resource to improve their oral expression abilities.

The fifth factor is perceived usefulness. Perceived usefulness is expressed as the degree to which users have improved their oral expression skills by using English-speaking Apps. In this paper, comprehensive research results show that English majors have a clear purpose when using English-speaking Apps. Most of them aim to improve their oral English expression ability through English-speaking Apps, which helps them improve their oral language defects. And can help them enhance their knowledge by accumulating of their oral sentences and passing the oral level test. In the results of the questionnaire data, this paper finds that when the English-speaking App can help learners learn, for example, by improving certain oral expression skills and the accent, improving their learning efficiency, and enabling learners to master more oral expressions. After practical help, students can strengthen their sense of identification with English-speaking Apps and find it valuable to use English-speaking Apps. In turn, it enhances the perceived usefulness of the English-speaking Apps. Thus, learners will be more inclined to use speaking Apps (Table 4.4, Table 4.5). The main purpose of English-speaking App is to improve the user's abilities. Therefore, the content arrangement of skills needed by different groups of people should be improved, including the consolidation of simple knowledge and the design of novel learning methods.

The last factor is the learning motivation. This is also an indispensable factor that affects the user's intention to use English-speaking Apps. The data of Table 4.7 show the learners use English-speaking Apps with intrinsic motivation that is they believe that it is important to learn English well. This item scored 3.91. They have strong motivation to learn English well. When the user's learning motivations are met, further intention to use will occur. The main goal is to inspire students to learn English well and to stimulate their enthusiasm for learning English-speaking skills. The students should also adjust their oral English motivation.

#### V. Conclusion

This study aims to investigate factors which affect English majors' intention to use English-speaking Apps. In this chapter the results, limitations of this study are presented, as well as some suggestions for the future studies.

#### **Summary**

This paper summarizes the concept of mobile learning speaking Apps by combing the relevant literature on English-speaking Apps. Based on the theory of technology acceptance model, with the help of the two key factors of perceived ease of use and perceived usefulness, and expectation confirmation theory is added and applied to the questionnaire. Then, through the participation of 221 English majors at Panzhihua University, this paper tried to explore the factors affecting the intention of English majors to use the speaking Apps and provide a reference for future research. The questionnaire survey results show that the factors influencing the intention of English majors to use speaking Apps are: perceived ease of use, perceived usefulness, learning resources, social impact, learning motivation and satisfaction. These factors positively impact the intention to use English-speaking Apps by English majors at Panzhihua University.

#### **Research Limitations**

First, due to individuals' limited time and ability, the study is limited by theory. For example, the theoretical framework only includes the technology acceptance model and expectation confirmation theory. Besides, the factors only discuss several affecting factors. However, the affecting factors on students' intention to use App in oral English learning are far more than these. It is hoped that future research can use more relevant theories to study the factors affecting English majors' intention to use English-speaking Apps from different perspectives.

Second, the sample size is small. The article surveyed only 221 English majors at Panzhihua University. The number is relatively less and not convincing enough. Although this study might explain the factors affecting English majors' intention to use Apps in Oral English practice to a certain extent, it was unsuitable for all the cases. Because the respondents came from only one university, the different schools may have different situations. Different study scopes and sample sizes might have different impacts on the study results, so the study was worth testing in terms of impact and breadth.

Accordingly, the author gave the recommendations for future research as follows. First, this study is only a preliminary exploration of the factors affecting the intention of English majors to use English-speaking Apps. In order to better understand the factors influencing the use of English-speaking Apps by English majors, more comprehensive research is needed. In addition, the scope of the study needs to be expanded to include different districts and schools to improve the reliability of the findings. Research methods should also be diversified, and interviews and questionnaires could be combined.

**Funding** This research is supported by Educational Informatization and Big Data Center of Sichuan Province, China (DSJ2022164) and Educational Informatization Application and Development Center of Sichuan Province, China (JYXX22-032).

#### References

- [1]. Xu A D, Zou Q. Application Status And Demand Analysis Of Oral English Autonomous Learning APP[J]. Software Guide, 2016, 15(01): 52-53.
- [2]. Zhan Q L, Zhang J R, Shao Y J. Theoretical Research And Practical Exploration Of Mobile Learning A Conversation With Professor Mike Schalps[J]. China Educational Technology, 2010(03): 1-7.
- [3]. Burston, Jack. Mobile-Assisted Language Learning: A Selected Annotated Bibliography Of Implementation Studies 1994-2012[J]. Language, Learning And Technology. (2013). 17. 157–224.
- [4]. Kukulska-Hulme, A., & Shield, L. (2008). An Overview Of Mobile Assisted Language Learning: From Content Delivery To Supported Collaboration And Interaction[J]. Recall, 2008, 20(3): 271-289.
- [5]. Wong, Lung-Hsiang & Looi, Chee-Kit. (2010). Vocabulary Learning By Mobile-Assisted Authentic Content Creation And Social Meaning-Making: Two Case Studies[J]. Journal Of Computer Assisted Learning, 2010, 26(5): 421-433.
- [6]. Wang Y L. Research On Application Of Mobile Learning APP In Extracurricular Oral English Learning In Secondary Vocational Schools[D]. Guangdong Polytechnic Normal University, 2018.
- [7]. Li J. An Exploration Of College Oral English Training Mode Based On Smart Phone Instant Communication[J]. Higher Education Forum, 2014(10): 31—36.
- [8]. Luo Y J. The Application Of Oral English Training APP In Extracurricular Learning Of College Oral English[J]. Chinese Journal Of ESP, 2020(02): 53-62+94.
- [9]. Xiao P, Chen Y. Research On Mobile Learning Application Supported By 3G Technology[J]. China Educational Technology & Equipment, 2009(12): 18-19.
- [10]. Pan J X, Lv Q H, Wang C H. Application Of Internet + Mobile Learning Mode In Nurses' TCM Nursing Study[J]. Journal Of Traditional Chinese Medicine Management, 2022, 30(23): 132-134.
- [11]. Lu S. Application Of FIF Oral English Training App In College Oral English Teaching[J]. Survey Of Education, 2022, 11(07): 78-81.
- [12]. Liu K H. A Study On The Intention Of Continuous Use Of English Learning Apps Based On Artificial Intelligence[D]. Qingdao University, 2022.
- [13]. Liu Y. An Analysis Of The Correlation Between College Students' Motivation To Use English Apps And Their Intention To Continue Using Them[J]. Journal Of Jilin TV & Radio University, 2019(12): 47-49+52.
- [14]. Shen M Y. A Survey On The Usage Intention Of English Word Memory APP Users[D]. Zhengzhou University, 2021.
- [15]. Gao J H. Study The Analysis Of Factors Influencing The Continuous Use Intention Of Software Users[D]. Shanxi Normal University, 2020.
- [16]. Fishbein, M. & Ajzen, I. Belief, Attitude, Intention And Behaviour: An Introduction To Theory And Research. Addison-Wesley, Reading MA[J]. Philosophy & Rhetoric, 1977, 41(4): 842-844.
- [17]. Fred D. Davis, Richard P. Bagozzi, Paul R. Warshaw. User Acceptance Of Computer Technology: A Comparison Of Two Theoretical Models[J]. Management Science, 1989, 35(8).
- [18]. Davis F D. User Acceptance Of Information Technology: System Characteristics, User Perceptions And Behavioral Impacts[J]. International Journal Of Man-Machine Studies, 1993, 38(3): 475-487.
- [19]. Venkatesh V, Davis F D. Davis, F. D.: A Theoretical Extension Of The Technology Acceptance Model: Four Longitudinal Field Studies[J]. Management Science, 2000, 46(2): 186-204.
- [20]. Chen Y, Yang B J. Review On The Development Of Technology Acceptance Model Theory[J]. Science & Technology Progress And Policy, 2009, 26(06): 168-171
- [21]. Gao W R. Research On APP Advertising Design That Respects Users' Right To Know And Choice On Users' Willingness To Use Apps[D]. Jilin University, 2021.
- [22]. Li Y, Wu S R, Liao Q. Research On Influencing Factors And Regulating Effects Of Teachers' Use Of Information Technology -- Based On UTAUT Model[J]. E-Education Research, 2016(10): 31-38.
- [23]. Davis F D, Bagozzi R P, Warshaw P R. Extrinsic And Intrinsic Motivation To Use Computer In The Workplace[J]. Journal Of Applied Social Psychology, 1992, 22(14): 1109-1130.
- [24]. Du Y H. Analysis On The Influencing Factors Of College Students' Willingness To Use MOOC[D]. Dalian University Of Technology, 2019.
- [25]. Oliver, R. L. Linda G. Effect Of Satisfaction And Its Antecedents On Consumer Preference And Intention[J]. ACR North American Advances, 1981, 8(1): 88-93.
- [26]. Bhattacherjee, A. Understanding Information Systems Continuance: An Expectation- Confirmation Model[J]. MIS Quarterly, 2001, 25, 351-370.

# Factors Affecting English Majors' Intention of Using Apps in Oral English......

- [27].
- Zou N. Research On Influencing Factors Of Continuous Use Intention Of Mobile Learning APP[D]. Chongqing University, 2016. Wu C G. Research On Influencing Factors Of College Students' Willingness To Use Mobile Learning Apps[D]. Shanxi Normal [28].
- University, 2018.
  Wang G Q. Research On Influencing Factors Of Consumers' Willingness To Use Community Group-Buying Platform [D]. Minzu University Of China, 2020. [29].