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# Factors Influencing Behavioral Intention of Online Learning in the Post-Covid Pandemic: A Case Study of a Primary School in Chengdu, China

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## Abstract

**Purpose:** This research aims to determine influencing factors of primary school students' behavioral intention to use online learning in the post-Covid pandemic in Chengdu, China. The conceptual framework contains perceived ease of use, perceived usefulness, attitude, habit, social influence, perceived behavioral control and behavioral intention. **Research design, data, and methodology:** Population and sample size are 450 parents of students who experienced online learning at least one semester in one of the top primary schools in Chengdu, China. The sample techniques used were judgmental, quota, and convenience samplings. Before the data collection, the results of index of item objective congruence (IOC) and Cronbach's Alpha coefficient values were approved. Afterward, confirmatory factor analysis (CFA) and structural equation modeling (SEM) were applied to measure validity, reliability, goodness of fit and hypotheses testing. **Results:** Perceived ease of use significantly influenced perceived usefulness and attitude. Perceived usefulness has a significant influence on attitude. Attitude and perceived behavioral control significantly influence behavioral intention. Nevertheless, habit and social influence did not have any significant influence on behavioral intention of online learning among primary school students. **Conclusions:** Students were isolated and banned from physical classroom due to the spread of the virus. Therefore, the Chinese government carried on the education as well as used online education to solve the imbalance for Chinese students via online learning during to post-pandemic.

**Keywords:** Online Learning, Habit, Attitude, Behavioral Intention, Post-Pandemic

**JEL Classification Code:** E44, F31, F37, G15

## 1. Introduction

Online education entails a necessary resources and strategic planning. It is a powerful tool for teachers to facilitate and transmit the knowledge content to learners via information and communications technology or ICT to enhances students' learning experience. Online leaning allows learners to study at their own pace by the use of available learning tools through a series of systems such as

the website, email, texts, audio and video conferencing delivered over internet. Online learning provides convenience, enjoyment and cost effectiveness via the delivery of innovative and interactive contents (Dhull & Arora, 2019). Online learning and e-learning similarly refers to "the utilization of electronic devices for learning, including the delivery of content via electronic media such as internet/intranet/extranet, audio or video-tape, satellite broadcast, interactive TV, or CD-ROM" (Zhang et al., 2020)

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as well as podcasts from global platforms today.

In China, the COVID-19 outbreak has established the new normal or new behavior of teaching and learning from physical to online classroom. Online education market in China has remarkably reached its market potential. Two hundred and twenty million Chinese students including primary, secondary and tertiary have been remaining homebound following the outbreak since early 2020. The new design of learning method was quickly carried out during the period. In response to China's online learning applications, there have been dramatic increases in online activities in most schools via digital platforms to battle the disruption of the epidemic. For example, Dingtalk developed by Alibaba reached over 1.1 billion downloads during the period (Wong, 2020).

Online learning will be the new normal and is predicted to continue in the post-epidemic. Around 11.93 million students took The National College Entrance Examination (NCEE) or "gaokao" to get admission in higher education. However, the campus experience has not yet been fully welcomed due to the fact that most learning programs are shifting to online or hybrid (physical and online classes) mode. Given that most schools have invested in hardware, software and online learning contents, there is a possibility that online learning will be prolonged after the outbreak. In addition, teachers, parents and students habitually use and enjoy the benefits of online learning. Therefore, they are willing to engage with this format even the pandemic is over. Although primary school students require more physical interaction with their teachers and peers, online learning will be an effective tool for in-class and outside classes which determines the behavioral intention in the long run (Yan, 2022).

## 2. Literature Review

### 2.1 Perceived Ease of Use

Perceived ease of use is described that "a system is easy and requires minimum efforts to use" (Miller & Khera, 2010). Teo (2010) also provides terminology of perceived ease of use as "the degree to which a user believes that using technology is free of effort." Davis (1989) refers perceived ease of use as "the degree to which the user believes the system would be easy to exploit". To some extent, when users believe a system or technology is easy to function, they tend to continue to use it in some period of time (Nikou & Maslov, 2021). Perceived ease of use is one of many influential factors in technology adoption which arouses system developers to design a technology to be easy to understand and use.

In the study of online learning, perceived ease of use directly impacted perceived usefulness of university students to use Web Course Tools (Ngai et al., 2007). Park (2009) found the significant effect of perceived ease of use on perceived usefulness of e-learning among Korean students. According to Moafa et al. (2018), perceived ease of use influenced on students' decision to adopt online learning. The easier an online learning is perceived, the higher the possibility of users will use the technology. In the context of e-learning, Druke et al. (2021) confirmed the relationship between perceived ease of use and perceived usefulness. During and the post COVID-19 pandemic, the perceived ease of use of online learning was one of the benefits for teachers and students to engage learning activities (Gao et al., 2022).

In this context, perceived ease of use and attitude of students to use an online learning system are significantly related. This statement refers to "the level to which students are convinced that using online learning enriches their learning" (Al-Rahmi et al., 2020). Perceived ease of use is "the level to which a user is convinced that online learning system use is effort-free". According to the findings of many studies (Davis, 1989; Teo & Zhou, 2014; Venkatesh et al., 2003), when an online learning is perceived as easy to use, learners potentially develop a positive attitude towards the use. Based on the above assumption, it was hypothesized that:

**H1:** Perceived ease of use has a significant influence on perceived usefulness of online learning among primary school students.

**H2:** Perceived ease of use has a significant influence on attitude towards use of online learning among primary school students.

### 2.2 Perceived Usefulness

Perceived usefulness is "the extent to which an individual perceives that adopting the new technology would enhance his or her work performance". Usefulness can be perceived as productivity from the use of a technology. It can be signified as benefits and advantages obtained from the use of a system technology in the various contexts. The benefits from the use of a technology can be productivity, performance, and efficiency (Ndubisi et al., 2003).

In recent years, many scholars examined teachers and students' adoption of online learning during the COVID-19 outbreak. Students perceive online learning can help them continue their study during the lockdown and they express positive attitude toward the use of online education as a replacement of physical classroom (Singh et al., 2020). The perceived usefulness of online learning systems was examined to have an influence on users' attitude and

decision whether they will use it (Islam, 2013). Consequently, the higher the perceived usefulness of online learning, the stronger the desire of learners to use it. The following hypothesis is suggested as a result of the discussion:

**H3:** Perceived usefulness has a significant influence on attitude towards use of online learning among primary school students.

### 2.3 Attitude

In this research, attitudes of students were defined as “particular actions related to their use of online learning in the post COVID-19” (Gurban & Almogren, 2022). Attitude is described as “a person’s positive or negative evaluation of a given object or behavior” (Chennamaneni et al., 2012). Students’ willingness to use an online learning was influenced by their evaluative judgment of the results of the use which could either be negative or positive attitude. Many literatures presented that students’ attitudes towards the use of a system or technology were impacted by their acceptance to use (Riaz et al., 2011). The attitude is subjected to have an impact on the behavioral intention (Gurban & Almogren, 2022).

Based on technology adoption theories, learning activities are facilitated by to the use of online learning which is an important factor that affects behavioral intention of students both during and the post pandemic. Specially, behavioral intention to use online learning can be identified as students’ motivation to use online learning which significantly impacted by their positive attitude towards the system (Al-Rahmi et al., 2020). The intent behavior has been proven to be statistically influenced by attitude as evidenced from previous studies (Gurban & Almogren, 2022; Teo et al., 2019). Therefore, it is suggested that students’ opinions about online learning play key role to their willingness to use it. Considering the above evidence, a proposed hypothesis is demonstrated:

**H4:** Attitude has a significant influence on behavioral intention of online learning among primary school students.

### 2.4 Habit

Habit is defined as “the perceptual structure of doing something often and regularly and explains when a person repeats a behavior regularly and he/she is satisfied with the outcome, the action then becomes habitual” (Venkatesh et al., 2012). Users’ habit can be identified as “the extent to which individuals tend to adopt behavior automatically because they have learned before” Habit is an essential factor in the regular or frequent use of system, which is diverse in different situation (Perrin et al., 2011). Habit entails the interaction of an individual with the technology

and he or she automatically uses it. Habit associates with activity which is nurtured from the time and experience. Ones’ desire to employ the technology tend to develop specific pattern of carry-on behavior (Limayem et al., 2007).

Habit positively influences users’ behavior (Fakhoury & Aubert, 2017). When users engage with a technology, they tend to promote behavioral intention to use it (Chao, 2019). Even though some studies failed to prove the significant relationship between habits and behavioral intentions, more numbers of studies affirmed that habits strongly predict behavioral intention (Venkatesh et al., 2012). In the context of this study, habit is an influential factor that impacts behavioral intention of system usage. It reasonably explains that habit becomes students’ familiarity in using online learning during the pandemic, and then they tend to adopt it in the post-pandemic. Thereby, a hypothesis is indicated:

**H5:** Habit has a significant influence on behavioral intention of online learning among primary school students.

### 2.5 Social Influence

Social influence refers to “an individual’s belief that their peers, family, and social circle are deemed importation that their opinion is that adopting information technology is valuable” (Venkatesh et al., 2003). In the study of higher education, social influence of students had a direct impact on their intention to use online education (Nair et al., 2015). Similarly, a significance of social influence on students’ adoption has been widely examined (Tarhini et al., 2017). Social influence is defined as “the degree to which a person believes that someone (such as friend and family) important to him or her should use the new system”. Social influence and subjective norm are identical (Chen & Keng, 2019). This study refers social influence that learners may be encouraged by their classmates, teachers, and others around them to choose to use the online course platform. Most literatures of technology adoption determine social influence will significantly impact the behavioral intention.

Theoretically, social influence is a key variable in the UTAUT model (Venkatesh et al., 2003). Social influence crucially shapes and directs behavioral intention of users in using a system technology (Alzeban, 2016; Park et al., 2012; Yuan et al., 2015). Social influence significantly impacts behavioral intention which can be signified that an individual person listens and follows the opinions of others to perform certain behaviors. The impact of social influence usually occurs in a mandatory environment rather than in a voluntary environment, which means users’ decision to use a technology tends to be forced by their social groups (Venkatesh et al., 2003). For example, online learning during the pandemic is not an option but it is a must for students to continue their learning activities. Therefore, UTAUT can be generalized in the use of online learning system is in mandatory environment (Tarhini et al., 2017).

**H6:** Social influence has a significant influence on behavioral intention of online learning among primary school students.

## 2.6 Perceived Behavioral Control

Perceived behavioral control is “the individual’s perception of their capability to perform the behavior based on past experience and anticipated issues, as well as their skills, abilities, opportunity, compulsions, and dependence upon others” (Ajzen, 1988). It is also defined as “a person’s ability to control factors that may influence their behavior” (Mafabi et al., 2015). Perceived behavioral control can directly drive the actual use as users believe in their ability to use a system technology (Ajzen, 1988). Perceived behavioral control can be indicated as a capability of a person to control over their own behavior in some occurrence with the existing resources such as time, money, skills and helps from others (Ajzen, 1991). Perceived behavioral control reflects belief regarding to access of resources and opportunities needed to behave (Giantari et al., 2013).

Many studies highlighted that users’ capacity and autonomy can contribute to their willingness to perform a certain behavior (Castanier et al., 2013), and it is subjected to the availability of information and resources (Seow et al., 2017). Many evidences have revealed that user’s confidence with their own skills can greatly impact their intent behavior (Ajzen, 1991). The past studies confirmed that perceived behavioral control is a predictor of behavioral intention to use as system technology (Ramamonjiarivelo et al., 2015). This study posted that students who believe in their ability to use online learning will demonstrate behavioral intention to use it in the post-pandemic. The potential linkages between these two variables lead to the development of a hypothesis:

**H7:** Perceived behavioral control has a significant influence on behavioral intention of online learning among primary students.

## 2.7 Behavioral Intention

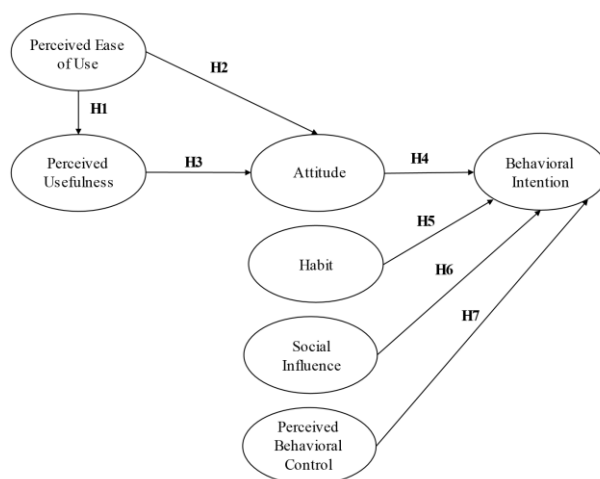
Behavioral intention is viewed as a measure of the technology adoption and has been widely investigated. Behavioral intention refers to “the extent to which the user intends to use the technology” (Harsono & Suryana, 2014). It can be conceptualized as intention to use an online learning of students is a precursor to actual use (Huang & Duangekanong, 2022). The intention to use behavior is the main construct in technology adoption theories such as TAM and UTAUT. Behavioral intention is defined as “the likelihood of a person using an information system and instructional technology and has been emphasized as an

objective in the practical use of modern technology” (Davis, 1989).

In the context of online learning, most scholars determined the relationship between the behavioral intention and actual behavior in many senses (Ing et al., 2020). There are evidences that the intent to use has been influenced by many factors such as attitude, social influence, perceived behavioral control etc. (Venkatesh et al., 2003). Consequently, the desire of users is evaluated from the easiness, benefits, people’s opinions and self-efficacy in using online learning during and the post COVID-19 outbreak in this study.

## 3. Conceptual Framework

The study on influencing factors of primary school students’ behavioral intention to use online learning in the post-pandemic is composed with seven variables which are perceived ease of use, perceived usefulness, attitude, habit, social influence perceived behavioral control and behavioral intention. Accordingly, the conceptual framework of this study is proposed in Figure 1, followed by seven hypotheses.



**Figure 1:** Conceptual Framework

**Source:** Created by the author.

**H1:** Perceived ease of use has a significant influence on perceived usefulness of online learning among primary school students.

**H2:** Perceived ease of use has a significant influence on attitude towards use of online learning among primary school students.

**H3:** Perceived usefulness has a significant influence on attitude towards use of online learning among primary school students.

**H4:** Attitude has a significant influence on behavioral intention of online learning among primary school students.

**H5:** Habit has a significant influence on behavioral intention of online learning among primary school students.

**H6:** Social influence has a significant influence on behavioral intention of online learning among primary school students.

**H7:** Perceived behavioral control has a significant influence on behavioral intention of online learning among primary students.

## 4. Research Methods and Materials

### 4.1 Research Methodology

Researcher practices quantitative method of survey distribution to 450 parents of students who have been studying in one of a top primary school in Chengdu, China and have been using online learning for at least one year. The series of questions are screening questions, 5-Likert Scale of measuring items and demographic information. Before the data collection, the index of item-objective congruence (IOC) was conducted, resulting all items rated by three experts were approved at a score 0.67 or above. Furthermore, the pilot test of 50 participants was applied by Cronbach's Alpha reliability, approved at a score 0.70 or over (Nunnally & Bernstein, 1994). After completion of the data collection, the SPSS and SPSS AMOS were used as statistical analytical tools to examine descriptive statistics, normality test, validity test, reliability test, and goodness of fit for measurement and structural models. The statistical approach is based on confirmatory factor analysis (CFA) and structural equation modeling (SEM).

### 4.2 Population and Sample Size

The target population of this study was 450 parents of students who had been studying in one of the top primary schools in Chengdu, China and had been using online learning for at least one year. Primary students were under 18 years old which are considered to be a minor group. Therefore, researcher mainly targeted parents as guardians of primary school students. According to Soper (2022), the minimum sample size was recommended to be at least 425. After a data screening process, researcher finally considered to use 450 responses per appropriate.

### 4.3 Sampling Techniques

The sampling techniques involve nonprobability sampling method, including purposive sampling, quota sampling, and convenience sampling. The data collection

has been taken for approximately six months from October 2021 to March 2022. First, purposive sampling is the selection by researcher's judgement which are parents of students who have been studying in one of a top primary school in Chengdu, China and have been using online learning for at least one year. Next, quota sampling is to select 450 participants from the total of primary school students of 3,400. Finally, convenience sampling is to distribute offline via administration offices and teachers, and online questionnaire via chat application and social medias.

## 5. Results and Discussion

### 5.1 Demographic Information

Demographic results of 450 participants are presented in Table 1. There were 54% of male and 46% of female. For the year of study, most respondents were in the fifth grade, accounting for 28% of the total respondents, followed by the sixth grade of 23%, fourth grade of 17%, third grade of 14%, second grade of 9%, and first grade of 8%. In terms of preference of learning format in the post-pandemic, majority of respondents preferred hybrid learning accounted for 53%, and the least group preferred pure online learning of 5% of the total respondents.

**Table 1:** Demographic Results

Demographic and Behavior Data (N=450)		Frequency	Percentage
Gender	Male	244	54%
	Female	206	46%
Year of Study	Grade 1	38	8%
	Grade 2	42	9%
	Grade 3	63	14%
	Grade 4	77	17%
	Grade 5	125	28%
	Grade 6	105	23%
Preference of learning format in the post-pandemic	Pure Online-Learning	23	5%
	Physical Classroom	189	42%
	Hybrid Learning	238	53%

Source: Created by the author.

### 5.2 Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis (CFA) was applied to examine the significance of items, representing factor loading for discriminant validity (Hair et al., 2006). CFA results were approved due to factors loading values were 0.30 or above and p-values were below 0.05. Additionally, composite reliability (CR) was greater than the cut-off points of 0.7, and the average variance extracted (AVE) was above the cut-off points of 0.5 (Fornell & Larcker, 1981).

Furthermore, Cronbach's Alpha coefficient values were approved at a score 0.70 or above (Nunnally & Bernstein,

1994), which were between 0.773 to 0.887. Subsequently, all estimates were significant as demonstrated in Table 2.

**Table 2:** Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source of Questionnaire (Measurement Indicator)	No. of Item	Cronbach's Alpha	Factors Loading	CR	AVE
Perceived Ease of Use (PEOU)	Khan and Qutab (2016)	4	0.790	0.618-0.784	0.797	0.498
Perceived Usefulness (PU)	Khan and Qutab (2016)	4	0.793	0.668-0.743	0.794	0.492
Attitude (ATT)	Teo (2010)	3	0.887	0.831-0.875	0.887	0.723
Habit (HB)	Tarhini et al. (2017)	4	0.779	0.633-0.742	0.781	0.472
Social Influence (SI)	Tarhini et al. (2017)	4	0.781	0.712-0.659	0.782	0.473
Perceived Behavioral Control (PBC)	Foltz et al. (2016)	4	0.804	0.671-0.741	0.805	0.509
Behavioral Intention (BI)	Khan and Qutab (2016)	4	0.773	0.583-0.798	0.775	0.466

Source: Created by the author.

Goodness of fit for measurement model showed that values of CMIN/DF, GFI, AGFI, NFI, CFI, TLI and RMSEA were all in harmony with empirical data. Without the model adjustment, measurement model's results were within acceptable values and can certify convergent and discriminant validities of the model as of Table 3.

**Table 3:** Goodness of Fit for Measurement Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2006)	414.575/303 = 1.368
GFI	≥ 0.90 (Hair et al., 2006)	0.938
AGFI	≥ 0.90 (Hair et al., 2006)	0.922
NFI	≥ 0.90 (Arbuckle, 1995)	0.918
CFI	≥ 0.90 (Hair et al., 2006)	0.976
TLI	≥ 0.90 (Hair et al., 2006)	0.973
RMSEA	< 0.05 (Browne & Cudeck, 1993)	0.029
<b>Model Summary</b>		<b>In harmony with empirical data</b>

**Remark:** CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, NFI = normalized fit index, CFI = comparative fit index, TLI = Tucker Lewis index, and RMSEA = root mean square error of approximation

Source: Created by the author.

According to Fornell and Larcker (1981), testing for discriminant validity was evaluated by computing the square root of each AVE. Based on these results, the value of discriminant validity is larger than all inter-construct/factor correlations, therefore, the discriminant validity is supportive. In addition, multicollinearity's problem can be examined through correlation coefficient. the factor correlations in Table 4 did not surpass 0.80. As a result, the problem of multicollinearity is not issued (Studenmund, 1992).

**Table 4:** Discriminant Validity

	SI	PU	ATT	HB	PBC	BI	PEOU
<b>SI</b>	<b>0.688</b>						
<b>PU</b>	0.676	<b>0.701</b>					
<b>ATT</b>	0.450	0.686	<b>0.851</b>				
<b>HB</b>	0.444	0.577	0.602	<b>0.687</b>			
<b>PBC</b>	0.335	0.520	0.552	0.571	<b>0.713</b>		
<b>BI</b>	0.227	0.284	0.285	0.238	0.280	<b>0.683</b>	
<b>PEOU</b>	0.513	0.611	0.598	0.632	0.557	0.238	<b>0.706</b>

Source: Created by the author.

### 5.3 Structural Equation Model (SEM)

Goodness of fit for structural model was measured through structural equation modeling (Hair et al., 2006). The causal relationships between variables in the structural model resulted acceptable values after the model adjustment as of Table 5, including CMIN/DF, GFI, AGFI, NFI, CFI, TLI and RMSEA.

**Table 5:** Goodness of Fit for Structural Model

Index	Acceptable Values	Statistical Values Before Adjustment	Statistical Values After Adjustment
CMIN/DF	< 3.00 (Hair et al., 2006)	954.706/317 = 3.012	496.989/310 = 1.603
GFI	≥ 0.90 (Hair et al., 2006)	0.856	0.924
AGFI	≥ 0.90 (Hair et al., 2006)	0.829	0.907
NFI	≥ 0.90 (Arbuckle, 1995)	0.812	0.902
CFI	≥ 0.90 (Hair et al., 2006)	0.865	0.960
TLI	≥ 0.90 (Hair et al., 2006)	0.850	0.955
RMSEA	< 0.05 (Browne & Cudeck, 1993)	0.067	0.037
<b>Model summary</b>		<b>Not in harmony with empirical data</b>	<b>In harmony with empirical data</b>

**Remark:** CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, NFI = normalized fit index, CFI = comparative fit index, TLI = Tucker Lewis index, and RMSEA = root mean square error of approximation

**Source:** Created by the author.

## 5.4 Research Hypothesis Testing Result

Based on its regression weights and  $R^2$  variances, the results of hypotheses were supported with a significance of  $p < 0.05$ . Consequently, among seven hypotheses, only five hypotheses were supported, including H1, H2, H3, H4, and H7, whereas H5 and H6 were not supported. Hypothesis results of the structural equation modeling are exhibited in Table 6.

**Table 6:** Hypothesis Results of the Structural Equation Modeling

Hypothesis	( $\beta$ )	t-value	Result
H1: PEOU→PU	0.731	10.129*	Supported
H2: PEOU→ATT	0.409	5.275*	Supported
H3: PU→ATT	0.390	5.012*	Supported
H4: ATT→BI	0.152	2.176*	Supported
H5: HB→BI	0.018	0.215	Not Supported
H6: SI→BI	0.099	1.423	Not Supported
H7: PBC→BI	0.156	2.000*	Supported

**Note:** \*  $p < 0.05$

**Source:** Created by the author.

The results from Table 6 can be summarized per below:

H1 presents the standardized path coefficient value of 0.731 (t-value=10.129) in the structural pathway. Hence, there is the strongest relationship between perceived ease of use and perceived usefulness. The results are aligned the previous studies that perceived ease of use directly impacts perceived usefulness of students to use online tools (Drueke et al., 2021; Moafa et al., 2018; Ngai et al., 2007; Park, 2009)

H2 confirms the support relationship between perceived ease of use and attitude, accounting the standardized path coefficient value of 0.409 (t-value=5.275) in the structural pathway. In this study, perceived ease of use and attitude of students to use an online learning system are significantly related as agreed by many scholars (Al-Rahmi et al, 2020; Davis, 1989; Teo & Zhou, 2014; Venkatesh et al., 2003).

For H3, perceived usefulness has a significant influence on the attitude with a standardized path coefficient value of 0.390 (t-value=5.012). In the light of this, students perceive usefulness of online learning in the post COVID-19, and it can project the positive attitude toward the use (Islam, 2013; Singh et al., 2020). Consequently, the higher the perceived usefulness of online learning, the more positive attitude of learners to be promoted.

H4 proves the support relationship between attitude and behavioral intention with standardized path coefficient value of 0.152 (t-value=2.176). Numerous literatures have consensus that students' attitudes towards the use of a system or technology is subjected to have an impact on the behavioral intention (Al-Rahmi et al., 2020; Gurban & Almogren, 2022; Riaz et al., 2011; Teo et al., 2019). Therefore, it is suggested that a student's attitude plays a key role to his or her willingness to use an online learning in the post pandemic.

H5 fails to prove that habit has a significant influence on the behavioral intention with standardized path coefficient of 0.088 (t-value=0.215). The findings oppose the earlier studies that a user's habit positively influences behavioral intention (Chao, 2019; Fakhoury & Aubert, 2017). However, some studies also failed to prove the significant relationship between habits and behavioral intention (Venkatesh et al., 2012).

In terms of H6, social influence has an insignificant impact on the behavioral intention, revealing the standardized path coefficient value of 0.099 (t-value=1.423). The results contradict with previous studies that social influence crucially shapes and directs behavioral intention of users in using a system technology (Alzeban, 2016; Park et al., 2012; Yuan et al., 2015; Venkatesh et al., 2003). This can be assumed that online learning during the pandemic is not an option but it is a must for students to continue their learning activities.

H7 verifies that perceived behavioral control significantly influences the behavioral intention with standardized path coefficient value of 0.156 (t-value=2.000). To support this, many studies emphasized that users' capacity and autonomy can contribute to their willingness to perform a certain behavior (Castanier et al., 2013; Ramamonjarivelo et al., 2015; Seow et al., 2017). This study confirms that students who believe in their ability to use online learning will demonstrate behavioral intention to use it in the post-pandemic.

## 6. Conclusions and Recommendation

### 6.1 Conclusion

The study aimed to investigate the factors influencing the acceptance of online learning of students through their parents in a primary school of Chengdu, China in the current scenario of in the post COVID-19 pandemic. The major components of the framework are perceived ease of use, perceived usefulness, attitude, habit, social influence, perceived behavioral control and behavioral intention. The results exhibit that perceived ease of use has a significant influence on perceived usefulness and attitude. Perceived

usefulness has a significant influence on attitude. Attitude and perceived behavioral control significantly influence behavioral intention. In contrast, habit and social influence had no significant influence on behavioral intention of online learning among primary students.

These findings suggest that students' behavioral intention is significantly influenced by attitude and perceived behavioral control. Therefore, the promotion of positive attitude and self-ability to use online learning should be highlighted during the post pandemic. First, the features provided by online learning must be emphasized by teachers and peers more often to encourage behavioral intention to use online learning among students within the current situation of the post-pandemic. Additionally, the proper guidance and timely assistance can enhance positive attitude and perceived behavioral control over the online learning system, schools can shape students' behavioral intention of online learning. Second, online learning offers various features and applications to help students and teachers, as evidenced by the support relationship between perceived ease of use, perceived usefulness and attitude. Therefore, the management should focus such points and encourage them to become familiar with using online learning in the post pandemic. Furthermore, communicating the various benefits of online learning usage would help achieve the milestone.

On the other hand, students do not consider that the habit and social influence impact the use of online learning during the post pandemic because students are familiar with such learning format since during the outbreak. Thus, the proper learning format can be considered by the management as supported in the demographic results that majority of respondents prefer hybrid learning accounted for 53%. This practice can decrease the hesitation and anxiety ratio associated with online learning usage. Furthermore, psychological counseling would also help motivate parents and students to use online learning in the post epidemic.

## 6.2 Recommendation

The outcome of the study provides some recommendations. At first, the framework makes the appropriate technology adoption according to the current phenomena of the post COVID-19 pandemic and its contribution to the education sector to analyze the acceptance of online learning systems. Education managers should emphasize to enhance students' learning efficiency by improving the users' interface and experience in online learning system as perceived ease of use and perceive usefulness are significantly related. Therefore, learners' positive attitude would be escalated when they consider the online learning system is easy to use and a useful during the post pandemic. Besides, enhancing positive attitude toward the use of online learning system could significantly

influences behavioral intention, which should be the foremost goal as students would be motivated to accept the technology if they consider it simple, convenient, and user-friendly. Even in the post pandemic, the benefits of using online learning should be consistently communicated and emphasized to ensure students' ability to control over the usage as evidenced in the significant relationship between perceived behavioral control and behavioral intention. The long-term acceptance of online education can enrich the effective operation and cost saving for schools. Subsequently, it can increase the revenue as schools can also expand the amount of enrollment in the post pandemic for a convenience of parents and students. In this sense, it is suggested that school management should set up a resilient online platform by which facilitators can communicate with learners without difficulties. In addition, the IT department and management can focus to convince parents and students to continue online learning in the post epidemic. Apart from academic course requirement, it is recommended to introduce the other online activities.

Even though habit and social influence have insignificant influence on behavioral intention to use online learning during the post pandemic. Future scholars are recommended to continue examining the effect of these variables. Educators are suggested to reintroduce online programs during the post pandemic. Another benefit would be that parents and students are familiar with the use of online learning since the outbreak. Therefore, school management could emphasize the long-term benefits of the use and the "new normal" as a habit where students do not require to commute to the school every day. Online learning offers knowledge sharing, self-pace and the complete information in one place, which learners can see them at their convenience based on their availability. It lessens the burden and expenses on administration related to keeping the educational material and physical resources. By encouraging the use of online through a practical plan, schools can comfort and better assist parents and students to identify the technology features to accomplish their academic goals. Moreover, social influence of online learning is majorly viewed as the enforcement by teachers and peers. Online learning tools can be designed to engage parents and students more conveniently and efficiency. Hence, it is recommended to promote the engagement in the online atmosphere with any online activities and events. However, primary school students are considered as youth who still need physical interaction and socialization. Globally, although many primary schools have been continuing to use online learning, they still demand students to attend the physical classes and activities to ensure their socializing skills. Therefore, more and more hybrid education format has been widely utilized and accepted with the current educational arrangement.



### 6.3 Limitations and Further Studies

Even though the findings achieve its objectives to investigate online learning adoption during the post pandemic, there are some limitations to be addressed. Firstly, the target population are primarily parents as researchers cannot directly assess students who are under 18 years old. Thus, the data was probably biased by the adults as a representative of students. Secondly, most respondents belonged to a specific region of China (Chengdu), which potentially affect the results. To investigate the samples in other regions, countries, or other age groups such as in higher education would produce different findings. Lastly, other factors can be further explored based on TAM and UTAUT such as facilitating conditions and usage behavior. Which may also differentiate the significant outcome to ensure online learning acceptance among students.

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