

Exploring Motivations for TikTok Usage and Impact Factors of TikTokers' Continuance Intention



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<https://doi.org/10.18280/isi.280214>

ABSTRACT

Received: 15 March 2023

Accepted: 17 April 2023

Keywords:

TikTok, uses and gratifications theory, technology acceptance model, motivations, continuance intention

The objectives of this study are to examine the motivations for people's TikTok usage and the determinants of their continued use of the app. As a relatively new social media gaining unprecedented popularity so rapidly, it begs the question of why TikTokers keep using the app. This study is essential since social media marketers who seek to engage with Chinese consumers on TikTok and platform designers who wish to optimize the app might gain valuable insights from this study. The research model was developed by integrating uses and gratifications theory (UGT) with technology acceptance model (TAM). Based on descriptive analysis, TikTok is primarily used for entertainment (ENT) and information seeking (IS) motivations, followed by sociability seeking (SS) and escape (ESC) motivations, rather than for fashion (FAS) or money making (MM) reasons. Based on an analysis of 421 TikTokers utilizing structural equation modelling (SEM), perceived usefulness (PU) and attitude (ATT) have significant positive impacts on continuance intention (CI) of TikTok usage, whereas perceived ease of use (PEOU) exerts a significant negative effect, quite the opposite of previous research findings. PEOU and PU have both been shown to positively impact ATT toward TikTok. Meanwhile, PEOU has a significant positive effect on TikTok's PU. There is significant positive impact of ENT and IS motivations on PEOU of TikTok, while FAS motivation exerts significant negative impact, whereas ESC, SS, and MM motivations are insignificant. Moreover, it has been revealed that ENT, SS, and IS motivations significantly contribute to TikTok's PU, whereas FAS, ESC, and MM motivations are negligible. A total of twelve hypotheses were supported out of eighteen. Several theoretical and managerial implications have been drawn from the current research.

1. INTRODUCTION

Among the highest growing social networks worldwide, TikTok has established itself as one of the most popular [1]. In 2016, Beijing-based ByteDance launched TikTok as a short video app. Over 3 billion TikTok downloads have been recorded since its debut in 2016 [2]. There are 600 million Chinese users daily on the app who upload, browse, share, and follow content uploaded by other users. While TikTok boasts rapidly growing users, it is also notable for its high level of engagement with users. Despite having only been around for a short time, TikTok is currently the most used app in the world in minutes, surpassing Facebook [3]. This unprecedented popularity of a relatively new social network in such an incredibly short time raises the question of why TikTok users adopt the app and continue to use it.

In this study, we aim to examine people's motivations for using TikTok and the factors determining their continued use. Through the integration of two important theories to generate a more in-depth understanding, this study makes a valuable contribution by closing a major gap regarding the factors which affect the continued TikTok usage. As a conceptual framework, TAM can be applied to explore TikTok acceptance in that it is based on the premise that PEOU and PU have an impact on adoption, and therefore determine

whether the systems will continue to be used in the long-term [4]. UGT seeks to understand how individuals use media. Rather than concentrating on how the media affects consumers, UGT stresses the role that consumers play in choosing certain media forms they can use to meet their psychological and social needs. Goal-oriented people choose media tools based on their needs, knowing what needs they have that need to be met [5]. Here are some of the considerations behind the integration of TAM and UGT. In the first place, TAM and UGT combined can provide a solution to TAM's weaknesses and maintain its strengths while addressing the motivations of users. Furthermore, this integrated model is useful in predicting people's continued use of TikTok.

2. THEORETICAL BACKGROUND

2.1 Technology acceptance model

In 1985, Davis developed TAM to explain technology adoption behavior and was deemed by Chuttur [6] to be the leading model that explains and predicts system use. According to Davis [4], TAM focuses on two predictors of PEOU and PU that help to understand technology usage behaviors. A variety of researchers have often employed TAM

as a means to gain insight into how people perceive their use of different technologies. Scherer et al. [7] report behavioral intentions and technology usage as outcome variables. In relation to the outcomes cited above, PEOU and PU of the system by individuals are key independent variables [8, 9]. Using TAM, it is attempted to develop an understanding of the reasons behind people's adoption or exclusion of a certain technology [4, 10].

It is important to note, however, that TAM does have two limitations. Due to its generality and simplicity, the initial model does not identify antecedents that may have influenced PEOU and PU [11, 12]. Moreover, as Park [12] pointed out, while the model can be used to identify factors influencing individuals' adoption and usage of certain technologies, it cannot adequately explain why people do so. The TAM must, furthermore, include factors related to target technology, context, and users, according to Shyu and Huang [13].

Considering the weakness of TAM, this paper introduces UGT, a commonly applied approach in communication research. As TAM focuses on the technology itself, whereas UGT looks at the motivations and experiences that are generated by the technology, it is crucial to integrate both theories into a broader conceptualization [14].

2.2 Uses and gratifications theory

UGT is an established theory in mass communications that explains how rational individuals choose particular media to fulfill certain socio-psychological needs [15]. In many studies, UGT has been used to examine how individuals utilize different media and the motives behind them. It is possible for people to use identical media for different reasons, as well as to experience different levels of gratifications. With no predefined set of constructs, UGT has been constantly revised and updated as research progresses.

This is not a new area of research to apply UGT to study social media. Using the framework of UGT, a popular line of studies on social media's continued usage emphasizes the impact of distinct gratifications on continuation intentions as seen in Facebook [16, 17], microblogging [18], online games [19], WeChat [20], Instagram [21] and KakaoTalk [22]. The intent to continue TikTok's usage has, however, never been addressed. UGT has been revived and rejuvenated by new forms of media, according to Rubin [23] and Ruggiero [24]. It was suggested by Bucknell Bossen and Kottasz [25] that new media platforms with distinctive features, such as TikTok, could be studied using this theoretical framework.

Unlike TAM, which focuses on external factors, UGT focuses on internal factors. Accordingly, we utilize UGT to identify internal factors of individuals, which is a weakness of TAM. Two reasons justify combining UGT with TAM in this study. Firstly, the combination incorporates user motivations while maintaining TAM's parsimonious nature. Furthermore, this integration enables us to predict the continuation of TikTok usage.

3. RESEARCH MODEL AND HYPOTHESES

Figure 1 illustrates the model created for the current study.

3.1 Continuation intention

In information systems, the intention of individuals to use the system again after acceptance is called CI [26]. The

psychological motivations of users to maintain a certain use of an information system has been emphasized by Bhattacharjee [26]. Ultimately, an information system's success depends not on whether it is accepted, but rather on how it is used over time. In the wake of adoption, CI has been regarded as one of the most important behavioral outcomes. The possibility of users continuing to use TikTok for an extended period of time is defined as CI to use TikTok herein.

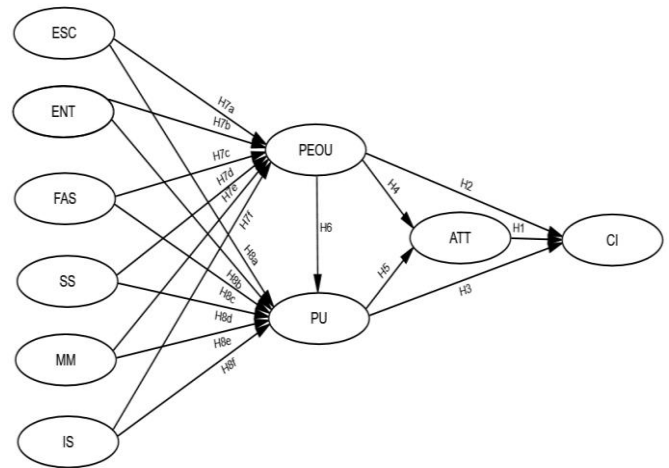


Figure 1. Research model

Note: ESC=Escape; ENT=Entertainment; FAS=Fashion; SS=Sociability Seeking; MM=Money Making; IS=Information Seeking; PEOU=Perceived Ease of Use; PU=Perceived Usefulness; ATT=Attitude; CI=Continuance Intention

3.2 Attitude

A person's ATT toward a certain behavior can be described as their belief about the outcome of their behavior [27]. The ATT towards the behavior is comprised of behavioral beliefs and outcome evaluations, which are interpreted as people's positive or negative assessment and judgement of the behavior, according to Ajzen [28]. It is found ATT is one of the strongest significant predictive factors of behavior intention when it comes to social media [29]. Therefore, we hypothesize the following.

H1: Attitude towards TikTok exerts a significant impact on continuation intention to utilize the app.

3.3 Perceived ease of use & perceived usefulness

Davis [4] introduced TAM, which drew upon the Theory of Reasoned Action and the Theory of Planned Behavior. In TAM, PEOU and PU are two key concepts, which refer to the extent to which people think it can save time and effort when interacting with the system, and their perception of the system's ability to enhance their job performance.

According to Venkatesh [30] and Venkatesh et al. [31], people's PEOU and PU of these technologies are predictive of their intention to make use of them. Across several studies, intention to adopt certain technologies was significantly influenced by both individuals' PEOU and PU for those technologies [30, 32, 33]. However, the study by Camilleri and Falzon [34] as well as the study by Yang and Lee [35] found that only users' PU of digital media streaming is positively related to their behavioral intentions regarding their usage of the services. Accordingly, the following hypotheses are put forth to investigate whether both PEOU and PU influence CI.

H2: Perceived ease of use exerts a significant impact on continuance intention to use TikTok.

H3: Perceived usefulness exerts a significant impact on continuance intention to use TikTok.

According to TAM, external factors affect PEOU and PU directly, thereby indirectly influencing users' willingness to accept a new technology. It is believed that ATTs are influenced by PEOU and PU [4]. Therefore, we hypothesize the following.

H4: Perceived ease of use exerts a significant impact on attitude towards TikTok.

H5: Perceived usefulness exerts a significant impact on attitude towards TikTok.

Since the early 1990s, substantial research has been conducted demonstrating that PEOU positively impacts PU [32]. PEOU and PU have been reported to have positive relationships in a variety of studies [4, 12, 32, 36-40]. According to these theoretical underpinnings, if technologies can be easily used, then people are more inclined to use them. In contrast, when technologies are too complicated or hard to operate, people will not find them useful [34]. Accordingly, the present study hypothesizes what follows.

H6: Perceived ease of use exerts a significant impact on perceived usefulness.

3.4 Gratifications sought/ motivations

This study will employ the six UGT 1.0 gratifications sought explored by Meng and Leung [41] in their research on

TikTok usage. As the first gratification sought, ESC is highlighted, suggesting that people believe by using TikTok, they can escape from work or study, as well as from the people close to them, such as their family members, friends, classmates and colleagues. ENT is another motivation, as people feel the app can entertain them. FAS is a third gratification sought by TikTok users, indicating a desire for FAS and style. As for the fourth motivation, it is SS, meaning users want to maintain contact with their friends and make new friends through TikTok. MM is the fifth gratification sought by TikTok users, as the platform allows users to earn money through live broadcasts and product promotions. In addition, IS is the sixth motivation, suggesting that people utilize TikTok to keep abreast of what's going on [41]. According to Park's [12] study, motivations for communication and instrumentality significantly impact PEOU, PU and subsequently influence the use and adoption of computer-based VoIP phone services. Based on these findings, it was concluded, TAM and UGT integration could be beneficial for examining how other new forms of communication technologies could be accepted by users. Following Park's [12] study, we propose the following hypotheses.

H7: Motivations (a. Escape, b. Entertainment, c. Fashion, d. Sociability Seeking, e. Money Making, f. Information Seeking) exert a significant impact on perceived ease of use.

H8: Motivations (a. Escape, b. Entertainment, c. Fashion, d. Sociability Seeking, e. Money Making, f. Information Seeking) exert a significant impact on perceived usefulness.

Table 1. Demographics of respondents (N=421)

Measure	Items	Frequency	Percentage (%)
Age	<=20	166	39.4
	21-25	186	44.2
	26-30	38	9.0
	31-40	26	6.2
	>=41	5	1.2
Gender	Male	134	31.8
	Female	287	68.2
Education Level	Middle School	8	1.9
	Polytechnic School/ High School	70	16.6
	College/ University	264	62.7
	Graduate School	79	18.8
Years of using TikTok	<0.5 year	112	26.6
	0.5-1 year	67	15.9
	1-2 years	82	19.5
	2-3 years	82	19.5
	3-4 years	52	12.4
	4-5 years	16	3.8
	>5 years	10	2.4
	Less than once every week	148	35.2
TikTok usage frequency	Two to three times every week	67	15.9
	Four to five times every week	32	7.6
	Once every day	37	8.8
	Two to three times every day	54	12.8
	Four to five times every day	26	6.2
	More than five times every day	57	13.5
	<15 minutes	155	36.8
Daily time spent on TikTok	15-30 minutes	73	17.3
	30-60 minutes	103	24.5
	1-2 hours	48	11.4
	2-3 hours	20	4.8
	3-4 hours	11	2.6
	>4 hours	11	2.6

4. METHODOLOGY

4.1 Data collection and sample

The authors obtained ethical approval for this study from University Malaysia Sabah's Research and Ethics Committee. All participants gave their informed consent to participate in this study. Researchers complied with ethical guidelines when gathering data and ensured that all information provided by respondents was used only for research purposes.

Owing to practicality and expense restrictions, it is unrealistic and impossible to research the whole population. Even if it was possible to study the entire population, it is prohibitive in terms of time, costs, and other human resources [42]. To gather data for this research, non-probability sampling methods were used. This is due to the fact that not every unit in the population, namely TikTokers, can be assured to be included in the sample since this is a voluntary survey and only interested respondents are asked to participate. The appropriateness of the sample size may be generally evaluated using the following criteria, according to studies of Tabachnick and Fidell [43] and Comrey and Lee [44]: 100 is considered poor; 200 is considered fair; 300 is considered good; 500 is considered very good; and 1000 or more is considered excellent. As a result, a sample size of over 300 is considered good.

As part of this study, data were collected from July 3 through August 29, 2022 using Tencent's questionnaire (<https://wj.qq.com/>). Convenience sampling was utilized to distribute the online survey link. Only one submission was allowed per IP address. There was no name associated with any of the respondents and all information was voluntarily disclosed. A description of the research scheme and its goals were presented in the questionnaire at the outset. As a means of minimizing meaning errors and guaranteeing accuracy, back translation [45] was employed. The survey, written in English initially, was then translated into mandarin by a linguistically proficient third party before being translated back into English. There is an appendix listing the items measured for the study. Pre-testing was conducted on 44 individuals prior to the survey to make sure every question was well-structured, thorough, and reliable. The pilot study feedback led to the revision of several perplexing questions. There were a total of 505 questionnaires collected. Those questionnaires scoring the same or taking less than two minutes to complete were eliminated from the analysis. In total, 421 valid samples were processed subsequently for analysis. A demographic breakdown of the sampled participants is shown in Table 1. In this sample, 44.2% of the participants are between the ages of 21-25; 39.4% are under 20. As for gender distribution, the majority of samples are female, making up 68.2%. In terms of education level, there are relatively more "College/University" participants with a proportion of 62.7% in the sample. 26.6% of TikTok users have used the platform for less than half a year. For TikTok usage frequency, "Less than once every week" accounts for the highest proportion of 35.2%. There are relatively more people who spend less than 15 minutes on TikTok on a daily basis, accounting for 36.8% of the sample.

4.2 Construct measurement

According to our research model, there are ten constructs, including CI, ATT, PEOU, PU, ESC, ENT, FAS, SS, MM and

IS. Measures of each construct were based on multiple item scales. All measurement instruments derived from existing research were then adjusted in order to fit the TikTok research scenario. Bhattacharjee [26] was the source of items for CI. The list of ATT items was based on Taylor and Todd [46]. Several items from Joo and Sang [32] were modified to serve as PEOU items. There were items for PU that came from Camilleri and Falzon [34]. For ESC, items were drawn from Meng and Leung [41] and Lee et al. [47]. In this study, we modified the items of ENT from Meng and Leung [41] & Tao and Zhu [48]. FAS items were sourced from Meng and Leung [41]. This article borrowed SS items from Meng and Leung [41] and Lee et al. [47]. Modifications to items for MM have been made based on Meng and Leung [41]. A selection of items for IS was taken from Meng and Leung [41]. All measuring items were rated from strong disagreement to strong agreement using a 7-point Likert scale.

4.3 A brief overview of analysis

Data were analyzed via confirmatory factor analysis (CFA) and SEM. In CFA, the underlying latent variable structure is already known, such as in this study, and the validity of the measurement items was evaluated against the proposed factor structures. In the current study, hypotheses were tested using SEM. For estimating relationships among different independent and dependent variables, SEM is commonly used in empirical research. An examination of the factors that influence people's CI when it comes to TikTok was conducted using the two-stage analytical technique developed by Anderson and Gerbing [49].

Reliability and validity tests were undertaken first. To form model fit indices, the ratio of chi-square to degrees of freedom (χ^2/df), the goodness-of-fit index (GFI), the adjusted goodness-of-fit index (AGFI), the incremental fit index (IFI), the comparative fit index (CFI) and the Tucker-Lewis index (TLI), the standardized root mean squared residual (SRMR), the root mean square error of approximation (RMSEA) were combined [50-52]. Cronbach's Alpha (α) and composite reliability (CR) [53] were utilized to test the internal consistency of all constructs in the conceptual model. It was recommended that CR be at least 0.70 to be adequate [54]. The average variance extracted (AVE), the square root of AVE, and the correlation values [55] served to validate our measurement model's convergent and discriminant validity. To assess the convergent and discriminant validity, we checked whether the AVEs of each construct are greater than their correlation with other constructs, as well as whether each item's loading on its assigned construct is higher than that on other constructs [55, 56].

Secondly, this research utilized structural equation analysis for testing the hypotheses, including investigating whether the hypotheses hold and an analysis of the relationships among the different variables under study. Statistical analyses were performed with SPSS 23.0, SPSSAU and AMOS 24.0.

5. THE ANALYSIS OF DATA

5.1 Descriptive analysis

As shown in Table 2, similar to the study results of Meng and Leung [41], people use TikTok primarily for ENT motivation, with a mean of 4.488, followed by IS motivation,

with a mean of 4.089. It is clear from the data that most people don't use TikTok for FAS or MM reasons; the means of these motivations are 2.959 and 2.854 respectively, relatively low compared with other motivations. Most people find TikTok easy to use as the mean of PEOU is 5.341. TikTok is considered useful by most people since the mean of PU is 4.619. The mean of ATT is 4.130, indicating that most people hold a positive ATT toward TikTok use. It looks like most people will keep using TikTok, since the mean score of CI is 4.108.

5.2 An Evaluation of the measurement model

An estimation of this model's goodness of fit began with confirmatory factor analysis (CFA). We applied CFA as a means of evaluating the quality of our proposed measures by examining whether the specific items load accurately under the construct where they belong. It is recommended to have at least two items in a construct, with each item factor loading

being greater than 0.50 [50]. Based on the analysis, all constructs in this study appear to have good measurement properties due to their reflective nature, in accordance with suggestions made by Chin [57] and Fornell and Larcker [55]. The outcomes of CFA can be found in Table 3.

Table 2. Descriptive analysis (N=421)

Constructs	Min	Max	Mean	Std. Deviation	Median
ESC	1.000	7.000	3.196	1.649	3.000
ENT	1.000	7.000	4.488	1.672	4.667
FAS	1.000	7.000	2.959	1.697	2.667
SS	1.000	7.000	3.558	1.780	3.667
MM	1.000	7.000	2.854	1.840	2.333
IS	1.000	7.000	4.089	1.901	4.333
PEOU	1.000	7.000	5.341	1.591	5.667
PU	1.000	7.000	4.619	1.765	5.000
ATT	1.000	7.000	4.130	1.623	4.333
CI	1.000	7.000	4.108	1.775	4.000

Table 3. Confirmatory factor analysis

	CI	PEOU	MM	FAS	ESC	ENT	SS	IS	PU	ATT
CI1	.781	.153	.096	.173	.095	.215	.186	.192	.206	.260
CI2	.844	.144	.094	.181	.073	.148	.144	.139	.221	.156
CI3	.811	.166	.098	.152	.118	.227	.238	.179	.162	.107
PEOU1	.087	.898	.026	.009	-.018	.063	.014	.190	.070	.157
PEOU2	.115	.898	.003	-.038	.024	.083	.016	.106	.168	.127
PEOU3	.161	.840	.091	.038	.012	.095	.155	.037	.275	.043
MM1	.093	.066	.895	.154	.132	.051	.182	.117	.037	.018
MM2	.090	.022	.909	.173	.115	.069	.163	.089	.100	.048
MM3	.049	.042	.876	.242	.079	.042	.186	.109	.064	.098
FAS1	.147	.022	.177	.809	.144	.197	.200	.127	.138	.061
FAS2	.161	-.027	.237	.824	.185	.111	.182	.204	.083	.031
FAS3	.141	.018	.246	.821	.193	.070	.131	.115	.041	.113
ESC1	.114	.060	.003	.038	.785	.292	.015	.176	.054	.127
ESC2	.057	-.007	.177	.211	.856	.041	.157	.050	.060	-.005
ESC3	.048	-.025	.137	.185	.866	.125	.083	.013	.022	.005
ENT1	.165	.103	.047	.038	.288	.759	.237	.175	.166	.154
ENT2	.299	.095	.027	.270	.314	.639	.143	.209	.164	.151
ENT3	.224	.130	.116	.197	.115	.789	.149	.148	.133	.160
SS1	.234	.058	.300	.228	.107	.111	.744	.232	.046	.103
SS2	.149	.122	.245	.156	.116	.235	.769	.122	.207	.066
SS3	.216	.060	.216	.235	.135	.167	.772	.191	.143	.125
IS1	.205	.189	.163	.189	.110	.193	.196	.785	.227	.119
IS2	.255	.148	.176	.235	.116	.123	.212	.769	.193	.132
IS3	.149	.239	.145	.176	.133	.334	.212	.661	.267	.177
PU1	.287	.318	.110	.128	.083	.160	.176	.261	.743	.201
PU2	.310	.329	.095	.106	.085	.195	.174	.273	.682	.247
PU3	.256	.325	.110	.133	.058	.209	.150	.235	.747	.214
ATT1	.305	.314	.079	.133	.109	.318	.136	.254	.331	.594
ATT2	.297	.292	.111	.139	.056	.236	.171	.152	.309	.697
ATT3	.451	.230	.126	.096	.087	.249	.133	.211	.252	.618

Extraction method: principal component analysis

Rotation method: Caesar's normalized maximum variance method

Estimating the measurement model was done using maximum likelihood estimation. According to Table 4, all fit indices except GFI fall within acceptable ranges [50-52]. In spite of this, what worth noting is that Cohen [58] believes 0.80 to be the minimum value of a reasonably good fit, so a GFI value lower than 0.90 might also indicate an adequate fit. Different tests were then performed to evaluate the reliability and validity of the measuring model. As a first step, Cronbach's Alpha (α) and composite reliability (CR) were evaluated to determine the internal consistency within the conceptual model. It is evident that there is strong internal consistency within all constructs, as illustrated by Table 5,

with all Cronbach's α and CR values exceeding the 0.70 cutoff value [53]. Further validation of the measuring model's convergent and discriminant validity was carried out by examining the average variance extracted (AVE), the square root of AVE, and the correlation values. In light of the fact that all of the AVEs in this model, as displayed in Table 5, are greater than the proposed minimal cutoff of 0.50 and that the square roots of the AVEs essentially exceed the correlation values between construct pairs, as illustrated in Table 6, we conclude that the research model appears to have a high degree of convergent and discriminant validity [55].

Table 4. Model fit indices

Fit Index	χ^2/df	SRMR	RMSEA	GFI	AGFI	IFI	CFI	TLI
Recommended Value	≤ 3	< 0.08	< 0.08	> 0.9	> 0.8	> 0.9	> 0.9	> 0.9
Observed Value	2.478	0.067	0.059	0.872	0.840	0.956	0.956	0.949

Table 5. Cronbach’s Alpha (α), composite reliability (CR), and average variance extracted (AVE)

Constructs	Items	Unstd.	S.E.	t-Value	P	Factor Loading	Cronbach’s a	CR	AVE
ESC	ESC1	1.000				0.715	0.855	0.862	0.677
	ESC2	1.124	0.071	15.816	***	0.869			
	ESC3	1.098	0.069	15.819	***	0.874			
ENT	ENT1	1.000				0.868	0.876	0.878	0.705
	ENT2	0.983	0.052	18.798	***	0.817			
	ENT3	0.895	0.047	19.136	***	0.834			
FAS	FAS1	1.000				0.859	0.913	0.915	0.782
	FAS2	1.079	0.043	25.219	***	0.947			
	FAS3	0.974	0.044	22.232	***	0.843			
SS	SS1	1.000				0.852	0.904	0.905	0.760
	SS2	0.967	0.045	21.326	***	0.845			
	SS3	1.047	0.045	23.023	***	0.917			
MM	MM1	1.000				0.920	0.949	0.950	0.863
	MM2	1.051	0.030	35.548	***	0.957			
	MM3	0.998	0.032	31.332	***	0.909			
IS	IS1	1.000				0.955	0.926	0.928	0.811
	IS2	0.952	0.032	29.750	***	0.897			
	IS3	0.861	0.033	26.136	***	0.846			
PEOU	PEOU1	1.000				0.885	0.913	0.914	0.781
	PEOU2	1.047	0.041	25.773	***	0.925			
	PEOU3	0.998	0.044	22.682	***	0.839			
PU	PU1	1.000				0.961	0.959	0.959	0.886
	PU2	0.943	0.025	37.110	***	0.916			
	PU3	0.968	0.023	42.154	***	0.946			
ATT	ATT1	1.000				0.903	0.923	0.924	0.801
	ATT2	0.957	0.036	26.924	***	0.907			
	ATT3	0.973	0.038	25.426	***	0.875			
CI	CI1	1.000				0.934	0.948	0.948	0.858
	CI2	1.017	0.030	33.584	***	0.924			
	CI3	1.041	0.031	33.267	***	0.921			

***P<0.001

Table 6. Construct correlations and discriminant validity

	CI	ATT	PU	PEOU	IS	MM	SS	FAS	ENT	ESC
CI	0.926									
ATT	0.788	0.895								
PU	0.699	0.831	0.941							
PEOU	0.402	0.586	0.616	0.884						
IS	0.637	0.708	0.728	0.444	0.900					
MM	0.329	0.335	0.331	0.138	0.433	0.929				
SS	0.616	0.575	0.566	0.260	0.658	0.576	0.872			
FAS	0.492	0.428	0.411	0.093	0.564	0.533	0.612	0.884		
ENT	0.678	0.749	0.635	0.343	0.677	0.311	0.626	0.530	0.840	
ESC	0.306	0.289	0.257	0.061	0.357	0.354	0.402	0.488	0.548	0.823

Note: AVE square roots are indicated with bold italics on the diagonal. The correlations are off diagonal.

5.3 Examining the structure model

Once the measurements’ goodness-of-fit, reliability and validity had been established, the hypotheses were tested. Detailed results are presented in Table 7, from which we can see that the majority of hypotheses were confirmed.

According to the results, ATT, PEOU and PU significantly affect the CI of TikTok usage. To be specific, the standardized path coefficient (β) value of ATT→CI is 0.672>0, and this path is significant at 0.001 level ($z=8.886$, $p=0.000<0.05$), which shows that ATT has a significant positive impact on CI. The β value of PEOU→CI is -0.141<0, and there is

significance in this path at 0.01 level ($z=-3.088$, $p=0.002<0.05$), suggesting that PEOU exerts a significant negative influence over CI, quite the contrary of what TAM suggests that individuals' PEOU of certain technologies would positively predict their future use of those technologies [7, 9, 37, 39]. The β value of PU→CI is 0.235>0, and this path appears significant at 0.01 level ($z=3.151$, $p=0.002<0.05$), which reveals that PU has a significant positive impact on CI. Hypotheses 1, 2 and 3 are clearly supported. There are significant influences of PEOU and PU on ATT towards TikTok usage, which support their respective hypotheses H4 and H5. The β value of PEOU→ATT is 0.097>0, and this path

presents significance at 0.05 level ($z=2.305$, $p=0.021<0.05$), which demonstrates that PEOU exerts a significant positive impact on ATT. The β value of $PU \rightarrow ATT$ is $0.785>0$, and this path displays significance at 0.001 level ($z=17.535$, $p=0.000<0.05$), indicating that PU has a significant positive impact on ATT. In the meantime, PU of TikTok is significantly affected by PEOU. The β value of $PEOU \rightarrow PU$ is $0.346>0$, and this path yields significance at 0.001 level ($z=9.057$, $p=0.000<0.05$), revealing that PEOU exerts a significant positive impact on PU. Hypothesis 6 is thus supported. Results show that ENT, FAS and IS have significant impacts on PEOU of TikTok, whereas ESC, SS and MM have little impact. The β value of $ENT \rightarrow PEOU$ is $0.217>0$, and this path reaches significance at 0.05 level ($z=2.458$, $p=0.014<0.05$), which suggests that ENT has a significant positive impact on PEOU. The β value of $FAS \rightarrow PEOU$ is $-0.247<0$, and this path is significant at 0.001 level ($z=-3.491$, $p=0.000<0.05$), indicating that FAS exerts a significant negative impact on PEOU. The β value of $IS \rightarrow PEOU$ is $0.467>0$, and this path exhibits significance at 0.001 level ($z=5.891$, $p=0.000<0.05$), meaning that IS has a

significant positive impact on PEOU. The three paths ESC ($z=-1.754$, $p=0.079>0.05$), SS ($z=-0.179$, $p=0.858>0.05$), and MM ($z=0.784$, $p=0.433>0.05$) \rightarrow PEOU do not show any significance. Therefore, ESC, SS, and MM do not have any significant impact on PEOU. Accordingly, hypotheses 7b, 7c, and 7f hold, while hypotheses 7a, 7d and 7e do not. As well as that, ENT, SS and IS significantly contribute to PU of TikTok, whereas ESC, FAS and MM have negligible effects. The β values of ENT and IS \rightarrow PU are 0.266 and 0.345 respectively, both >0 , and the two paths ENT ($z=4.492$, $p=0.000<0.05$) and IS ($z=6.272$, $p=0.000<0.05$) achieve significance at 0.001 level, which confirms that ENT and IS have significant positive impacts on PU. The β value of $SS \rightarrow PU$ is $0.110>0$, and this path displays significance at 0.05 level ($z=2.012$, $p=0.044<0.05$), showing that SS exerts a significant positive impact on PU. The three paths ESC ($z=-1.910$, $p=0.056>0.05$), FAS ($z=0.535$, $p=0.593>0.05$), and MM ($z=0.275$, $p=0.783>0.05$) \rightarrow PU do not appear to be significant. Therefore, ESC, FAS, and MM do not have significant impact on PU. In this regard, hypotheses 8b, 8d, and 8f stand supported, whilst hypotheses 8a, 8c, and 8e are rejected.

Table 7. Tests of hypotheses

Research Hypothesis	Path Relations		Unstd.	S.E.	Z	P	Std.	Results
H1	ATT	\rightarrow CI	0.718	0.081	8.886	***	0.672	Supported
H2	PEOU	\rightarrow CI	-0.162	0.053	-3.088	0.002	-0.141	Supported
H3	PU	\rightarrow CI	0.230	0.073	3.151	0.002	0.235	Supported
H4	PEOU	\rightarrow ATT	0.104	0.045	2.305	0.021	0.097	Supported
H5	PU	\rightarrow ATT	0.718	0.041	17.535	***	0.785	Supported
H6	PEOU	\rightarrow PU	0.409	0.045	9.057	***	0.346	Supported
H7a	ESC	\rightarrow PEOU	-0.119	0.068	-1.754	0.079	-0.115	Rejected
H7b	ENT	\rightarrow PEOU	0.203	0.083	2.458	0.014	0.217	Supported
H7c	FAS	\rightarrow PEOU	-0.230	0.066	-3.491	***	-0.247	Supported
H7d	SS	\rightarrow PEOU	-0.013	0.073	-0.179	0.858	-0.015	Rejected
H7e	MM	\rightarrow PEOU	0.042	0.054	0.784	0.433	0.050	Rejected
H7f	IS	\rightarrow PEOU	0.365	0.062	5.891	***	0.467	Supported
H8a	ESC	\rightarrow PU	-0.101	0.053	-1.910	0.056	-0.083	Rejected
H8b	ENT	\rightarrow PU	0.293	0.065	4.492	***	0.266	Supported
H8c	FAS	\rightarrow PU	0.028	0.052	0.535	0.593	0.025	Rejected
H8d	SS	\rightarrow PU	0.114	0.056	2.012	0.044	0.110	Supported
H8e	MM	\rightarrow PU	0.011	0.042	0.275	0.783	0.012	Rejected
H8f	IS	\rightarrow PU	0.319	0.051	6.272	***	0.345	Supported

*** $P<0.001$

6. DISCUSSION AND CONCLUSION

6.1 Discussion

As per survey results, TikTok is used primarily for ENT and IS motivations, followed by SS and ESC motivations, similar to that of Meng and Leung [41]. Based on the data, contrary to what Lu and Lu [59] and Meng and Leung [41] claimed, it is evident that most people don't use TikTok for FAS or MM reasons. The participants believe that using TikTok helps them relax or rest, as well as relieve their stress, in line with studies on UGT, in which scholars conclude that media technologies are often viewed as forms of ENT [60-62]. To satisfy their information needs, most respondents use TikTok to keep up with recent events and to find interesting information, which is also consistent with previous research [10, 63]. Contrary to Mull and Lee [64] and Vaterlaus and Winter [65], the current research finds most people do not use TikTok for FAS or MM motivations. As for FAS, the finding of this research is

supported by Curras-Perez et al. [66], who claimed that people use social networks to form social links with friends, family, and acquaintances, and to have fun and entertainment, rather than being fashionable or up-to-date. According to Meng and Leung [41], MM is an additional motivation for TikTokers to use the platform to earn money through livestreaming and product promotion. Despite the fact that our research findings do not support it at present, TikTok's commercial and money-making advantages may become increasingly important as more users adopt the app and continue to use it [65].

This study shows that people generally perceive TikTok as an easy-to-use and useful application, in agreement with Vaterlaus and Winter [65]'s finding. Participants find it easy to learn how to operate TikTok, with most reporting no difficulty using the app skillfully. Furthermore, they have an easy time interacting with TikTok thanks to its simple interface, similar to what Vaterlaus and Winter [65] found. With TikTok, people are able to access content faster than with traditional video services, providing them with a useful

alternative, consistent with Lu and Lu [59]. Additionally, TikTok offers a better experience when it comes to watching informative or entertaining videos, the same as Wang [67] mentioned. Besides that, TikTok also facilitates people's studies or work, which Scherr and Wang [68] also noted. Most people have a positive ATT toward TikTok since they find it enjoyable and satisfying to use the service and consider using it a good idea. Consequently, much of the research participants are committed to using TikTok and to doing so regularly in the future.

Based on SEM analysis, PU and ATT are significant positive antecedents of people's intention to continue using TikTok, whereas PEOU is a significant negative predictor, contrary to what many researchers have reported PEOU to be a positive predictor, such as Kim and Wang [69], Dhir et al. [70] and Dalvi-Esfahani et al. [71]. When the usefulness of TikTok is perceived and a positive ATT towards the app is established, people are more likely to continue using the service. Yet, the easier the software is to operate, the more likely users are to discontinue using it. Possibly, due to the simplicity of the platform, it may be easy for people to become addicted to it, thereby wanting to get rid of it. As Vaterlaus and Winter [65], Chakraborty et al. [72] and Lu et al. [73] have pointed out, people avoid TikTok due to concerns about low-quality content and vulgarity, as well as potential time-wasting. While PEOU significantly influences PU in a positive way, both PEOU and PU have significant positive impacts on ATT. This means people are more likely to perceive TikTok's usefulness if they perceive its ease of use. Additionally, when people perceive TikTok as easy to use and useful, they will develop a more favorable ATT towards it. PEOU of TikTok is significantly influenced by ENT and IS in a positive way, by FAS in a negative way, while ESC, SS and MM have only limited influences. In other words, people who use TikTok for ENT and IS purposes are more likely to find the app easy to use. Nevertheless, the more people use TikTok for FAS motivation, the more people will find the software hard to use. It could be that TikTok is only a popular social media that can't meet people's FAS needs. Moreover, ENT, SS and IS stand to have significant positive effects on PU of TikTok, in contrast to ESC, FAS and MM, which have negligible effects. This means that the more people use TikTok for ENT, SS, and IS motivations, the more useful it will be to them.

Social media such as TikTok have seen a surge in use following the unexpected spread of Coronavirus epidemic and its resulting social distancing measures. Paid streaming services also saw a spike in subscriptions [74]. A positive ATT and a perception of ease of use and usefulness of media platforms like TikTok would encourage consumers to continue entertaining themselves and searching for interesting information on the software.

6.2 Theoretical implications

Theoretical contributions of this research are as follows. To begin with, by integrating UGT and TAM in a single theoretical framework, the current study advances the existing literature. To understand how information and communications technologies are adopted, UGT and TAM are both well-known theories. UGT is concerned with intrinsic factors of information system adoption, whereas TAM focuses on extrinsic factors, so this study utilized UGT to shed light on individual users' intrinsic motivations, a weakness of TAM. In this study, we successfully developed a model that would be

able to explain and predict the CI for TikTok users. This study also explores the antecedents of PEOU and PU. The research model can assist in addressing not only the underlying research questions, but also to examine why people continue to engage in other popular social media similar to TikTok. To some extent, the current work is a novel attempt combining UGT and TAM to examine people's motivations for using newer social media, such as TikTok, and their CI towards them.

Furthermore, as TikTok continues to grow, this research serves as a springboard for further academic exploration of topics that have yet to be explored. Based on our findings, TikTok users have different motives than those who use other social media platforms. As far as TikTok use motives are concerned, most users prioritize ENT and IS. Due to social media's predominant role as a "social" tool, previous social media UGT studies have focused on the importance of social interaction [75]. On TikTok, users primarily seek ENT and information, while the majority consumes content, whereas the minority builds communities and interacts with others.

6.3 Practical implications

This study provides valuable insights for social media marketers seeking to connect and engage with Chinese consumers on TikTok. As a start, marketers who are interested in TikTok influencer marketing need to take into account the motivations of its users. TikTok users mainly consume time for ENT and IS, so practitioners must develop entertaining and informative contents that meet their primary needs. Aside from that, social media marketers should understand consumers' motivations, as well as their CI on the platform in order to collaborate with appropriate influencers to accomplish a variety of influencer marketing goals.

TikTok platform designers can also benefit from our findings. TikTok users tend to use the platform more for ENT and IS motivations than for FAS or MM. To satisfy people's need for ENT, platform designers should include features that help them express their enjoyment during consumption, such as avatars and emojis [76]. Also, more convenient search methods will help people find relevant information more easily, such as adding hashtag search function to satisfy their need for IS by making it easy to find videos they've watched recently. SEM results show that PU and ATT are significant positive antecedents of people's intention to continue using TikTok, whereas PEOU is a significant negative predictor, which could be explained by its simplicity, allowing people to become addicted easily, and thus want to get rid of it. Consequently, TikTok designers should strive to make users feel that the platform is useful and maintain their positive ATT towards it. As well as that, the designers should develop a mechanism that will prevent addiction, so that users won't stop using the software completely because they feel too addicted to it.

6.4 Research limitations and future directions

A few research limitations should be noted, along with directions for future research. As a result of the COVID-19 epidemic, a nonprobability sampling was utilized to draw the sample for this research, and therefore, the sample for this study was neither representative nor diversified. Therefore, when interpreting the findings, one should keep in mind that the research may not be generalizable. Moreover, our survey had a much higher percentage of female participants than male

participants. An appropriate sample of Chinese TikTok users should be recruited with a balance of male and female respondents in future research. A further limitation of this study could be that the six motivations examined here are inadequate to account for the time users spend on TikTok. Future TikTok research can explore other motivations, as well as the relationship between motivations and users' CI, which has not been explored thus far.

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APPENDIX

Measurement Items

Escape (ESC) adapted from Meng and Leung [41] and Lee et al. [47]

ESC1: I use TikTok as a way to escape temporarily from what I am doing, like studying or working.

ESC2: I use TikTok as a great way for me to escape temporarily away from other people, such as classmates, coworkers, family members and friends.

ESC3: It is my way of escaping from reality through TikTok.

Entertainment (ENT) adapted from Meng and Leung [41] and Tao and Zhu [48]

ENT1: Using TikTok helps me relax.

ENT2: I use TikTok as a way to rest.

ENT3: Using TikTok can relieve my stress.

Fashion (FAS) adapted from Meng and Leung [41]

FAS1: I use TikTok as a way of looking stylish.

FAS2: Fashion is what drives me to use TikTok.

FAS3: I use TikTok to avoid looking old-fashioned.

Sociability Seeking (SS) adapted from Meng and Leung [41] and Lee et al. [47]

SS1: TikTok is a great app for meeting new people.

SS2: TikTok allows me to interact with a wide range of people.

SS3: I use TikTok as a way of maintaining good relations with others.

Money Making (MM) adapted from Meng and Leung [41]

MM1: Using TikTok allows me to earn money by broadcasting live streams.

MM2: By promoting products on TikTok, I can earn money.

MM3: By using TikTok, I can earn money.

Information Seeking (IS) adapted from Meng and Leung [41]

IS1: I use TikTok to keep up with recent events.

IS2: TikTok is my go-to app for finding news and information.

IS3: Finding interesting information on TikTok is something I do with the app.

Perceived ease of use (PEOU) adapted from Joo and Sang [32]

PEOU1: The process of learning how to operate TikTok is easy for me.

PEOU2: Being able to use TikTok skillfully comes easily to me.

PEOU3: It is easy for me to interact with TikTok.

Perceived usefulness (PU) adapted from Camilleri and Falzon [34]

PU1: In comparison to traditional video services, TikTok provides me with faster access to the content I want.

PU2: TikTok gives me a better experience when it comes to watching informative or entertaining videos.

PU3: TikTok makes my study/work easier.

Attitude (ATT) adapted from Taylor and Todd [46]

ATT1: As a user of TikTok, I find it enjoyable.

ATT2: The TikTok service I'm using is satisfying to me.

ATT3: Using TikTok seems like a good idea to me.

Continuance Intention (CI) adapted from Bhattacharjee [26]

CI1: Using TikTok is something I intend to continue doing, so I'm not abandoning it.

CI2: Rather than using another replacement application, I intend to keep using TikTok.

CI3: I will use TikTok regularly.