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INFLUENCE OF TIKTOK USAGE TOWARD POSITIVE EMOTION AND RELATIONSHIP

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Abstract

TikTok is a new kind of social media. Because of its multi-functional characteristics and video streaming media form, TikTok has become universally prevalent and has attracted high number of users. Thus, an increasing number of individuals begin to utilize TikTok for different purposes, such as for entertainment, seeking information, achieving knowledge, pressure releasing, filling in leisure time and so on. However, excessive usage of TikTok has led to a series of issues as it is impacting users' emotions and relationships. For instance, some users have ignored their family and friends in their real life as a result of indulgence in TikTok, which may significantly impact on their interpersonal relationships eventually. Similarly, others feel frustrated and depressed after browsing TikTok for a long time. This research is conducted to learn more about the influence of TikTok usage toward positive emotions and relationships among TikTok users in China. Quantitative research method by survey approach is adopted in this study. A total of 244 online questionnaires are collected in this study. Data analyses including descriptive analysis, means, standard deviation, T-test, one-way ANOVA and multiple regression are employed via IBM SPSS software version 25. The results indicate that attitudes toward TikTok including both perceived usefulness and perceived ease of use significantly influence positive emotions and relationships among TikTok users in China. Finally, it is hoped that this study could remind TikTok users to view the negative effects of TikTok usage and use TikTok reasonably in the future.

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Keywords: Attitudes toward TikTok, positive emotion, positive relationship, TikTok usage patterns, TikTok users

1. Introduction

According to the statistical result from Sensor Tower, TikTok was downloaded more than 188 million times in the first quarter of 2019, making it become the first leading downloaded social media App in the world (SensorTower, 2019). Strong technical strength and good product experience enable TikTok to harvest many users. TikTok offers users a free platform to express themselves and build new relationships (Omar & Dequan, 2020). It was reported that "music dubbing", "funny story", "mind relaxing" were the major charm factors spellbinding TikTok users (Feng et al., 2019). Provincial Health Committees and other authorities of China have registered official accounts on TikTok (Zhu et al., 2020). To sum up, the user base of TikTok has gained rapidly.

2. Problem Statement

Several scholars have found that there are various videos of "positive energy" on TikTok in China, which could bring positive emotions and positive relationships to TikTok users in China (Chen et al., 2020). It was stated that the main motivations for using TikTok are entertainment and social contact among TikTok users in China. Entertainment helps users to relax and have fun, which could produce positive emotions for users. Whilst, social contact allows users to share rich experiences, tell interesting life stories, help others solve difficulties and so on, which is very useful to foster positive relationships (Lu & Lu, 2019). However, TikTok usage still have some issues that cannot be ignored currently. For instance, TikTok has been the subject of troubling reports about its "dark" side, which is reportedly filled with child predators, dark patterns, teens bullying and so on. These issues are very harmful to positive emotions and relationships of users (Perez, 2019). Researchers have argued that some of the videos on TikTok have an extremely negative impact on users' emotions. The negative emotions make some users feel desperate for life. Even when users share videos with each other on TikTok, there is a contagion of negative emotions among them (Lu & Lu, 2019). Moreover, TikTok over usage has led to TikTok addiction. Consequently, TikTok users were addicted to using TikTok and ignored communication with family and friends, even kept themselves away from relationships in real life (Lu & Lu, 2019; Lu et al., 2020). Additionally, Lu et al. (2020) revealed that a number of videos on TikTok are with twisted values, which is not conducive to building positive relationships. Previous studies focused on TikTok to investigate travel intention (Bian & Zhu, 2020; Du et al., 2020), purchase intention (Wang, 2019), information service quality of the Chinese government accounts on TikTok (Chen & Zhang, 2020), usage motivation (Omar & Dequan, 2020), continuous usage intention (Ma et al., 2019; Susilo, 2020) and so on. Nevertheless, few studies have probed how TikTok usage would affect positive emotion and relationships among TikTok users in China. To fill in the gap, this current study aims to examine how TikTok usage would influence positive emotion and relationship among TikTok users in China.

3. Research Questions

3.1. Influence of TikTok usage toward positive emotion and relationship

It was reported that Facebook usage significantly affected on students with low self-esteem when they used Facebook for social activities. The scholars further argued that long time usage on Facebook was associated with lower self-esteem, while having a lot of Facebook friends had a positive association with social adaption and attachment of high school students to university (Kalpidou et al., 2011). Moreover, it was found that time spending with existing friends through instant texting online had a positive impact on the active relationship (Valkenburg & Peter, 2011). Based on previous studies, research question 1 was raised.

- What are the influences of TikTok usage patterns on positive emotion and relationship?

Past studies employed the Technology Acceptance Model (TAM) to study the attitudes of users toward new technologies. TAM aimed to predict and identify users' acceptance toward a new technology (Davis, 1989). TAM has been adopted to identify how perceived technology beliefs, task-technology fit, attitudes toward technology and self-efficacy could affect users' behavioural intention to accept the technology (Lam et al., 2007). Nonetheless, there is still a research gap on the study and understanding of the acceptance of technology at TikTok. Few studies have determined the attitudes toward TikTok among users in China. Therefore, this current study is designed to evaluate the influence of attitudes toward TikTok on positive emotion and relationships among users by applying TAM theory. Research question 2 was carried out in accordance with the literature review.

- What are the influences of attitudes toward TikTok on positive emotion and relationship?

3.2. Influence of users' demographic characteristics toward TikTok usage and positive emotion & relationship

Demographic characteristics are also important factors to study social media usage. Several researchers considered demographic characteristics of users as indicators to predict social media usage behaviors. It was shown that there were great differences between gender in motivations for using Weibo, with high frequency usage of female users (Hwang & Choi, 2016). Conversely, Pang (2018b) found that males used WeChat more often than females. In addition, Pang (2018a) stated that education level was significantly associated with active Weibo usage. The findings displayed that users with lower education level use Weibo pretty more frequently. According to these findings, another 3 questions were addressed:

- How can users' demographic characteristics influence TikTok usage patterns?
- How can users' demographic characteristics influence attitudes toward TikTok?
- How can users' demographic characteristics influence positive emotion and relationship?

4. Purpose of the Study

The purpose of this research was:

1) To identify the influence of TikTok usage patterns on positive emotion and relationship, 2) To examine the influence of attitudes toward TikTok on positive emotion and relationship, 3) To determine

whether users' demographic characteristics could influence TikTok usage patterns, 4) To investigate whether users' demographic characteristics could influence attitudes toward TikTok, and 5) To estimate the influence of users' demographic characteristics on positive emotion and relationship.

4.1. Research Model

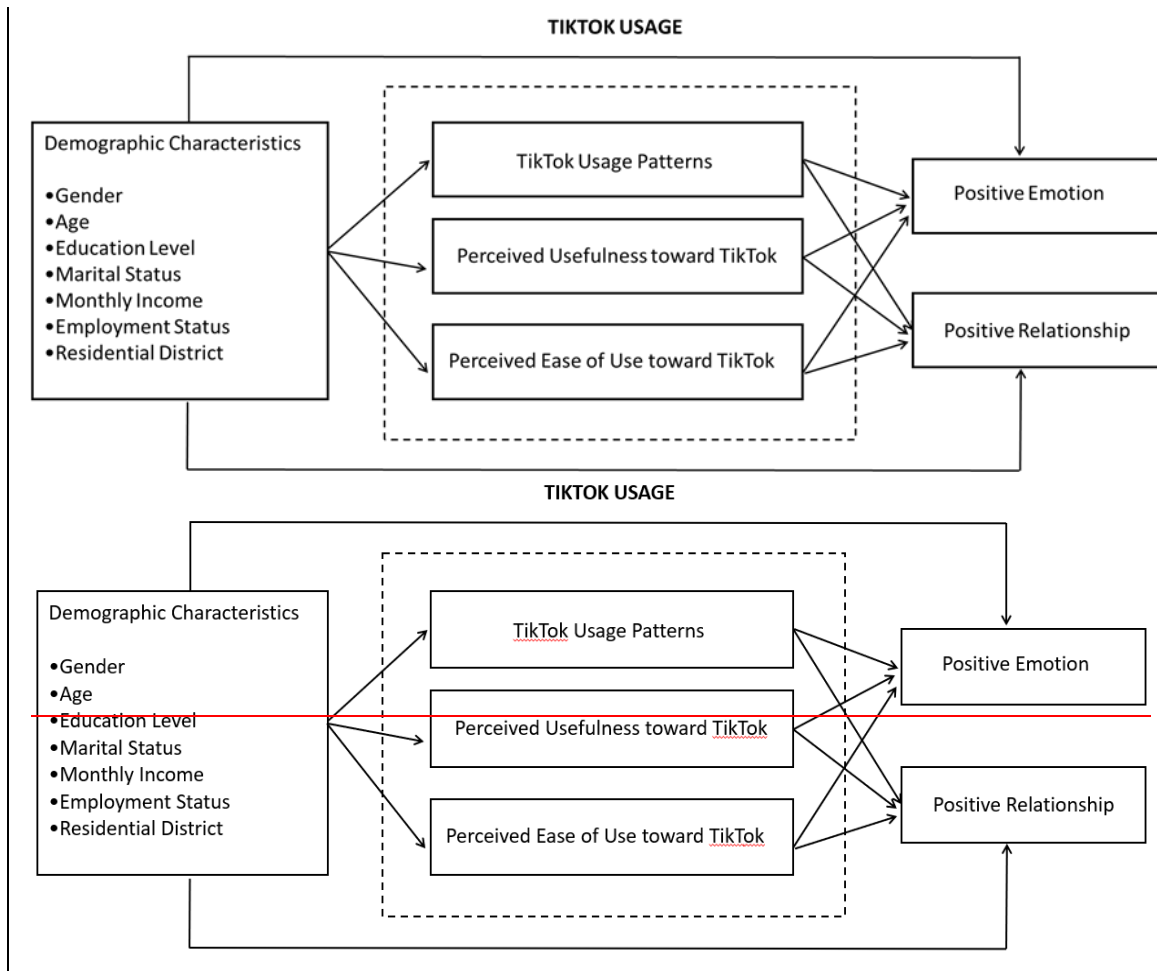Figure 1 has illustrated the conceptual research framework for this present study.

Figure 1. Conceptual research framework

5. Research Methods

5.1. Sample Size

A quantitative approach by survey method was utilized in this study. In accordance with research model in this study, the total sample size should be more than 129 based on G*Power (Faul et al., 2007; Faul et al., 2009) software 3.1.9.2 version.

5.2. Data collection

Snowball sampling technique was employed in this study to collect primary data. The questionnaires were distributed to the participants online using the portal Wenjuanxing. All the participants volunteered to fill in the questionnaire. Ultimately, a total number of 244 respondents took part in this study. 84.02 percentage of the respondents reported that they have used TikTok. In this study, only TikTok users were included. Additionally, after eliminating the outliers, the number of qualified respondents is only 177.

5.3. Measurement

Demographic prolife: Table 1 illustrated the demographic characteristics of the TikTok users in details. Byrne (2010) and Hair et al. (2010) argued that if the value of Skewness is in the range of ± 2 and value of Kurtosis falls between ± 7, it could be indicated that the data is normally distributed. Based on this benchmark, the data of age is normal.

Table 1. Demographic profiles of TikTok users (N = 177)

Variable	N	%	Min	Max	Mean	SD	Skewness	Kurtosis
Gender								
Male	90	50.8						
Female	87	49.2						
Age			18.00	54.00	26.35	6.51	1.95	4.49
Education background								
Senior high school or below	9	5.1						
Diploma	23	13.0						
Bachelor	109	61.6						
Master or above	36	20.3						
Marital status								
Unmarried	134	75.7						
Married	43	24.3						
Monthly income								
< ￥2,000	63	35.6						
￥2,000 – 5,000	40	22.6						
￥5,001 – 8,000	26	14.7						
￥8,001 – 10,000	16	9.0						
> ￥10,000	32	18.1						
Employment status								
Student	56	31.6						
Unemployed	11	6.2						
Full-time employment	92	52.0						
Part-time employment	5	2.8						
	11	6.2						
	2	1.1						

Self-employed		
Retired		
Residential zone		
Rural	33	18.6
Urban	144	81.4

TikTok usage patterns: The specific measurement items were listed in Table 2. According to Hair et al. (2010) and Byrne (2010), all the variables were normally distributed except followers on TikTok account (skewness = 10.20, kurtosis = 109.88).

Table 2. Measurement of TikTok usage patterns

Variable	Min	Max	Mean	SD	Skewness	Kurtosis
Do you use TikTok? – Yes / No. (nominal data)						
How long have you been using TikTok? ___month(s)	.50	48.00	16.30	12.00	.64	-.48
On an average how many times in a day do you start-up TikTok?	1.00	10.00	3.08	1.97	1.52	2.91
On an average how many hours in a day do you spend on TikTok?	.10	5.00	1.28	.89	1.37	2.42
In a week, how many days do you log on to TikTok?	1.00	7.00	5.12	1.98	-.70	-.73
How many followers do you have on TikTok?	.00	50,000.00	564.89	4325.34	10.20	109.88

Perceived usefulness toward TikTok: All the items are defined as 5-point Likert scale retrieved from (Tsai et al., 2001). Respondents were asked to circle the answers 1-5 related to these questions: *TikTok: 1) allows me to do more interesting things, 2) enlarges my social networking, 3) makes a great contribution to human communication, 4) helps me acquire relevant information I need, 4) is able to replace other social media video applications, 5) enhances communication with closely related persons.*

Perceived ease of use toward TikTok: All the items were 5-point Likert scale retrieved from (Davis, 1989), and this study has changed the original electronic mail into TikTok. The questions were

listed: *"1) Learning to operate TikTok is easy. 2) I feel it easy to get TikTok to do what I need it to do. 3) It is easy for me to remember how to perform tasks using TikTok. 4) My interaction with TikTok is transparent. 5) Interacting with TikTok does not request a lot of effort. 6) I feel it is easy to be skilful at using TikTok"* (Davis, 1989, p. 324).

Positive emotion and positive relationships: All the questions were 5-point Likert scale. The higher scores represented more positive emotion and relationships. All the measurement items were retrieved from (Kern et al., 2015). Items under the construct positive emotion: *When I use TikTok, I often felt: 1) cheerful. 2) strong. 3) happy. 4) active. 5) energetic. 6) excited.* Indicators under the subscale positive relationships were: *"1) My relationships are supportive. 2) My relationships are rewarding. 3) I actively contributed to the happiness and well-being of others. 4) When something good happens to me, I have people in my life that I like to share the good news with. 5) I have friends that I really care about. 6) There are people in my life who really care about me. 7) When I have a problem, I have someone who will be there for me"* (Kern et al., 2015, p. 266).

All the subscales were listed in table 3 as well as normality and reliability assessment. All the data were normal (Byrne, 2010; Hair et al., 2010). Based on the benchmark of Nunnally, the instrument was reliable (Nunnally, 1978). As all Cronbach's α coefficients in this study ranged between .80 and .90.

Table 3. Normality, reliability assessment of attitudes toward TikTok, positive emotion & relationship

Variable	Mean	SD	Skewness	Kurtosis	Cronbach's α
Perceived usefulness toward TikTok	3.16	.59	-.29	1.98	.80
Perceived ease of use toward TikTok	3.68	.58	-.59	1.87	.83
Positive emotion	3.53	.68	-.31	.34	.90
Positive relationship	3.86	.54	-.82	3.57	.88

6. Findings

6.1. Research question 1 & 2

Multiple regression analysis shows that under TikTok usage patterns, only the duration of using TikTok contributed to positive relationship at the 0.05 confidence level (R^2 = .054, β = .173, p = 0.030). The results reported that TikTok usage patterns do not predict positive emotions. In addition, R^2 of .328 shows that 32.8% of the variation in rating of the accuracy of positive emotion is explained by the regression. The model fit is very good as the R^2 value .328 is greater than .30 (Norušis, 2008). It referred to that attitudes toward TikTok including both perceived usefulness (β = .309, p = 0.000) and perceived ease of use (β = .376, p = 0.000) significantly influence positive emotion of users. Meanwhile the results displayed that attitudes including both perceived usefulness (β = .222, p = 0.001) and perceived ease of

use (β = .484, p = 0.000) significantly contribute to 36.8% of variance (R^2 = .368) towards users' positive relationship as well.

6.2. Research question 3 to 5

Independent sample t-test revealed the means for TikTok usage duration (mean = 16.75, SD = 12.55), times start-up TikTok per day (mean = 3.19, SD = 2.04) , average hours for using TikTok per day (mean = 1.22, SD = 0.88), days for using TikTok per week (mean = 5.01, SD = 2.07) of male have no significant difference with that of female (TikTok usage duration: mean = 15.63, SD = 11.51; average times per day: mean = 3.00, SD = 1.82; average hours per day: mean = 1.31, SD = 0.91; days per week: mean = 5.08, SD = 1.96). The results also shown that there is no difference between gender and attitudes toward TikTok as well as positive emotion. However, there is a significant difference between gender and positive relationships among TikTok users in China at the 0.05 α level, t (175) = -2.425, p = 0.016. The results also depicted that the mean for perceived ease of use toward TikTok of those who have not married yet was 3.73 (SD = 0.57), perceived ease of use of those who already married was 3.52 (SD = 0.58), it delineated that there is a difference between marital status and perceived ease of use toward TikTok, t (175) = 2.016, p = 0.045. Furthermore, the results shown that the means for positive emotion (Mean = 3.32, SD = 0.62) and relationship (Mean = 3.68, SD = 0.45) of users living in rural zone had a difference with that of users who live in urban area (positive emotion: Mean = 3.58, SD = 0.68; positive relationship: Mean = 3.91, SD = 0.56) with the context of t (175) = -2.010, p = 0.046 for positive emotion and t (175) = -2.134, p = 0.034 for positive relationship.

One-way ANOVA test exhibited that there are statistically significant differences between education level and average times to start-up TikTok per day (F = 3.410, p = 0.019) as well as average using hours per day (Kruskal-Wallis H = 8.655, df = 3, p = 0.034), the results showed that users with higher education level start-up TikTok fewer times per day and use TikTok fewer average hours per day. The results also illustrated that there is no statistically significant difference between monthly income of users and TikTok usage as well as positive emotion & relationship among TikTok users in China.

Correlation analysis results demonstrated age of respondents was only statistically significant negative associated with perceived ease of use (r = -.185, p < 0.01). It was indicated that the older perceived more negative toward ease of using TikTok.

7. Conclusion

Based on the findings, TikTok usage patterns did not influence positive emotion of TikTok users whilst only duration of using TikTok made a weak contribution to positive relationships. Nevertheless, attitudes toward TikTok containing perceived usefulness and perceived ease of use have a great prediction on positive emotion and positive relationship. Additionally, users' age had a statistically significant negative relationship with perceived ease of use toward TikTok. Similarly, there is a significant difference between marital status and perceived ease of use toward TikTok. What's more, users' education background influenced TikTok usage patterns especially the average times and hours of using TikTok per day. In the end, users' demographic profiles also influenced positive emotion and

relationships. For instance, there is a difference between gender and positive relationships among users. Meanwhile, users in urban China reported more positive emotion and relationship than those in rural area.

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