

An Empirical Research on The Application of Mobile Short Video in Higher Normal Undergraduate Colleges and Universities

——Taking Tik Tok Platform as An Example

Xueli Li^{1,*}, Xia Xiao²

¹College of Education, Shandong Women's University, Jinan, China

²College of Marxism, Shandong Technology and Business University, Yantai, China

* Corresponding author. e-mail: lixuehappy@163.com

e-mail: 116331387@qq.com

Abstract

With the rapid development and wide application of mobile short video technology, it has gradually been "favored" by some higher normal undergraduate colleges and universities. A growing number of higher normal undergraduate college and universities have opened mobile short video accounts, which can promote the development of various education and teaching work, and increase the reputation of the school through publicity. In this study, the accounts of Tik Tok short videos of officially certified higher normal undergraduate colleges and universities were selected as the analysis objects, and SPSS software was used as the analysis tool to carry out a statistical analysis of their dissemination status. In general, it includes descriptive statistical analysis of the number of works, fans and likes of each account; correlation analysis between the number of works, fans and likes; and In-depth analysis of the specific contents of typical accounts. The research shows that the development of short video in higher normal undergraduate colleges and universities is still in the exploratory stage. The number of higher normal undergraduate colleges and universities that carry out short video dissemination, the number of works, especially the quality and effect of dissemination all need to be improved. In the future, higher normal undergraduate colleges and universities need to improve the application of short videos from the following points: standing by "innovative awareness, establishing the concept of short video dissemination; building professional teams, standardizing and optimizing short video dissemination contents, telling "Campus Story" well; highlighting the characteristics of "teacher-cultivating" and publishing short videos that are beneficial to the cultivating of normal students.

Keywords: *Mobile short video; Tik Tok; Higher normal undergraduate colleges and universities; dissemination; SPSS*

1 INTRODUCTION

Short video refers to the video content played on various new media platforms, which is suitable for viewing in mobile state and short-term leisure state, and is pushed by high frequency, ranging from a few seconds to a few minutes [6]. With the emergence and rapid development of mobile Internet, short video has gradually become an important entry for content dissemination and cultural consumption [1]. According to the 45th statistical report on the development of Internet in China released by China Internet Network

Information Center, as of March 2020, the number of short video users in China is 773 million, accounting for 85.6% of the total Internet users [2]. All kinds of short videos are playing an increasingly important role and influence in various industries, and knowledge-based short videos have become an important branch of them. In this context, in September 2019, the China Science Popularization Research Institute, Tik Tok and the ByteDance Platform Responsibility Research Center jointly launched the "DOU Knowing Project" 2.0, announcing that Tik Tok will launch a comprehensive service plan for knowledge content creators [3].

As a higher education institution spreading knowledge, higher normal undergraduate colleges and universities also participate in the torrents of mobile short video dissemination. A growing number of higher normal undergraduate colleges and universities have registered accounts on the Tik Tok, Kuaishou and other mobile short video platforms, and carried out dissemination activities such as education and teaching content publicity and image construction.

2 DATA AND RESEARCH METHODS

2.1 Data Source

According to the special research report on China's short video head market competition in 2020-2021 released by iiMedia consulting, the growth momentum of China's short video user scale is obvious, reaching 722 million in 2020, an increase of 15.2% over 2019. In recent years, the scale of short video coverage has continued to expand, and its popularity among netizens has been increasing. Super application platforms such as Tik Tok and Kuaishou have also been born. Moreover, in 2020, Tik Tok users surpassed Kuaishou for the first time, becoming the short video application platform most used by users in various regions of China. Combining with the current actual situation of using short videos in higher normal undergraduate colleges and universities in China, this research uses the Tik Tok platform as a carrier to select data.

The author conducted data survey and collection from February 21, 2021 to February 22, 2021. Firstly, searching with "Normal University" or "Normal College" as the key word in the user column of the Tik Tok platform, and the user accounts of the officially certified higher normal undergraduate colleges and universities were collected, and 76 valid samples were screened out. Secondly, according to the different levels of higher normal undergraduate colleges and universities, they are divided into three types: directly under the Ministry of Education, provincial key and ordinary undergraduate colleges and universities. Finally, in combination with research needs, statistics and analysis are made on the number of works, the number of fans, and the number of likes received by each Higher normal undergraduate college.

2.2 Research Methods

This research used descriptive analysis, correlation analysis and content analysis to carry out statistical

analysis of the short video dissemination situation in higher normal undergraduate colleges and universities.

Firstly, the descriptive statistical analysis was carried out on the number of works, likes and fans of Tik Tok accounts in higher normal undergraduate colleges and universities to reveal the dissemination status and differences of different Higher normal undergraduate colleges and universities. Secondly, studying the correlation between the number of works, likes and fans of among each higher normal undergraduate college through correlation analysis, and to further determining the degree of correlation between three variables. Finally, the content analysis method is used to conduct in-depth research and sorting of the content posted by the short video accounts of typical higher normal undergraduate colleges and universities, sum up experience and analyze deficiencies.

3 ANALYSIS OF SURVEY RESULTS

According to the statistical results, the number of higher normal undergraduate colleges and universities that have opened official accounts on the Tik Tok platform is 76, of which 5 are directly under the Ministry of Education, 24 are provincial key colleges and universities, and 47 are ordinary undergraduate colleges and universities. It can be seen that the higher normal undergraduate colleges and universities that have released short videos on the Tik Tok platform account for only about half of the total, not many.

Further analysis of the sample accounts found that the overall application of short videos in higher normal undergraduate colleges and universities is not high. Among them, there are only 6 short videos with a number greater than 500 and only one with a number greater than 1,000. The maximum number of works is 1273. In addition, the standard deviation of the number of works published by higher normal undergraduate colleges and universities is 206.88, which shows that the number of short video works of different higher normal undergraduate colleges and universities is very different. From the perspective of the number of fans and the number of likes, the standard deviations are 10.22 and 137.56, respectively, indicating that the short video application, especially the operation of different higher normal undergraduate colleges and universities, are quite different, and it also reflects the great difference in the quality of short video works to a certain extent.

Table 1: Data performance of short video dissemination in higher normal undergraduate colleges and universities

	<i>Number of samples</i>	<i>Minim-um</i>	<i>Maxim-um</i>	<i>Avera-ge</i>	<i>Standard deviation</i>
Number of works	76	8	1273	203.67	206.88
Number of fans (Ten thousand)	76	0.03	78.10	3.79	10.22
Number of likes (Ten thousand)	76	0.08	979.10	44.78	137.56

3.1 Difference Analysis of Short Video Dissemination Accounts in Different Higher Normal Undergraduate Colleges and Universities.

Through research, it is found that in terms of the average number of works, the higher normal undergraduate colleges and universities directly under the Ministry of Education are significantly higher than the provincial key and ordinary undergraduate colleges and universities, and the provincial key colleges are also slightly higher than the ordinary undergraduate colleges and universities. This shows that the higher the level of the college, the more the number of published works, and there is a certain degree of relationship between the number of published works and the level of the college. In terms of average number of fans and average number of likes, the performance of higher normal

undergraduate colleges and universities directly under the Ministry of Education is significantly higher than that of provincial key and ordinary undergraduate colleges and universities, while provincial key colleges are slightly higher than ordinary undergraduate colleges and universities. This shows that the higher the college level, the higher the average number of fans and the average number of likes. The average number of fans and the average number of likes has a certain relationship with the level of the college. Generally speaking, the higher normal undergraduate colleges and universities directly under the Ministry of Education have released the most short videos and received the most attention and likes, and their advantages are particularly obvious. This reflects to some extent that its video quality is also better than provincial key and ordinary undergraduate colleges and universities.

Table 2: Dissemination status of short videos in different higher normal undergraduate colleges and universities

Category	<i>Number of samples</i>	<i>Average number of works</i>	<i>Average number of fans</i>	<i>Average number of likes</i>
directly under the Ministry of Education colleges and universities	5	519.2	29.5	187.92
provincial key colleges and universities	24	192.54	2.67	37.37
ordinary undergraduate colleges and universities	47	175.79	1.62	33.34

Further analyzing the data of the top 10 normal colleges under different indicators. Among the top 10 colleges in terms of the number of fans and the number

of praises, 4 of the colleges directly under the Ministry of Education have a place. Provincial key colleges have 3 and 2 respectively, while ordinary undergraduate

colleges and universities have 3 and 4 respectively. In terms of the number of works, there are 4 colleges directly under the Ministry of Education, and the provincial key colleges and ordinary undergraduate colleges and universities are equally divided, with 3 each. Moreover, on the whole, the rankings of colleges directly under the Ministry of Education are relatively high in terms of the number of works, the number of fans and the number of likes.

3.2 Related Analysis

The main correlation analysis includes Pearson correlation, Spearman correlation and Kendall correlation. Different sample distribution patterns require different correlation analysis. Through the single-sample ks test, it is concluded that the number of works, the number of fans, and the number of likes do not obey the normal distribution, so we consider using

Spearman's rank correlation coefficient statistics and analyze the correlation between them, and further determine the correlation Degree. According to the analysis results in Table 3, the correlation coefficient between the number of works and the number of fans is 0.803 ($P < 0.01$), the correlation coefficient between the number of works and the number of likes is 0.875 ($P < 0.01$), the number of fans and the number of likes The correlation coefficient between is 0.947 ($P < 0.01$). This shows that there is a significant correlation between the number of works, the number of fans, and the number of likes, with the highest correlation between the number of fans and the number of likes. There is a mutually reinforcing relationship between the number of short videos released by higher normal universities, the number of fans, and the number of likes. The number of fans has the most obvious influence on the number of likes.

Table 3: The correlation coefficient of the number of works, the number of fans and the number of likes

			<i>Number of works</i>	<i>Number of fans</i>	<i>Number of likes</i>
Spearman's rank correlation	Number of works	Correlation coefficient	1.000	.803**	.875**
		Significance (two-tailed)	.	.000	.000
		Sample	76	76	76
	Number of fans	correlation coefficient	.803**	1.000	.947**
		Significance (two-tailed)	.000	.	.000
		Sample	76	76	76
	Number of likes	correlation coefficient	.875**	.947**	1.000
		Significance (two-tailed)	.000	.000	.
		Sample	76	76	76

** .At 0.01 level (two-tailed), the correlation is significant

3.3 Analysis of Typical Account Content

Through the above statistics and analysis, it is found that there are 6 higher normal undergraduate colleges and universities in the top ten in the number of published works, the number of fans, and the number of praises. Among them, the only 6 universities directly under the Ministry of Education account for 4 of them which has an absolute advantage. However, there are only 1 provincial key and ordinary normal

undergraduate colleges and universities each with a larger total. In terms of the number of works, some colleges ranked the top 10 or even the first, but the number of fans and the number of likes did not rank in the top 10; some colleges did not rank in the top 10 in terms of the number of works, but the number of fans and the number of likes is among the top 10. In order to further analyze this phenomenon and difference, in view of the large number of higher normal undergraduate colleges and universities, this study will further select

the top 10 higher normal undergraduate colleges and universities in terms of number of works, number of fans, or number of likes. In particular, focusing on the four universities directly under the Ministry of Education, namely Beijing Normal University, East China Normal University, Central China Normal University, and Shaanxi Normal University that rank in the top 10 in the number of works, the number of fans, and the number of likes, provincial key and ordinary undergraduate colleges and universities, namely Hangzhou Normal University and Nanning Normal University; The number of works ranked No. 1, Shangqiu Normal University, which is not among the top 10 in the number of fans and the number of likes; Guizhou Normal College, which does not rank in the top 10 in the number of works, but both the number of fans and the number of like among the top 10. Obviously, from the above summary, it can be concluded that the number of fans and the number of likes of the published works have a certain relationship with the level of the colleges, but they are not completely related, nor are they completely related to the number of published works. Therefore, the author will further conduct targeted content analysis of works published by typical accounts, sort out and summarize the short video dissemination characteristics of different types of higher normal undergraduate colleges and universities from a qualitative level.

Judging from the six higher normal undergraduate colleges and universities with the number of published works, the number of fans, and the number of likes all ranked in the top ten, they have the following characteristics: Firstly, the number of fans and likes of short videos is relatively high which short videos related to campus life, such as welcome, graduation, military training, sports meets, club activities, etc.; short videos related to exams, such as college entrance examination, postgraduate entrance examination, English level four and six; and related topics such as fighting the new crown epidemic and New Year blessings. It can be seen that works related to the study and life of college students are highly valued. Secondly, almost all of these colleges have more or less released short videos on topics related to outstanding students, outstanding alumni, and patriotic sentiments, and they have received high levels of attention. This reminds us that the power of role models should not be underestimated. We must attach importance to ideological and political education. Thirdly, some colleges have their own outstanding characteristics. For example, East China Normal University has a series of "teacher talks" lectures and a series of micro-classes on pedagogy in the fight against the epidemic; Hangzhou Normal University has publicity on the rule of law to educate college students, "Tian Ma Xing Kong": A series of lectures by alumni including Jack Ma's special report; Beijing Normal University has related videos on online teaching during

the epidemic period (a lot of likes), college student film festivals, rising knowledge (astronomy), winter vacation book lists and other related videos; Nanning Normal University has videos on social hot spots; East China Normal University, Central China Normal University and Shanxi Normal University all attach great importance to the introduction and publicity of majors and colleges.

Next, let's analyze Shangqiu Normal College, which has the largest number of published works but did not get a high number of fans and likes, and Guizhou Normal College, which is the opposite. The works released by the former mainly focus on Spring Festival blessings and food, while other themes are rarely or even absent. The themes of the works released Guizhou Normal College include orientation, graduation, military training, sports meets, postgraduate entrance examinations, club activities, fighting against the new crown epidemic, etc. However, there are few works related to Chinese New Year blessings and food, and this school has released some unique works on military fire drills, registration routes for new students, and essential items for the beginning of school. The above analysis further verifies that the number of fans who publish works is not completely related to the number of likes and the number of works, and has a great relationship with the content and quality of the work. It is necessary to further regulate the content of works published and improve the quality of works.

4 SUGGESTIONS FOR FUTURE DEVELOPMENT

In response to the above analysis of the short video dissemination status of higher normal undergraduate colleges and universities, combined with the current reality, we put forward relevant suggestions to promote the sound development of short videos in my country's normal colleges, so as to effectively have a positive effect and influence on the construction of higher normal universities and the growth of students.

4.1 Always Having "Awareness of Innovation" and Establishing a Scientific Short Video Dissemination Concept.

The empowerment of science and technology is the general trend of future development and is irreversible; it is also a major plan for future development, which should and must be used [4]. The development of new media and new technologies has brought about all aspects of social impact. Short video platforms have become the "new favorite" of network dissemination, and they have also opened up new work paths for all walks of life and brought about increasing influence [4]. In 2014, CCTV entered Miaopai, which was the first time that mainstream media applied short videos to

major national events such as the National Congress of the People's Republic of China and the National Congress of the People's Republic of China. Subsequently, mainstream media at all levels successively opened official accounts on Tik Tok and Kuaishou short video platforms. In 2019, two central-level media short video platforms, "People's Daily+" and "Central Video", went online. At present, schools of all levels and types are also beginning to develop and utilize various short video platforms. Higher normal undergraduate colleges and universities should also follow and seize this trend of development, establish a scientific short video dissemination concept, and use it scientifically to make the undergraduate normal education work "new" and "live" in order to receive better educational effects. And further promote the development of the school. Short video dissemination needs to be used, but the key lies in how to use it. The effect of short video dissemination does not entirely depend on the quantity, but also has a great relationship with the quality. Moreover, the unrestricted release of short videos will also cause a waste of traffic. At the same time, too much quantity is not conducive to people to discover and watch good Videos. Therefore, we must improve the quality of short videos and scientifically limit the number of short videos released.

4.2 Building Professional Teams, Standardizing and Optimizing the Contents of Short Video Dissemination, Telling "Campus Story" Well.

In order to guide the healthy development of short video platforms, in the last few years, the state has successively promulgated the "Online Short Video Platform Management Regulations" and "Online Short Video Content Review Standards Rules", which regulates the content and values of short video production, and further formulated rectification measures for violations. This provides a basis for the production of short video content. Higher normal undergraduate colleges and universities can rely on related colleges such as information technology to set up a short video production center to conduct topic selection, content planning, copywriting and material review for short video content production to ensure the quality of short videos. In addition, the colleges should appoint specialized personnel to conduct timely review and supervision of short video content, and use the big data system to monitor public opinion. If any content or bad information that violates the production rules of short video content is found, it must be modified or even deleted in a timely manner. It is necessary to establish a responsibility mechanism to control all aspects of content production and dissemination, formulate codes of conduct and supervision guidelines for the entire content production process, improve the independent supervision process system, and create a virtuous short video production and dissemination environment [5].

Finally, short video production inspections and exchanges can be conducted among various colleges. In particular, some colleges whose short video dissemination effect is not ideal should actively learn from superior colleges, or even pair up with them, and ask them for guidance on a regular basis, so that the short video dissemination of various colleges can achieve common improvement and development. At the same time, it should be noted that higher normal undergraduate colleges and universities of different types and regions must also publish some short videos with their own advantages and characteristics according to their own characteristics and advantages, such as the "Sky Horse Xingkong" of Hangzhou Normal University, the "teacher's talk" of East China Normal University, etc.

In terms of the specific content of the short video, higher normal undergraduate colleges and universities should publish more works related to learning such as outstanding students, alumni publicity, college entrance examination, postgraduate entrance examination, etc.; Works related to traditional Chinese festivals such as patriotism, filial piety, environmental protection, respect for teachers and teaching, etc. In addition, works on school history, school motto, college introduction, professional development, etc. are also very important. This can enable the students of our school and other schools to better understand the situation and even the spiritual core of the school, and lay the foundation for future advancement choices. Finally, higher normal undergraduate colleges and universities should also publish some works related to social hotspots. For example, propaganda films such as epidemic prevention and fighting against the epidemic. In this way, students can be shocked and baptized in their thinking while learning the knowledge of protection.

4.3 Highlighting the Essential Attributes of "Teacher-Cultivating" and Publishing Short Videos That Are Beneficial to The Cultivating of Normal Students.

The most prominent and essential feature of higher normal undergraduate colleges and universities lies in the word "teacher-cultivating". Therefore, the contents of the short videos should also focus on the word "teacher-cultivating" to facilitate the cultivation and development of prospective teachers. One is to set up "Teacher Recommendations" and "Student Recommendations" columns to recommend books that you have read and think that they are more valuable in a single week and a fortnight, with about 200 words book introduction and reason for recommendation. Each person is set up a recommendation opportunity every semester. Then, through the selection of reading stars, submission of reading experience and other methods to promote students' reading action. Secondly, the short

video dissemination of higher normal undergraduate colleges adheres to the nature of "normal education" and publishes the advanced deeds of an ancient and modern education expert, famous teacher and excellent student every week, such as the deeds of Zhang Guimei, a model of the times and the president of Huaping women's high school. Through the study of these typical examples, we can imperceptibly cultivate students' morality and appearance, cultivate students' teaching style, and achieve spiritual inspiration and ideological enlightenment with the power of example. Thirdly, we should always pay attention to the reality and existing problems of education, such as the typical cases of education reform and innovation—the construction and reform of South University of science and technology and West Lake University, and the current situation of children's education in poor mountainous areas. Let students feel the reality of the soil and atmosphere in the world of education while learning theoretical knowledge, combine theory with practice, and improve students' comprehensive ability of analyzing and solving problems.

5 CONCLUSION

The mobile short videos are of great significance and influence to the development of education and teaching and other undertakings in higher normal undergraduate colleges. However, at present, the mobile short video dissemination in higher normal undergraduate colleges is still in the initial stage, and the quantity, quality, methods and effects of the dissemination need to be improved. The higher normal undergraduate colleges need to focus on the following aspects to develop and tap the potential value of mobile short video: Forming a scientific concept of mobile short video dissemination, building a professional team, standardizing and optimizing the content of short video dissemination, and highlighting the nature of normal education.

ACKNOWLEDGMENTS

This article is the phased achievement of a major project of Shandong Province Educational Science Planning (20CKSJ09); the phased achievement of the Shandong Women University High-level Scientific Research Project Cultivation Fund (2018GSPGJ01); the phased achievement of the talent team cultivation plan for the predominant discipline "Preschool Teacher Education" in Shandong.

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