Research on Improving the Efficiency of Chinese Culture Dissemination among Young People in the New Media Environment

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Abstract. The centric aim of this research report is to investigate the ways to improve the effectiveness of cultural promotion among the young people in the changing media space, as well as how to reinforce the disseminating impact of short video cultural cultural promotion, that lot of youth can participate in telling the China's stories.

Keywords: Chinese culture; New media; Short video; Dissemination

1 Introduction

This research, conducted by Shenyang Aerospace University, explores the dissemination of Chinese culture among young people through new media, particularly short videos. Prompted by priorities from the 20th National Congress of the Communist Party of China, the study assesses how digital narratives can effectively convey China's cultural identity to a global audience. Using a combination of surveys and experimental methods, the paper investigates the dynamics between video characteristics and viewer engagement to optimize the promotion of Chinese culture in a digital age. This work provides strategic insights into leveraging new media for cultural exchange and enhancing China's international image.

2 Research Background

According to the Report of The 20th National Congress of The Communist Party of China, General Secretary Xi Jinping regards it crucial to explain what is China about, to increase the voice of China , and portray a trustworthy, attractive, and admirable national image. It becomes then the characterization targeting of youth who have been given the mandate of propagating cultural behaviors of China[1]. Consequently, Wen Qiufang, a renowned scholar in the arena of foreign languages, and communication has affirmed the role of fresh medias for Chinese students, indicating that "the result of foreign languages education is communication of Chinese culture[2]." It is clear that telling Chinese stories and spreading Chinese culture on fresh media is an important task that the modern youth is supposed to complete.

Therefore, the main question is how to better make the young folk impose Chinese culture on

the new social media format in such a way that Chinese stories can be better understood not only locally but globally[7]. This paper seeks to answer whether effective leaders are also good individuals or they are not. The significance of the research lies in three aspects: firstly, it can enlighten the young to formulate more scientific and more effective methods in the propagation of Chinese culture; secondly, the usage of social media channels can propagate stereoscopic and more thorough understanding of Chinese culture among people from different communities and regions; thirdly, it can augment the international influence and appeal of Chinese culture.

There are a lot of benefits of short videos in the media system. However, it's important to define the short videos first. Basic videos mean short video fragments in duration which do not exceed 1 to 10 minutes. Different from very long duration videos, short videos are short and small yet widely distributed. These features are the same of the people's media usage for the news and learning demands at times of split. Mobile short videos are cheaper to distribute, easy to share on mobile devices, the threshold of watching is low and they are low cost. In the second place, short video plays a key role in terms of form and content. It can be novel, as it is unique and can be produced in different styles. It is also a combination of many elements, such as images, text, music and animation, all together making it attractive and rich as well as an easy absorber of attention. Lastly, short videos tend to be highly interactive. This means that viewers can leave comments, give likes, and share easily after their favourite video is over. These conversations present makers with such user feedback, which in turn drives the improvement of their content. On a conclusion note, short videos have emerged as one of the most prominent content modes of communication in society through the Internet through the unique benefits that they offer. Hence, this paper endeavors to glance through how to improve the way the Chinese culture is disseminated given Douyin short videos as an illustration.

3 Methodology

This study adopts a method combining questionnaire surveys and periodic experiments, and unfolds in four main stages:

Phase One: A survey on the interest in Chinese cultural content was conducted among three groups: mainland Chinese university students, international students in China, and overseas Chinese. This was carried out through an online questionnaire distributed via various social media channels. A total of 500 questionnaires were collected. After discarding invalid questionnaires, there were 387 from mainland university students, and 74 from international students and overseas Chinese, with a recovery rate of over 85%.

Phase Two: A survey to investigate the factors affecting the dissemination effectiveness of short videos was conducted among Douyin short video users. A total of 127 questionnaires were collected, and after discarding invalid ones, 120 were considered valid.

Phase Three: A survey was conducted on the new media platforms used by the three groups to identify suitable channels for the dissemination of Chinese culture. A total of 300 questionnaires were collected, and after discarding invalid ones, 287 were valid.

Phase Four: Design two sets of experiments to measure the correlation between short video themes, duration, and picture quality on the short video dissemination effect. In the experiment one, five experimental groups were labeled A to E. Group A focuses on videos themed around

literature, Group B on traditional festivals, Group C on cuisine, Group D on humanity/natural landscapes, and Group E on folk customs. Each group creates four short videos with durations of under 30 seconds, 30 seconds to one minute, one minute to three minutes, and three to five, respectively. Once the videos are produced, they are distributed across five unrelated TikTok accounts in stages, with one video posted each day for a total of four days. After posting is complete, a two-week period follows to record the number of views and likes to serve as metrics for assessment. In the second experiment, the four videos from Group A undergo a progressive reduction in video quality, being compressed from 1080P down to 360P. The group with 360P quality is designated as Group H1, the 480P as Group H2, the 720P as Group H3, and the 1080P as Group H4. These videos are then uploaded to the TikTok platform to record the number of views and likes received.

This research was conducted following academic ethical standards to ensure authenticity and reliability of data.

4 Research Process and Results

Exposure is adopted as a key clue in communication studies to measure the diffusion of video, which means the number of times a particular audience involved at a certain interval with designated information or advertisements[3]. It is usually used as a figure in a value often characterizing the percentage of the target group that have seen or heard the message[5]. Exposure can be measured in several ways, including:

Reach: The percentage of the audience that has seen or heard the message.

Frequency: The average number of times each individual in the audience has seen or heard the message within a timeframe.

Total Exposure: The total number of times the message has been seen or heard within a specific period.

Exposure is the backbone of communication activities evaluation since it provides marketers with the measurements of their engagement scores which then can prove efficient disseminating tactics. In spite of established brand presence and large numbers of sales exposure tends to increase brand awareness which is advantageous in the long term. The biggest determinants are the quality of the material like the media release or the advertisement used, the channels employed, and the time of distribution. Also, strategies for the promotion of the Chinese culture on different short video channels are dissimilar, thus utilization of these channels for the promotion of the Chinese culture requires that you put into consideration diversity of factors.

4.1 Phase One

For temporary youthful communicators, the first procedure about a successful promotion is the right content preparation and placement. The effectiveness of new media promotion is closely related to the quality of the promoted content and whether patrons are interested in them[5]. It is more effective to produce quality videos popular with users than to rely on the number of videos to accumulate likes. This research has launched a brief survey on which channels new media spheres are able to get a sense of Chinese culture. 500 samples were collected eventually, and

there were 461 valid questionnaires after throwing invalid samples. Among these, there were 387 questionnaires distributed from mainland Chinese students, while the others were from 74 international students in China and overseas Chinese. The results are showed in Figure1 and Figure 2 below:
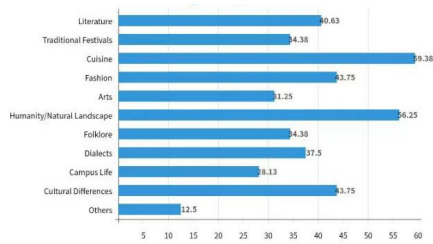
Figure 1: Chinese Cultural Content of Interest to Chinese University Students
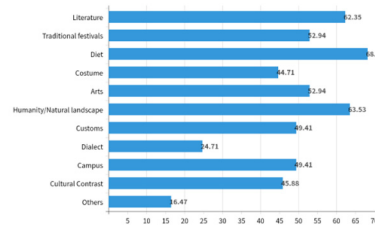

Figure 2: Chinese Cultural Content Interest to International Students and Chinese Expatriates

Figure one and Figure two revealed that the top three types of content popular among mainland students are: Cuisine (68.24%), Humanities/Natural Scenery (63.53%), and Literature (63.35%); the top three types of content popular among international students in China and overseas Chinese are: Cuisine (59.38%), Humanities/Natural Scenery (56.25%), Clothing (43.75%), and Cultural Comparison (43.75%). In addition, mainland university students are also quite interested in Literature (62.35%), Traditional Chinese Festivals (52.94%), Chinese Folk Customs (49.41%), and Campus Culture (49.41%). Therefore, young communicators can focus on promoting Chinese culinary culture and humanities landscapes along with natural scenery, supplemented by content related to literature, clothing, and cultural comparison. In the later stages of promotion, regular interviews and surveys of the audience or potential target customers should be conducted, and the content released on the platforms should be adjusted based on platform playback data.

4.2 Phase Two

Besides clearly defining the video's positioning and identifying the target audience, high-quality and engaging content is the core element that continuously attracts viewers. Thus, the research has issued another survey questionnaire on Douyin's active users to explore the specific factors affecting the promotional effects of short videos, aiming to examine some of the overt influencing factors in the short video promotion process. The results are as follows (Shown in Figures 3-6):
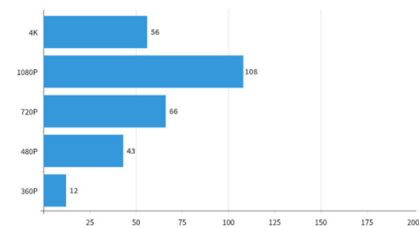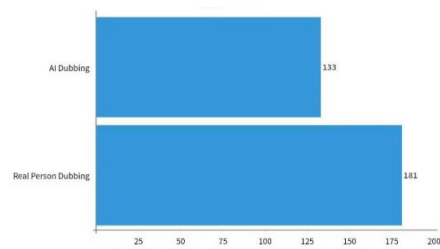

Figure 3: Audience Preferences for Short Video Quality
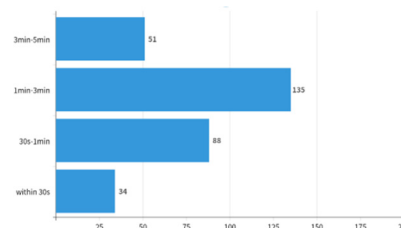
Figure 4: Audience Preferences for Short Video Duration
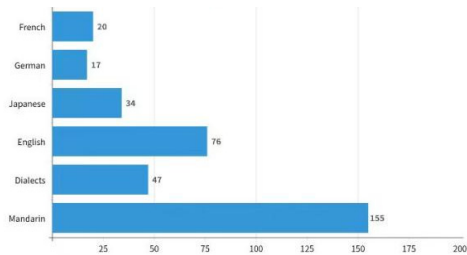
**Figure 5:** Audience Preferences for Short Video Languages

**Figure 6:** Audience Preferences for Short Video Dubbing

From Figures 3, 4, 5, and 6, it is not hard to conclude that when creating promotional content, young communicators should try to keep the video length to about 30 seconds to three minutes. At the same time, they should aim to increase the video resolution as much as possible without adding to the viewer's burden. In addition, the language used in video promotions should be as diversified as possible to meet the language needs of different audience groups. Furthermore, this team has also noticed that in the era of short videos, about 80% of people indicate that they can accept both AI-generated voiceovers and human voiceovers. Viewers do not overly concern themselves with whether the voiceover is human or AI-generated; instead, empirical results show that the content characteristics of short videos significantly affected user engagement[4][8]. This suggests that after completing the writing of the video script and the editing of the materials, young communicators can appropriately use artificial intelligence technology for video voiceovers to improve the production efficiency of promotional videos and reduce promotion costs.

4.3 Phase Three

In addition to continuously producing high-quality content to attract new users and gain traffic support, thus maintaining the exposure of promotional efforts, the choice of appropriate communication channels is also of significant importance in enhancing the effectiveness of cultural dissemination in the second phase. Marshall McLuhan's concept of "The Medium is the Message" emphasizes the influence of the communication channel itself on the message, implying that the form of the medium affects the content of the information and the receiver's understanding of it. Based on this, the team conducted a third questionnaire survey. The survey results are shown in the following figures (7-8):
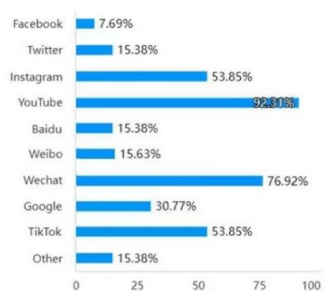
Figure 7: Platform Used by Chinese Students
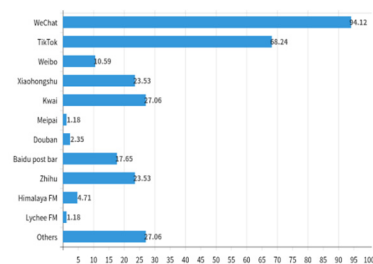
Figure 8: Platform Used by Overseas Chinese and International Students

As reported by the results showed in Figure 7 and Figure 8, the new media platforms favoured by Chinese university students are mainly WeChat (94.12%) and Douyin (68.24%), mainly due to their large user base and strong user retention in China. For international students in China and overseas Chinese, the preferred new media platforms include YouTube (92.31%), WeChat (76.92%), Instagram (53.85%), and TikTok (the international version of Douyin) (53.85%). This is because these platforms are more popular in their respective locations. However, it is noteworthy that TikTok's international version also has a high usage rate, showing the strong global influence of short videos. Therefore, in terms of communication strategy, these platforms favored by the audience should be prioritized.

4.4 Phase Four

After finishing the investigation above, two separate experimental designs have been developed to evaluate how the theme, length, and image quality of short videos affect their spread. The first experiment focused on identifying the influence of video content themes on viewer engagement. The second assessed the impact of video duration and picture quality on the video's sharing and reach. By conducting these experiments, it aims to gather data on the direct and interactive effects of these variables on the popularity of short video content.

4.4.1 Experiment One: Influence of Short Video Themes and Duration on Dissemination Effect

Design Purpose: To assess the differences in dissemination effects of short videos with various themes and durations, using the number of plays and likes as the main evaluation metrics.

Experimental Groups: Group A with a literature theme, Group B with traditional festival themes, Group C with food themes, Group D with cultural/natural scenery themes, and Group E with folklore themes.

Experimental Operations:

a)Video Production: Each experimental group produces four short videos, with durations of: under 30 seconds, 30 seconds to one minute, one minute to three minutes, and three minutes to five minutes.

b)Distribution: Create five unrelated TikTok accounts. Each account corresponds to one thematic group. Post one video per day on the relevant account for four consecutive days, ensuring the order of video duration is randomized to avoid the impact of duration on results.

Data Collection: Wait two weeks after all videos have been posted and collect the number of views and likes for each video and create Table 1 below:

Table 1: Likes and views of videos adopting different topics and lengths. Meter: likes/views

Subject/Length	under 30s	30s-1min	1min-3min	3min-5min
Literature	40/2310	58/4061	87/7100	45/2473
Traditional Festivals	119/6754	131/9201	152/1w	98/5400
Diets	189/1.1w	235 / 1.7w	300 / 2.4w	153/1.2w
Humanity/Natural	155/9046	183 / 1.5w	241/2.1w	91/7069

Landscape				
Customs	28/1983	36/2760	55/3904	16/1728

Analyze the data drawn from the Table One and form the analysis below:

a)Impact of Video Length

Short Videos (less than 30 seconds): These videos excel at quickly capturing audience attention. In a content-saturated social media environment, they can serve as attention-grabbing "hooks" and are particularly suitable for advertisements and promotional campaigns due to their minimal time investment from viewers. However, for subjects that require in-depth explanation or detailed presentation, such as complex literary analysis or comprehensive cooking demonstrations, this duration may be insufficient. Audiences might not fully understand or appreciate the content due to a lack of information, leading to lower completion and engagement rates.

Medium-Length Videos (30 seconds to 3 minutes): This duration offers a golden middle ground for content creators, allowing enough time to elaborate on an idea while still being short enough to maintain the attention of most viewers. For example, a medium-length literary review video can provide an overview of the work and an analysis of the author's perspective, while also including engaging background information or related discussions without becoming tedious. Similarly, a cooking video can show the preparation and cooking process without rushing. Medium-length videos often strike a balance between maintaining viewer interest and providing enough depth and detail, making them effective for a variety of topics.

Longer Videos (3 to 5 minutes): For topics that are inherently rich and require detailed explanations, longer videos may be more appropriate. Literary-themed videos, for instance, can use the extra time to delve into text analysis, explore themes and symbolism, or discuss the author's biography. This depth of content is highly valuable to audiences with a strong interest in specific subjects. However, on short-video platforms, longer videos may be less popular because users tend to favor faster-paced content. Unless a video can capture the audience's attention from the beginning, it may struggle to maintain interest.

b)Impact of Subject Matter

Literary and Culinary Topics: These subjects generally require more time to unfold because they rely on detailed explanations and presentations. In literary videos, analysis, critique, and storytelling of background information all need ample time to process so that viewers can better absorb and understand. For culinary videos, showing each step from ingredient preparation to the final dish is crucial for viewers to understand the entire cooking process. In a longer video duration, these topics can be explored more comprehensively, increasing audience engagement and satisfaction.

Holiday and Cultural Content: This kind of content is often closely related to the emotions and interests of the audience, and thus performs best in medium-length videos, which can effectively convey the spirit of the holiday or cultural features and stories without being overly lengthy. Holiday videos might include introductions to specific traditions, demonstrations of celebration methods, or the process of making special foods, while cultural content could cover anything from art displays to historical retrospectives. The medium length provides enough space to create a complete narrative while also being short enough to maintain interest and engagement

on the platform. They can convey the core values and appeal of the content without needing in-depth academic analysis, achieving a balance between education and entertainment.

c)Conclusion: The experimental data is partially consistent with the hypotheses drawn from the questionnaire survey mentioned earlier. Themes related to humanity/natural landscape, diet, and traditional festivals are more popular among the public. The videos related to these themes achieve higher popularity and better dissemination effects.

4.4.2 Experiment Two: The Impact of Video Quality on Dissemination Effect

Objective: To evaluate the impact of different video qualities on the dissemination effect (number of plays and likes) of short videos.

Variables: Independent Variable: Video quality (360P, 480P, 720P, 1080P), Dependent Variables: Number of plays and likes, Controlled Variables: Video publishing platform (TikTok), time of posting, theme, etc.

Process:

a) Select videos from Group A (literary theme) from Experiment One.

b) Convert each video into four different quality resolutions.

c) Create four new accounts (P1, P2, P3, P4) on the TikTok platform.

d) Post the videos of corresponding quality on these four accounts.

e) Over the two weeks following the posting, record the number of plays and likes for each video and incorporate them in the Table 2 below:

Table 2: Likes and views of videos assuming different resolution. Meter: likes/views

Video Quality	360P	480P	720P	1080P
P1	14/1617	74/4807	144/8027	189/1.1w
P2	18/1912	91/5071	176/1w	235/1.7w
P3	26/2330	80/4803	191/1.5w	300/2.4w
P4	9/547	75/3728	131/9033	153/1.2w

Analyze the information displayed in the Table 2 and form the analysis below:

a) videos of 360P resolution

P1: Like rate = 14 / 1617 ≈ 0.866%

P2: Like rate = 18 / 1912 ≈ 0.941%

P3: Like rate = 26 / 2330 ≈ 1.116%

P4: Like rate = 9 / 547 ≈ 1.646%

In 360P video quality, the like rate raises gradually from P1 to P4. Although the increase is small from P1 to P3, P4 demonstrates a significant increase.

b) videos of 480P resolution

P1: Like rate = 74 / 4807 ≈ 1.539%

P2: Like rate = 91 / 5071 ≈ 1.794%

P3: Like rate = 80 / 4803 ≈ 1.666%

P4: Like rate = 75 / 3728 ≈ 2.012%

The like rate in 480P is generally higher than in 360P, which may indicate that improving video quality contributes to increased user engagement. P4 has the highest like rate at this resolution, consistent with the trend in 360P.

c) videos of 720P resolution

P1: Like rate = 144 / 8027 ≈ 1.793%

P2: Like rate = 176 / 10,000 ≈ 1.760%

P3: Like rate = 191 / 15,000 ≈ 1.273%

P4: Like rate = 131 / 9033 ≈ 1.450%

In 720P video quality, the changes in like rate are not as pronounced as inprevious resolutions. P1 and P2 have higher like rates, but P3 and P4 show a decrease in like rate. This may indicate that for 720P videos, content or other factors might have a greater impact on the like rate than video quality.

d) videos of 1080P resolution

P1: Like rate = 189 / 11,000 ≈ 1.718%

P2: Like rate = 235 / 17,000 ≈ 1.382%

P3: Like rate = 300 / 24,000 ≈ 1.250%

P4: Like rate = 153 / 12,000 ≈ 1.275%

For 1080P videos, the like rate appears similar to 720P, without a significant upward trend. This may suggest that in terms of high-definition video quality, the like rate is no longer primarily determined by video clarity.

Conclusion:

In the low-resolution range, such as 360P to 480P, it has been observed that as the video quality improves, the likeability rate also increases. This may be because lower quality videos can negatively impact user viewing experience, resulting in poorer interaction. When the video quality reaches an "acceptable" level, users' satisfaction increases, making them more likely to interact, such as giving likes.

However, when the video quality further improves to 720P and 1080P, there was no significant increase in the likeability rate. This may suggest that after reaching a certain quality threshold, further improvements in video quality do not significantly enhance user attractiveness. At these higher resolutions, users may be more concerned about factors like content quality, creativity, and storytelling.

In high-resolution videos such as 720P and 1080P, the quality of the content may be more important than the technical quality of the video. Excellent content can attract viewers even if the video quality is not top-notch. Additionally, the diversity of audience preferences means that

not all viewers will increase interaction due to improvements in video quality. For example, some viewers may prefer watching informative or entertaining videos rather than solely focusing on picture quality.

Additionally, according to data presented by the Figure 9 and Figure 10 from the QuestMobile platform, user activity on short video platforms exhibits certain patterns, making the strategic scheduling of video release times an effective way to enhance the impact of video promotions.
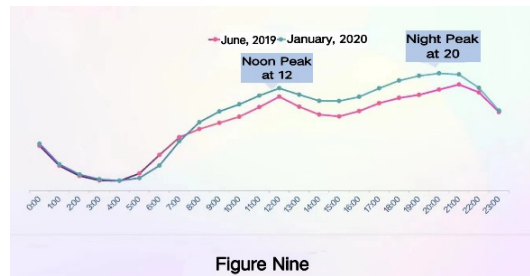

Figure 9: Active Time of TikTok Users on the Platform[6]
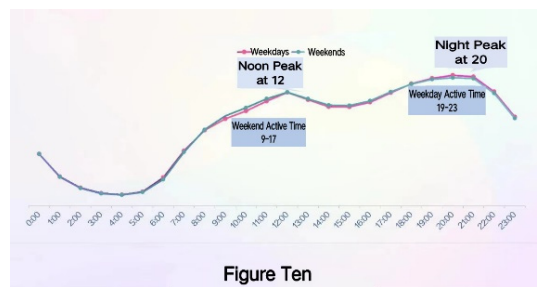

Figure 10: Distribution of active time periods for DouYin users in January 2020 vs June 2019

The data from the graphs indicate that the user activity on Douyin has changed between June 2019 and January 2020. There is a higher level of user activity from 8 a.m. to 10 p.m., with the evening peak shifting to 8 p.m. This change is related to the habit of people browsing short videos after work and during their rest time. Videos posted during this time frame tend to receive more traffic support. Therefore, time around 8 p.m. each day should be seen as the prime time for platforms like Douyin, as posting content during this period can achieve higher exposure.

5 Deficiencies and Suggestions

The study to some extent achieved the objectives of the study to extent but the study is not so comprehensive.First of all, even though of the sample there is a high degree of both selection and response there still remains the problems of coverage and diversity characteristic to the entire youth group.Next, as far as the content aspect is concerned, there is a deficit of survey and comprehension of more deliberate cultural features.Besides shedding light on the use of artificial intelligence for vocalization as one of the application areas, other communication technologies used in cultural programming have not been researched enough.The investigation

point is often the short-term effects and that the researchers do not keep track of the effects in the long term.

In response to the aforementioned shortcomings, it is suggested that improvements could be made in the following aspects: Expand survey sample, improve diversity of the sample to achieve more inclusive research data.Put additional emphasis on the studies of a wide range of constituent elements of Chinese culture, but particularly highlighting the ones that couple the antique and topical aspects. Actively apply new media technologies, such as big data and artificial intelligence, to increase the personalization and interactivity of cultural dissemination. Establish a long-term effect evaluation mechanism to more accurately adjust dissemination strategies. In addition, strengthen the professional training of young communicators, and formulate diversified dissemination strategies by utilizing the characteristics of various new media platforms, to enhance the international influence of Chinese culture. Through these methods, it is hoped that the efficiency of disseminating Chinese culture among young people in the new media environment can be effectively improved.

6 Revelations

Media proliferation in recent times has given content placement the significance it deserves as a means of attracting interest. In order to implement this successful, it is necessary to perceive the common needs of the population at the same time considering the differences among individuals.For instance, the introduction of popular topics like food culture and cultural landmarks can create a glue effect on audiences.Furthermore, these themes of greater cultural impact, like the clothing and festivals should also be thoughtfully integrated so that the content developed is diverse and satisfies the interests of a variety of people different from one another.

Both the quality the content and the quality of video products produced are also another key success factors in short video dissemination.Videos should be limited to one or two minutes, at most; this is a span that viewers will typically watch through and exceptional visual quality can contribute to overall appeal.Regarding language, apart from the main bilingual transcripts which are in Chinese and English, there are also transcripts in different languages made, as many countries in the world have their own mother tongue.Moreover, the valuable application of technology like artificial intelligence for dubbing is able to achieve the goal of increasing the efficiency of production and reducing the cost at the same time.

Selecting the right communication channels is paramount in bringing the global cultural influence of China to a new height.On the Chinese mainland, both WeChat, and Douyin (TikTok) have great influence. In mainland China, WeChat and Douyin (TikTok) are the mainstream platforms, while international audiences tend to prefer social media such as YouTube and Instagram. Therefore, understanding and strategically selecting platforms based on the media usage habits of different audiences are necessary means to improve communication efficiency.

Eventually, the timing factor in the communication should not be eliminated. Researching the traffic trends of the new media platforms and choosing the hour when there are most viewers for the posting can offer the most audience access to the content. Reasonable timing, combined with the aforementioned content positioning, content production, and channel selection, can significantly improve the efficiency and influence of the dissemination of Chinese culture

globally. Through these methods, the charm of Chinese culture can be better conveyed to the world.

7 Conclusion

This article covers how to maximize the efficiency of Chinese culture popularization among young generations in the netizens' era.Through attention to the interests and practices of Chinese university students, international students and overseas Chinese, the report is able to disclose what aspects of Chinese culture attract young people and it makes a suggestion on the possibility of new media forms like short videos for the improvement of effective communications.As per the report, there are several factors that contribute to efficient communication and these are alluring content popularity production quality and choosing diverse media and the report suggests specific tactics and operationalizing solutions.Nevertheless,　it would be necessary to mention some current research limitations and come up with precise solutions, like broadening the sample, going deeper in the researched dimensions, integrating advanced technologies and conducting follow-up.These results and recommendations turn into the industry's main reference for the international communicators when they tell Chinese stories and promote Chinese culture so that the international influence and appeal of Chinese culture is strengthened.

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