

Research on Influencing Factors of Public Participation in Government Short Videos: A Case Study of the “China Military Online” Douyin Account (Postprint)

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Abstract

In the information age, with the rapid development of the short video industry, government short videos have emerged as a novel form of political communication discourse. This study investigates the factors influencing public participation in government TikTok accounts. Taking the government TikTok account “China Military Online” as a case study, this paper employs regression analysis to examine the determinants of public engagement with government short videos. The findings reveal that two key elements—thematic content and background music—significantly affect public enthusiasm for participating in government TikTok accounts. Conversely, presentation format, video duration, language style, sentence structure, and topic tags exhibit no significant influence on public participation. This paper further explores the underlying reasons behind these results, aiming to enhance the practical effectiveness of government communication.

Full Text

Factors Influencing Public Engagement with Government Short Videos: A Case Study of the “China Military Network” Douyin Account

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Abstract: In the information age, government short videos have emerged as a new form of political communication discourse alongside the rapid development of the short video industry. This study investigates the factors influencing

public engagement with government Douyin accounts, using the “China Military Network” official Douyin account as a case study and employing regression analysis to explore these factors. The results indicate that two key elements—theme content and background music—significantly impact public enthusiasm for engaging with government Douyin content. Conversely, presentation format, video duration, language style, sentence structure, and topic tags do not show significant effects. This paper further examines the underlying reasons for these findings to enhance the practical effectiveness of government communication.

Keywords: Government short videos; Public engagement; Data measurement; Government Douyin accounts; Regression analysis

1.1 Government Short Video Research

Short videos refer to mobile social media content ranging from several seconds to a few minutes in length, distributed through networks and mobile smart terminals via short video applications. In the government sector, short videos have become a crucial tool for government agencies to release official information, disseminate core values, accept public opinion supervision, and deliver public services. The Douyin app, with its powerful dissemination and social capabilities, has attracted numerous government service institutions to open accounts and publish short videos. In March 2018, “Communist Youth League Central” and “Chang’ an Network” became the first government accounts to join Douyin. By October 2019, over 16,000 government agencies had opened Douyin accounts, cumulatively publishing 820,000 short videos [2]. Several government accounts have now attracted nearly ten million followers, including “China Military Network,” “Siping Police Affairs,” and “China Military Television Network.” Government Douyin content primarily covers tourism and culture, law enforcement and policing, news media, local promotion, and scientific research. Scholars have noted that government short video platforms effectively combine current hot topics with government propaganda, producing videos in formats and with background music that netizens enjoy [3]. For instance, “Siping Police Affairs” uses situational dramas to entertain users while conveying relevant police information, effectively bridging the distance between audiences and government agencies. Other research indicates that driven by 5G technology, short video content is presenting new scenarios for immersive, contextualized communication [4].

1.2 Public Engagement with Government Short Videos

In her study of factors influencing public engagement with government Weibo accounts, scholar Zhang Lili found that “event reporting” and “public participation” themes had particularly significant impacts on public engagement compared to other content types [5]. Scholar Du Leyun, in analyzing the top 20 most-liked government Douyin videos in 2018, discovered that videos encompassing multi-

ple elements and involving complex production processes generated higher user sharing and commenting indices [6]. The lightweight nature of mobile short video content means its duration is far shorter than traditional television news. According to Socialbakers (a tool developed for analyzing social media management metrics), a survey of user completion rates for Facebook news videos shows that among videos ranking in the top 25% for completion rates, 45% of users leave after watching for one minute, 33% leave after 30 seconds, and 20% leave after just 10 seconds. This demonstrates that video duration significantly influences user behavior. Zhang Zhuoran argues that music is an independent art form, and its appropriate use can help audiences develop deeper cognitive understanding of news content [7]. Zhang Zhen's research on the Beijing News WeChat official account found that borrowing popular expressions in news headlines can transform originally rigid and serious titles into lively and interesting ones, subtly enhancing their appeal and enabling them to be replicated and disseminated as strong memes, thereby generating more clicks [8]. The four sentence structures commonly used in daily communication are declarative, exclamatory, interrogative, and imperative. Jia Wenlong's analysis of headline texts from university library WeChat top stories found that exclamatory and interrogative sentences received far higher read and like counts than other structures, as these two types carry stronger emotional coloring and better capture readers' attention. Finally, Douyin has established a "Positive Energy" trending topics column featuring content mostly initiated by authoritative accounts such as mainstream media Douyin accounts and government Douyin accounts, which have substantial fan bases. For example, topic campaigns like "#China's Development Needs You and Me#" and "#I Want to Laugh in a National Opera Style#" have each garnered hundreds of millions of views. Based on the above research, this study proposes the following seven hypotheses:

H1: Theme content influences public engagement behavior with government short videos.

H2: Presentation format influences public engagement behavior with government short videos.

H3: Video duration influences public engagement behavior with government short videos.

H4: Background music influences public engagement behavior with government short videos.

H5: Language style influences public engagement behavior with government short videos.

H6: Sentence structure influences public engagement behavior with government short videos.

H7: The presence of #topic tags influences public engagement behavior with government short videos.

2.1 Data Source

This study conducts quantitative analysis of 737 government short videos published by the “China Military Network” Douyin account between February 1, 2020, and December 31, 2020, to explore factors influencing public engagement with government Douyin content.

2.2 Variable Measurement

For the dependent variable, like counts reflect user recognition of government short videos, while comment and share counts further demonstrate users’ willingness to engage. This study operationalizes “public engagement” into three specific indicators: like count, comment count, and share count. This data was collected by the author through reviewing all 737 short videos.

For independent variables, government Douyin content is categorized into seven indicators: theme content, presentation format, video duration, background music, language style, sentence structure, and topic tags. Detailed explanations of these seven indicators are provided in Table 1 .

2.3 Descriptive Analysis

The author analyzed the percentage distribution of various themes among the 737 short videos. Military promotion videos accounted for the highest proportion at 45.3%, followed by news hotspots (22%), entertainment and miscellaneous content (19%), and positive energy dissemination (the lowest at 12.8%). Among the four presentation formats, material compilation was most common (55.1%), followed by live-action footage (25.5%), story performance (15.3%), and image+text (the smallest at 4.1%). Video duration was predominantly under 30 seconds (80.1%), with 31-60 second videos comprising 16.7% and videos over 60 seconds accounting for only 3.3%. Regarding background music types, upbeat music was most frequently used (36.9%), followed by passionate (26.6%) and gentle (22.9%) music, while sad music was least common (4.7%). In terms of language style, colloquial language dominated (73.3%), followed by formal written language (20.1%), with internet slang being least common (6.6%). For sentence structure, declarative sentences were most prevalent in titles (53.5%), followed by exclamatory sentences (37.9%), with interrogative (7.2%) and imperative (1.5%) sentences rarely used. Regarding topic tags, 72.2% of videos had no tags, while 27.8% included them.

3.1 Regression Analysis with Likes as Dependent Variable

In the regression analysis with likes as the dependent variable, the author used “positive energy dissemination” as the reference category for content type, establishing three dummy variables. The results showed that “military promotion” had significantly higher compliance than “positive energy dissemination” ($p < 0.05$), while “news hotspots” and “entertainment/miscellaneous” showed no

significant difference from “positive energy dissemination” ($p > 0.05$). For presentation format, using “image+text” as the reference, no significant differences were found between “material compilation,” “story performance,” or “live-action footage” compared to “image+text” ($p > 0.05$). For video duration, using “over 60s” as the reference, no significant differences were found between “under 30s” or “30s-60s” compared to “over 60s” ($p > 0.05$). For background music, using “sad” as the reference, no significant differences were found between “passionate,” “upbeat,” “gentle,” or “other” music compared to “sad” music ($p > 0.05$). For language style, using “internet slang” as the reference, no significant differences were found between “written language” or “colloquial language” compared to “internet slang” ($p > 0.05$).

3.2 Regression Analysis with Comments as Dependent Variable

In the regression analysis with comments as the dependent variable, using “positive energy dissemination” as the reference for content type, the results showed that “military promotion” had significantly higher compliance than “positive energy dissemination” ($p < 0.05$), while “news hotspots” and “entertainment/miscellaneous” showed no significant difference ($p > 0.05$). For presentation format, using “image+text” as the reference, no significant differences were found among “material compilation,” “story performance,” or “live-action footage” ($p > 0.05$). For video duration, using “over 60s” as the reference, no significant differences were found between “under 30s” or “30s-60s” ($p > 0.05$). For background music, using “sad” as the reference, “passionate” music showed significantly higher compliance ($p < 0.05$), while “upbeat,” “gentle,” and “other” music showed no significant difference ($p > 0.05$). For language style, using “internet slang” as the reference, no significant differences were found between “written language” or “colloquial language” ($p > 0.05$).

3.3 Regression Analysis with Shares as Dependent Variable

In the regression analysis with shares as the dependent variable, using “positive energy dissemination” as the reference for content type, no significant differences were found among “military promotion,” “news hotspots,” or “entertainment/miscellaneous” ($p > 0.05$). For presentation format, using “image+text” as the reference, no significant differences were found among “material compilation,” “story performance,” or “live-action footage” ($p > 0.05$). For video duration, using “over 60s” as the reference, no significant differences were found between “under 30s” or “30s-60s” ($p > 0.05$). For background music, using “sad” as the reference, no significant differences were found among “passionate,” “upbeat,” “gentle,” or “other” music ($p > 0.05$). For language style, using “internet slang” as the reference, no significant differences were found between “written language” or “colloquial language” ($p > 0.05$).

4. Conclusion

In this study examining factors influencing public engagement with government Douyin accounts, the author used like count, comment count, and share count as dependent variables and employed theme content, presentation format, video duration, background music, language style, sentence structure, and topic tags as independent variables at the content level. Regression analysis was conducted to test the hypotheses, with results summarized in Table 2 .

Table 2: Hypothesis Verification Results

Hypothesis	Result
H1: Theme content influences public engagement with government short videos	Supported
H2: Presentation format influences public engagement with government short videos	Not supported
H3: Video duration influences public engagement with government short videos	Not supported
H4: Background music influences public engagement with government short videos	Supported
H5: Language style influences public engagement with government short videos	Not supported
H6: Sentence structure influences public engagement with government short videos	Not supported
H7: Presence of #topic tags influences public engagement with government short videos	Not supported

The analysis reveals that theme content and background music significantly influence public engagement with government Douyin content, particularly “military promotion” themes and “sad” background music. Regarding presentation format, video duration, language style, sentence structure, and topic tags, Douyin’s development has diversified video presentation forms that are quickly accepted by the public. Government Douyin accounts primarily publish videos under 60 seconds; “China Military Network” released only 24 videos exceeding 60 seconds in one year, with all under-60-second videos fitting within users’ fragmented time windows. As government Douyin publishing formats have diversified, public attention to headline language style, sentence structure, and topic tags has decreased, with audiences focusing more on video content and quality itself, rendering these factors less significant than theme content.

Theme content and background music affect public engagement likely due to the different attributes of government Douyin accounts. The “China Military Network” account studied here is a military-themed government account, making its military promotion content particularly salient. Sad background music often accompanies content about martyrs who sacrificed for the country or na-

tional memorial days, which more easily touches public emotions and triggers engagement.

Based on these findings, this paper offers targeted recommendations for government Douyin development. First, government Douyin accounts must clarify their goals and direction, seeking creative materials that resonate with public life based on their account attributes while avoiding repetitive or monotonous content that may cause audience fatigue and disinterest. Second, background music should match the theme to strengthen emotional impact. As a music-centric creative short video platform, Douyin requires sound and visuals to work synergistically for stronger audience immersion. Government Douyin accounts should employ different music styles for different content to achieve perfect audio-visual integration, reinforcing video themes and evoking audience emotions.

Furthermore, how government Douyin accounts should develop within an entertainment-oriented short video platform remains a question for consideration. Operators should exercise initiative to clarify their positioning and advantages, develop distinctive features, and increase interaction with users to improve user stickiness. During data collection, the author observed that user comments and private messages often go unanswered, which diminishes user participation experience and affects sustainable development. Douyin's platform should also increase recommendation weights for government accounts to distribute quality government short videos to broader audiences.

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Note: Figure translations are in progress. See original paper for figures.

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