A Qualitative Comparative Analysis of Health Narrative Communication Effects of Government TikTok Accounts

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Abstract

Objective: This study aims to explore the narrative communication effects of health-related content on government TikTok accounts, with the goal of identifying effective strategies that enhance public engagement and improve health communication outcomes.

Methods: Using the TikTok account of the Shenzhen Health Commission as a case study, this research employs crisp-set Qualitative Comparative Analysis (csQCA) to examine the narrative strategies used in 46 health-related short videos. Key variables, including knowledge cues, belief cues, action cues, and narrative style, are analyzed to identify effective pathways for health communication.

Results: The csQCA analysis reveals 11 distinct narrative paths with an overall consistency of 1.0 and coverage of 0.815. Among these, three primary paths —"Edutainment Short Drama," "Collaboration with Internet-Famous Doctors," and "Emotional Resonance Short Drama"—demonstrate the strongest explanatory power for successful health communication outcomes. The combination of professional medical knowledge, immersive perspectives, and engaging audiovisual techniques is crucial for driving audience interaction.

Conclusions: The findings suggest that high-quality narrative strategies—particularly those incorporating emotional appeal, expert collaboration, and technical audiovisual elements—significantly enhance the communication impact of short videos related to government. These insights can guide the development of more effective health communication practices for local government social media platforms.

Keywords: health communication, narrative strategy, government social media

1.Introduction

People's health is an important cornerstone of national development, and achieving this goal requires active health education and awareness initiatives to promote healthy behaviors and lifestyles. Building a Healthy China, as one of the overarching goals of China's development, further establishes the key role of public health in the process of socialist modernization. Health communication plays a crucial role in achieving public health goals, aiming to enhance the public's health knowledge, change health attitudes and behaviors, and reduce health inequalities.

Government social media serves as an important platform for the Party and the government to shape public opinion and communication; it is a significant means to build a service-oriented government and an important way to improve social governance capabilities. In the health and construction sectors, new media emphasizes the development and innovation of communication methods, effectively conveying health information and performing prominently in the establishment of the government social media system. Government and public health departments utilize major social media platforms to engage with the public, provide timely health information, strengthen public trust in the government, promote government-citizen interaction, and collaborate in responding to health crises (Chen et al., 2020). In the current era of social media, short videos related to government play an increasingly vital role in the public's access to information and serve a crucial function in promoting health risk communication. This development results from technological advancements, policy orientation, and practical needs.

Health Committees at all levels actively developed government short video content, releasing a series of videos on health science popularization, doctor-patient stories, and more on platforms such as TikTok (Zhang et al., 2023). They leverage the

advantages of government social media for health communication and promote effective health risk communication. In recent years, health-related government social media transformed its health communication strategy, gradually shifting from a reliance on statistical data to guide the public in improving health habits to a more diversified and humanized communication approach. These government social media platforms increasingly adopt storytelling, personal experience sharing, and educational methods incorporating entertainment elements to promote changes in public health behaviors. This transformation not only enriches the presentation of health information but also enhances its appeal and resonance, thereby more effectively influencing public health awareness and behavioral choices.

In this context, high-quality government TikTok, represented by the "Shenzhen Health Commission," have emerged, providing the public with accurate, understandable health content in a timely manner and bringing new ideas to government health communication. The official account engages in health narratives through video content, breaking the stereotype of science as overly serious and difficult to understand, and making the government appear more approachable and comprehensible. By building emotional connections and cognitive resonance, health communication can profoundly impact a wider audience, further promoting the achievement of health promotion goals.

Although government social media health narratives play an important role in providing information and collective responses, few studies have explored the narrative effect from the dimension of "narrative strategy effectiveness." Exploring the narrative strategies of health-related government TikTok is crucial because not all narratives lead to successful persuasion and improved health outcomes. The effect of narratives may vary depending on their characteristics, and some narratives may not

be sufficient to influence health behaviors (De Graaf et al., 2016). In other words, narratives are not always a universal strategy for conveying health information and influencing changes in audience attitudes and behaviors; their effectiveness depends on factors such as the emotions conveyed and the storytelling approach (Ma & Nan, 2018). Moreover, existing studies mostly explore narrative effectiveness through experiments, with little focus on government social media platforms.

In addition, short videos related to government have faced criticism for their excessive "entertainment" tendencies, with some accusing them of relying on vulgar elements to attract attention. Excessive use of internet slang and improper expressions can lead to user dissatisfaction and diminish the government's credibility. The public may also feel confused by the overwhelming and chaotic health information online, making it difficult to resonate with, resulting in unsatisfactory health communication effects. Thus, how to develop a "constructive" health narrative in content production, balance the inherent conflicts in controversial topics, and navigate the dual demands of official logic and media logic is a challenge faced by health-related government TikTok.

Therefore, based on the perspective of health narratives and using the TikTok account of the "Shenzhen Health Commission" as an example, this paper employs the crisp-set Qualitative Comparative Analysis (csQCA) method to explore how the health narrative strategies of government TikTok accounts produce linkage effects and the specific effective paths from a configurational perspective. This study aims to provide insights for local government social media health communication practices, help improve the government's ability to construct the meaning of national health, promote scientific health behaviors among the audience, and contribute to the construction and development of a Healthy China.

2. Literature Review and Model Construction

2.1 Health Narrative

As health communication continues to evolve, narrative has emerged as a critical tool in both health promotion and communication. Narratives serve as vehicles for conveying information by linking real or fictional events into coherent stories with clear beginnings, middles, and ends. Through detailed character development and scene construction, narratives not only illustrate issues but also actively explore and propose solutions. Narratives allow the public to process information in an easily understandable manner while fostering emotional connections among individuals (Kreuter et al., 2007).

Narrative Transportation Theory explains the psychological mechanisms underlying the effects of narratives. Narrative transportation is defined as the process through which an audience becomes immersed in a narrative, requiring focused attention, imagination, and emotional engagement, as well as an understanding of the characters and plot within the story. As narrative transportation intensifies, the psychological distance between the audience and the narrative object decreases, resulting in increased empathy and identification.

Existing research has confirmed that narratives are more effective than non-narrative formats in influencing health-related attitudes, intentions, and behaviors (Lewis & Sznitman, 2017). This is because narratives help audiences better understand medical knowledge, foster positive attitudes, and enhance the intention to share health information.

2.2 Influencing Factors of Health Narrative Effectiveness

In health communication, variables in different narrative elements can have varying impacts on communication outcomes. De Graaf et al. conducted a review of health narrative effects, categorizing these influencing factors into three types: first, narrative content, including similarity, attribution of responsibility, and so on; second, narrative form, encompassing media, perspective, and the authenticity of information; third, narrative context, a key variable that has not yet been comprehensively and deeply validated, with some ambiguity in its boundary definition (De Graaf et al., 2016). Based on a review and synthesis of existing research, this paper proposes a new framework consisting of four dimensions—narrative content, narrative form, narrative agents, and narrative audiovisual language—grounded in the core elements of narrative.

2.2.1 Narrative Content

2.2.1.1 Knowledge Cues. Knowledge cues aim to transform scientific and technical health information into engaging, accessible content through effective communication strategies. Carefully crafted government health short videos not only disseminate essential healthcare knowledge and treatment methods but also embed valuable experiential health wisdom into daily life, providing the public with comprehensive health guidance. Knowledge cues may encompass various content types, including the introduction of healthcare knowledge, explanations of treatment methods, public education on healthcare, and the promotion of information from government health institutions. This content is vital for the audience as it offers practical strategies and resources for implementing healthy behaviors to achieve health-related goals.

Health narratives built on knowledge cues serve not only to apply specialized expertise in reporting public health issues but also to shape and encourage public participation in social health initiatives. Whether addressing physiological topics such

as disease education and healthcare or sociological aspects like healthcare systems, public health, and doctor-patient relationships, it is crucial to provide professional, scientific descriptions and evaluations centered around specific health knowledge cues. By offering such knowledge cues, the depth and breadth of health information are enriched, ranging from phenomena to context and from specialized content to everyday practices, thereby expanding the target audience and subjects of health communication. Thus, this study categorizes knowledge cues into two dimensions: the presence or absence of knowledge cues.

2.2.1.2 Belief Cues. Belief cues focus on enhancing the public's confidence and efficacy in adopting healthy behaviors by providing clear, actionable plans. The objective is to instill in the public the belief that they can effectively implement healthy behaviors and trust in their efficacy. Through belief cues, health communicators can offer concrete steps and guidance to help the public engage in positive health behaviors.

A commonly used strategy in health communication is the fear appeal, which elicits fear by presenting threatening information to encourage the adoption of healthy behaviors. The Extended Parallel Process Model (EPPM) explains the public's psychological responses to fear appeal messages. According to the EPPM, upon perceiving a threat, individuals evaluate the severity of the threat, their susceptibility to it, and their ability to implement coping measures. If the public perceives that they can successfully implement these measures, they are more likely to adopt the suggested healthy behaviors. Consequently, this study classifies belief cues into two categories: the presence or absence of belief cues.

2.2.1.3 Action Cues. Action cues clarify actionable communication plans, provide practical guidance, foster collaboration, and motivate individuals to adopt

health-positive behaviors. They also promote the development and implementation of policies conducive to a healthy lifestyle. The core of action cues lies in mobilizing the audience to "take action." Confidence in the ability to follow these recommended actions is crucial for encouraging the audience to act.

By offering action cues, communicators guide the public in developing healthy thought patterns and lifestyle habits, thereby promoting behavior change through collective engagement. Action-oriented narratives should not only suggest what to do but also provide clear guidance on how to do it, disseminate information that encourages specific actions, and further promote healthy behaviors. Practical guidance enhances confidence and willingness to act by providing specific health prevention steps or showcasing role models who successfully implement healthy behaviors (Jiang et al., 2024).. Consequently, this study classifies action cues into two dimensions: whether or not action cues are provided.

2.2.2 Narrative Form

2.2.2.1 Narrative Perspective. Narrative perspective typically involves the use of character names or personal pronouns, including the first-person (I), second-person (you), and third-person (he/she). The choice of narrative perspective is often considered to influence the audience's experience. First-person or third-person narrative perspectives are key factors in shaping narrative outcomes. In health-related narratives, the use of the first-person perspective, employing "I" or "my," tells a personal story about the self, promoting an internal, vicarious experience where the audience may connect with the character's life from an internal viewpoint. In contrast, third-person narratives, told from an observer's perspective using pronouns such as "he/she," "they/them," or "their," offer an external viewpoint, leading the audience to more objectively observe the character's experience (Klauk et al., 2012).

Research indicates that first-person narratives often result in higher risk perception compared to third-person perspectives (Nan et al., 2015). However, some studies suggest that the differences may depend on factors such as the research topic, narrative text, and audience characteristics (Christy, 2018). Therefore, this study categorizes narrative perspective into two dimensions: the use of either first-person or third-person narratives.

2.2.2.2 Narrative Duration. Narrative duration is a critical factor that may influence the effectiveness of communication (Otterbacher, 2009). While longer narratives typically provide more information and are directly related to narrative content, there is no consensus on whether longer health narratives yield better communication outcomes.

Currently, there is no unified standard for the duration of government TikTok. Based on the average duration of all samples, this study uses the median of 1 minute and 50 seconds as the benchmark for measuring video length. The median is not affected by extreme values and can be used to describe the central tendency of the data. We hypothesize that short videos with an average duration greater than or equal to 1 minute and 50 seconds are likely to contain richer and more complete knowledge content.

2.2.2.3 Narrative Style. In today's entertainment-driven media environment, government health narratives often adopt an entertaining or relaxed style to capture audience attention. Given the professional complexity of health information, narrative styles may vary, ranging from serious, rational presentations for more technical knowledge to lighter, humorous approaches for broader appeal.

Therefore, in this study, narrative style is divided into two dimensions: serious and rational, and lighthearted and humorous. When it comes to presenting

professional medical knowledge, the approach is typically serious and rational. However, there are also instances where such knowledge may be presented in a lighthearted and humorous manner, reflecting the trend of making knowledge more accessible and entertaining (Tian et al., 2023).

2.2.2.4 Dramatic Features. Dramatic features, broadly defined, refer to characteristics used to construct the storyline, create suspense, and evoke emotions. These features emphasize emotional appeals in the narrative and the use of dramatic language and sensory details (Rodgers & Stemmle, 2020). Dramatic health narratives are considered more engaging and entertaining, and the emotional engagement triggered by dramatic features can influence persuasiveness through narrative processing. The use of dramatic elements enhances audience empathy and emotional involvement, thereby increasing the persuasive power of health messages (Chang, 2008).

From this perspective, this study classifies health narratives based on the presence or absence of dramatic features.

2.2.3 Narrative Subject

The narrative subject refers to the narrator within the storytelling process. Different subjects impart various emotional tones and perceptions, influencing the audience's experience. A joint narrative involving healthcare professionals and patients is particularly persuasive and fosters a sense of empathy.

A "patient-centered" approach lies at the core of medical humanism (Branch, Jr, 2001) Joint narratives between doctors and patients demonstrate doctor-patient interactions focused on addressing public concerns and values. Such narratives cultivate empathy, emotional resonance, and identification between doctors and patients (Kumagai, 2008). Therefore, this study categorizes the narrative subject into two dimensions: the inclusion of multi-subject doctor-patient interactions.

2.2.4 Narrative Audiovisual Language

Message Sensory Value (MSV) refers to the degree to which the audiovisual elements of a message engage the audience's sensory and emotional responses (Palmgreen et al., 1991). Higher MSV content is generally more appealing, with existing research identifying three key dimensions: video features, audio features, and content characteristics (Paek et al., 2010).

Multimodal technology has infused new energy into the production of government health short videos. By utilizing MSV elements, such as strong visual imagery and dynamic audio, the communication effect is enhanced. Given the complexity of health communication, effective audiovisual packaging is essential for making health narratives more engaging. Therefore, this study classifies health-related government TikTok based on whether they employ audiovisual packaging techniques.

2.2.5 Narrative Effect

The communication effect refers to the impact of the Shenzhen Health Commission's health narratives on the audience, serving as the outcome variable in this study. This effect is reflected in specific audience behaviors, including likes, comments, and shares. The communication effect can be comprehensively measured by the number of likes, comments, and shares, with the sum of these indicators used to calculate an average value. An analysis of 46 cases revealed that the overall average communication effect was 12,401. A value exceeding 12,401 indicates better dissemination and impact, suggesting that the content is more well-received by the audience. If the value is higher than the average, it indicates superior communication effectiveness, which is conducive to the spread of trending topics.

3.Research Methods and Design

3.1 Research Method

This study employs crisp-set Qualitative Comparative Analysis (csQCA), a method specifically designed for analyzing binary-valued variables. Based on Boolean algebra, csQCA uses a set-theoretic framework to reveal the potential multiple causal combinations behind complex social phenomena. Unlike traditional univariate analysis, csQCA emphasizes a combination of case-oriented and variable-oriented approaches. It not only focuses on the characteristics of individual cases but also extracts more generalizable conclusions by comparing patterns across different cases. This method helps researchers identify causal relationships with explanatory power when exploring complex phenomena and allows for significant findings that are applicable to the broader research field, drawn from typical sample cases. Thus, csQCA offers unique advantages in studies involving multiple variables and complex causal relationships (Ragin, 2014).

Health-related official social media TikTok accounts represent a phenomenon characterized by "multiple concurrent causes," as they involve the interaction of multiple narrative factors. To effectively analyze this complex phenomenon, csQCA provides a systematic approach. The specific steps include selecting cases and determining variables for coding, importing the coding table into QCA software, constructing a truth table, and conducting consistency and coverage checks. Ultimately, the most typical and prominent causal factors are identified from among the numerous combinations of condition variables.

3.2 Case Selection

The new media platform selected for this study is the TikTok account of the Shenzhen Health Commission. In the mobile media era, official social media platforms serve as authoritative channels for the effective dissemination of health knowledge, playing a

crucial role in conveying health policies and promoting health literacy with significant credibility. The TikTok account of the "Shenzhen Health Commission" represents a prime example of health-oriented official social media, renowned for its "most reliable health science communication and the most engaging content." In contrast to the traditional image of official social media, which is often associated with a formal, authoritative tone and one-way communication, the "Shenzhen Health Commission" TikTok account not only undertakes responsibilities such as policy interpretation, public transparency, information dissemination, and public opinion guidance, but also provides health knowledge popularization and education.

The "Shenzhen Health Commission" TikTok account has successfully facilitated public access to health information through innovative communication strategies and content presentation. Backend data and audience feedback indicate a positive communication effect. With over 3 million followers, the account has gained more than 1 million new followers in just one month, driven by its compelling narrative short videos. The TikTok account has consistently focused on the health sector, and its excellent performance has earned it the prestigious "Top Ten Innovative Cases in Chinese Applied News and Communication." Furthermore, the Shenzhen Health Commission's TikTok account has been consistently listed in the "Outstanding government social media Matrix of Shenzhen" for multiple months and has frequently topped the rankings, highlighting its outstanding influence and broad recognition in the field of government social media.

As of June 30, 2024, a total of 130 videos had been posted on this account. For the purpose of this study, we screened these videos, excluding those that did not fall within the scope of health narratives, were repetitive in topic, or did not meet other research criteria. Ultimately, 46 short videos were selected as the analysis sample.

Overall, these 46 short videos received 7,722,625 likes, 608,677 comments, and 5,673,267 shares on the Douyin platform, indicating that these samples have certain typicality and widespread dissemination effects among the audience. In terms of content, the videos cover a wide range of health topics, including autism, dentistry, tuberculosis, and otolaryngology, demonstrating the broad coverage of health narratives in the research sample. Furthermore, these videos also display diversity in format, including short dramas and doctor interviews, highlighting the variety of characteristics within the sample.

3.3 Variable Design and Assignment

This study employs csQCA for analysis. Based on the "Principle of Binary Attribution" and considering both the data weight of each case and the expected utility of each conditional variable in relation to the outcome variable, binary assignments (1 or 0) were applied. The variables and their assignments are detailed in **Table 1** below.

Table 1 Design and Assignment of Conditional Variables and Outcome Variables

Variable	Variable Types	Explanation	Assignment	Explanation variables
Narrative content	Knowledge Clues	There are knowledge clues	1	Condition variables
		No knowledge clues	0	
	Belief Clues	There are clues of belief	1	
		No belief clues	0	
	Action Clues	There are clues to action	1	

		No action clues	0	
Narrative form	Narrative perspective	Immersive narrative perspective	1	
		No immersive narrative perspective	0	
	Narrative duration	More than 1 minute 50 seconds	1	
		Less than 1 minute 50 seconds	0	
	Narrative style	Lighthearted and humorous	1	
		Serious and rational	0	
	Drama Features	Has dramatic features	1	
		No dramatic features	0	
Narrative Subject	Doctor-patient	Doctor-patient narrative	1	
		No doctor-patient narrative	0	
Audiovisual language	Multimedia packaging	With technical packaging	1	
		No-tech packaging	0	
Communication effect		Greater than 1 2401	1	Outcome
		Less than 1 2401	0	Variable

The study was manually coded by two graduate students majoring in Journalism and Communication. Before the formal coding began, a standardized coding manual was developed, and both coders received training on the operationalization of variables. The two coders performed the coding independently. After calculation, the reliability coefficients for each variable ranged from 0.80 to 1.0, indicating consistency in their coding results. Therefore, the inter-coder reliability results are considered acceptable.

4. Data Analysis and Results

4.1 Single Variable Analysis

In applying the QCA method to research, the analysis of individual explanatory variables constitutes a crucial aspect of the overall study, yielding two key indicators: consistency and coverage. Consistency measures the degree to which a particular explanatory variable is necessary for the occurrence of the outcome variable, while coverage assesses the explanatory power of the variable in producing the outcome. The formulas for these two indicators are as follows:

Consistency $(x1 \leq y1) = \sum [\min (x1_i , y1_i)]/\sum(x1_i)$

Coverage $(x1 \leq y1) = \sum [\min (x1_i , y1_i)]/\sum(y1_i)$

Using fsQCA3.0 software, the truth table for the sample cases was calculated, and the results are presented in **Table 2**.

Table 2 Results of single conditional variable analysis

Explanatory variables	High communication effect	
	Consistency	Coverage
PPC	0.4375	0.823529

dramatic	0.5	0.8
knowledge	0.4375	0.7
action	0.875	0.7
belief	0.34375	0.733333
immersive	0.4375	1
style	0.5625	0.75
package	1	0.744186
time	0.59375	0.826087

Upon examining the results for consistency and coverage, it was found that the consistency of the "technical packaging" variable exceeds 0.9 (reaching 1.0), indicating that this variable can be regarded as a necessary condition for achieving high communication effects. Similarly, the consistency of the "action clue" variable exceeds 0.8 (reaching 0.875), suggesting that it constitutes a sufficient condition for high communication effects. The relatively high coverage values for both variables indicate strong explanatory power in accounting for the occurrence of high communication effects.

For the remaining explanatory variables, consistency scores were all below 0.8, indicating that none of these variables can be considered necessary or sufficient conditions for high communication effects on their own. However, their potential impact when combined with other variables necessitates further exploration through combinatorial analysis.

4.2 Variable Combination Analysis

The objective of variable combination analysis is to investigate whether the outcome variable results from the interaction of multiple explanatory variables,

thereby identifying a combination path that leads to the occurrence of the outcome. By analyzing these combination paths, a more comprehensive and nuanced understanding of the outcome's emergence can be obtained. After inputting the truth table derived from the cases into fsQCA 3.0, the analysis produced the following results: the Complex Solution, the Intermediate Solution, and the Parsimonious Solution. The Intermediate Solution, which strikes a balance between explanatory power and generalizability, is frequently used in practical research due to its robust application across diverse contexts. Consequently, this study focuses on the Intermediate Solution for subsequent analysis, with the optimal combination path extracted and presented in **Table 3.**

Table 3 Extraction table of optimal combination path of intermediate solution

Number	Combination path	Native coverage	Net coverage	Consistency
1	PPC*dramatic*~knowledge*action*~belief*immersive*package*~time	0.15625	0.125	1
2	~PPC*~dramatic*knowledge*action*~immersive*style*package*time	0.1875	0.1875	1
3	PPC*dramatic*action*belief*immersive*~style*package*time	0.125	0.125	1
4	PPC*dramatic*~knowledge*~belief*immersive*~style*package*~time	0.0625	0.03125	1
5	~PPC*dramatic*~knowledge*action*~immersive*~style*package*time	0.0625	0.03125	1
6	~PPC*dramatic*~knowledge*action*~bel	0.0625	0.03125	1

	ief*~style*package*time			
7	~PPC*~dramatic*~knowledge*action*~belief*~immersive*style*package*~time	0.0625	0.0625	1
8	~PPC*~dramatic*knowledge*~action*~belief*~immersive*~style*package*time	0.03125	0.03125	1
9	PPC*~dramatic*knowledge*action*~belief*immersive*~style*package*time	0.03125	0.03125	1
10	PPC*dramatic*~knowledge*action*~belief*~immersive*style*package*time	0.03125	0.03125	1
11	PPC*dramatic*~knowledge*~action*~belief*immersive*style*package*time	0.0625	0.0625	1
Overall coverage		0.8125		
Overall consistency		1		

Through the variable combination analysis, a total of 11 combination paths were identified, with an overall consistency of 1 and a coverage rate of 0.815. This indicates that these paths can explain the majority of the sample cases. The results reveal that the combination of content elements leading to high communication effectiveness is not fixed; various factors can interact in different ways to produce high communication effects. Among the 11 paths, the first three demonstrate the highest coverage and explain a larger proportion of the samples. Therefore, this study focuses on these three paths.

Path 1: Edutainment Short Drama

(Doctor-patient Interaction * Dramatic Feature * No Knowledge Clue * Action Clue * No Belief Clue* Immersive Perspective * Technical Packaging * Short Duration)

Typical examples of this path include "Contemporary Cattle and Horse Syndrome!" and "Get in There!" In the short video series produced by the Shenzhen Health Commission, a unique dramatic perspective is employed to deliver humorous complaints. This path captivates the audience with drama and humor while subtly integrating medical knowledge. The role of the doctor helps dispel misunderstandings by providing accurate medical explanations in an engaging manner. This approach allows the public to acquire knowledge while laughing and encourages them to apply this information in their daily lives. The short duration and careful technical packaging, including high-quality visuals and smooth editing, enhance the audience's experience and ensure that the videos are easily shared and absorbed.

Path 2: Collaboration with Internet-Famous Doctors

(Doctor-patient Subject Interaction * No Dramatic Feature * Knowledge Clue * Action Clue * Non-immersive Perspective * Relaxed and Humorous * Technical Packaging * Long Duration)

Examples such as "Foreign object! No hole is too small!" and "Snoring companions, sleepless nights. Does your sleep buddy snore?" represent this narrative path. These videos effectively popularize public health knowledge and have given rise to internet celebrities such as "Doctor Mouth," known for their humor, and "Doctor with Mole," who explains medical topics using relatable life examples. Their simple style and humorous expressions transform complex medical information into accessible content, bridging the gap between doctors and the public. The non-immersive perspective and humorous narration make health knowledge more approachable, while technical

elements such as visual effects and editing techniques enhance the content's potential for viewing and sharing.

Path 3: Emotional Resonance Short Drama

(Doctor-patient Interaction * Dramatic Feature * Action Clue * Belief Clue * Immersive Perspective * Serious and Rational * Technical Packaging * Long Duration)

Typical cases such as "Parents of Children with Autism: 'As long as he can live well, that's enough.'" and "Have You Encountered Unfair Treatment in the Workplace?" utilize an immersive perspective to portray the inner struggles of patients, generating strong emotional resonance. These videos not only highlight the pain and hardship of individuals but also convey a message of hope and support. The combination of "dramatic feature" and "immersive perspective" invites the audience into the narrative, fostering deep empathy and reflection. This path, despite its serious tone, appeals to the audience through sincerity and depth. The longer format facilitates a more thorough narrative, giving viewers ample time to process and engage with the content.

5. Research Conclusion

5.1 Implications

This study also offers some insights for health communication practices on government social media:

First, government social media could make effective use of the new media arena to guide the public with 'constructive' health narratives.

Local governments should accelerate their adaptation to the changes in the media ecosystem and clarify erroneous health concepts for the public in a timely manner. Local government social media should avoid publishing inappropriate

"clickbait-style," "vulgar" information in an attempt to gain attention or save time, as this may worsen the health communication situation. Simply pursuing "entertainment" weakens the authority and reliability of solutions and lacks true constructive value. In fact, the elements of constructive journalism can provide both a conceptual and practical guide for health communication by integrating authoritative knowledge with communication skills, forming a knowledge chain with constructive power, and transforming health knowledge into actionable and feasible strategies. Depth integration of content and coordinated messaging can form a "combination punch" for health communication.

The short videos produced by the Shenzhen Health Commission reflect the deep integration and coordination of knowledge cues, belief cues, and action cues. Knowledge cues provide a solid foundation for health information, belief cues establish a scientifically sound health concept, and action cues encourage the audience to transform the knowledge they learn into behavior. The collaboration of these three elements enhances the authority and appeal of the content, guiding the audience from passive information reception to active participation and behavioral change. By continuously reinforcing the integration of this narrative strategy, government health videos can more effectively influence public health behaviors and improve health literacy across society.

Second, government social media should focus on empathetic narratives to enhance the integration of 'emotion and reason' in government communication effectiveness.

The analysis of the new media communication practices of the Shenzhen Health Commission shows that empathetic communication is an important tool for improving the effectiveness of government communication. In addition to releasing policy

information and service updates, government social media needs to consider how to achieve the tangible presentation of information, emotional resonance, and a deep combination of public recognition through content production and dissemination. To enhance the narrative transmission effectiveness of the Shenzhen Health Commission's new media platform, innovation in narrative approaches at the sensory and perceptual levels is required. Innovation and optimization of narrative forms involve the integration of multiple perspectives, styles, and media. Government social media platforms are promoting a narrative transformation in health communication by integrating various perspectives, styles, and media forms. Moreover, different narrative styles such as humor, seriousness, and warmth cater to the preferences of different audiences, enhancing the attractiveness and effectiveness of health information.

Technological empowerment has strengthened the use of audiovisual language in health communication. Government social media must use modern technologies and audiovisual language to improve the audience's experience. It is worth trying to provide an immersive interactive experience and vivid scene perception for users through converged media technologies. Several excellent cases have shown that integrating various media forms into health communication can greatly enhance the attractiveness and effectiveness of government messages. For example, using animation technology, vivid storytelling, and new technologies like virtual reality (VR) in science popularization videos can make complex health concepts and scientific knowledge more intuitive and relatable, helping the audience understand and accept them more easily. Utilizing visual charts, animations, and real-time data can transform complex health topics into easy-to-understand and captivating content.

Third, foster multi-stakeholder collaboration to build a health communication ecosystem and establish mechanisms for interconnected and coordinated dissemination.

As an official media platform, the Shenzhen Health Commission should fully leverage its authority while promoting cooperation with experts, healthcare workers, and media professionals to facilitate the deep dissemination of health knowledge. The scientific and professional nature of health information creates a natural cognitive gap between the public and content production, so through the "expert-media-public" collaboration, complex health knowledge can be transformed into more comprehensive and accessible communication content. For instance, collaborating with medical experts to produce scientific short videos, inviting frontline healthcare workers to share real-life stories, or working with mainstream media to carry out health-themed reports can enrich the perspectives and content of health communication. By further clarifying the entry points for different communication topics in collaborative innovation, health knowledge and policy information can be presented in a manner that is both scientific and storytelling. From sensory pleasure to emotional resonance, and then to a rational understanding of the logic behind policies, the process can be seamlessly integrated.

Government social media should work to break down "siloed" communication structures and establish a multi-party cooperation and connection ecosystem centered around health communication. Learning from the Shenzhen Health Commission's approach, which uses multi-party dialogue and cooperation to expand the breadth and depth of health information communication, government social media platforms can contribute to building a health communication ecosystem that is co-constructed and shared by society. This provides more channels for the public to access health

knowledge and explores a sustainable and innovative path for health communication on government social media.

5.2 Limitations and Future Research

This study still has some limitations:

First, the applicability of the research results is somewhat limited. The findings are often specific due to the choice of research sample and may only be applicable under certain conditions, making it difficult to generalize. This study takes the "Shenzhen Health Commission" Douyin account as an example. As a local government social media platform, its information editing and dissemination capabilities and platform influence are relatively limited. Therefore, the conclusions of this study cannot be directly applied to other local or national platforms. Future studies could explore the information dissemination effects on platforms at different levels and from different regions.

Second, the use of crisp-set Qualitative Comparative Analysis (cs-QCA) is limited by sample size, scope, and research capacity. This study only selects and examines one media platform, Douyin, so the findings cannot be simply extended to other media domains. Their applicability still needs to be further verified in subsequent research.

Third, although quantitative indicators such as the number of likes, shares, and comments have become representative standards for assessing communication effectiveness, some studies suggest that more appropriate metrics beyond simple likes should be considered for practical purposes. For instance, the multi-dimensional nature of communication effects, including emotional, cognitive, and behavioral dimensions, broadens the scope of social media communication research.

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