

Generation Mechanism of Health-related Video Coping Behaviors Among the Elderly Population in Beijing

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Abstract: With the accelerating global aging process, the health management needs of China's elderly population have become increasingly prominent. WeChat Channels, with its unique social attributes and short-video features, has emerged as a key platform for the elderly to access health information. However, there is a lack of systematic analysis of the coping behavior mechanisms of the elderly when engaging with health-related videos on this platform. Using snowball sampling, this research surveyed 125 elderly users in Beijing and found that content quality and outcome expectations positively influenced coping behaviors, while self-risk perception showed an overall positive effect but with concerns about false information negatively correlating with certain behaviors. The research expands theoretical applications and provides references for policy-making and platform optimization.

Keywords: Health Communication; Elderly Population; WeChat Channels

Online publication: July 26, 2025

1. Introduction

China has over 310 million people aged 60 and above, driving urgent health management demands^[1]. WeChat Channels, leveraging its social networking and short-video functions, has become a core medium for the elderly to obtain health knowledge. However, low information literacy makes them prone to trusting pseudoscientific content, and the social recommendation mechanism may exacerbate the information cocoon effect^[2]. Existing studies lack analysis of coping behavior mechanisms on WeChat Channels, and the related research requires empirical verification. Based on the Uses and Gratifications Theory (Blumler & Katz, 1974), this research extends its application to health communication for the elderly, holding theoretical and practical significance for policy formulation and platform optimization^[3].

2. Research Methods

Using snowball sampling, paper questionnaires were distributed at elderly-concentrated venues (parks, communities, etc.) in urban and suburban Beijing, with oral guidance provided to visually impaired respondents. Online distribution via social networks was also employed, yielding 125 valid responses. The research targeted elderly individuals (≥ 60 years old) residing in Beijing who used WeChat Channels and had viewed health-related videos. Independent variables included content quality, self-risk perception, and outcome expectations, while coping behavior served as the dependent variable. A

questionnaire with 19 Likert-scale items was designed, and after reliability and validity testing, multiple linear regression and correlation analysis were conducted to explore variable relationships.

3. Results and Findings

3.1. Sample Demographics

The sample included 52.8% (66) aged 60-69, 36.8% (46) aged 70-79, and only 10.4% (13) aged 80+, indicating 60-79-year-olds are the primary audience for health content on WeChat Channels. Males accounted for 62.4% (78), possibly due to higher smart device usage rates. Educational backgrounds were dominated by high school/technical secondary school (31.2%) and undergraduate (36%), with 70.4% residing in urban areas. Usage frequency showed 53.6% used WeChat Channels daily, 32.8% multiple times a week, and 13.6% occasionally, highlighting its role as a daily information channel.

3.2. Reliability, Validity, and Regression Results

Reliability tests showed Cronbach's α coefficients of 0.874 for content quality, 0.839 for outcome expectations, and 0.872 for coping behaviors, indicating high reliability. The self-risk perception dimension had $\alpha=0.751$, increasing to 0.872 after removing the "false information concern" item, suggesting weak correlation with other risk perception items. Exploratory factor analysis extracted four factors with a cumulative variance contribution of 66.855%, featuring factor loadings of 0.724-0.813 for content quality and 0.741-0.817 for outcome expectations, confirming good construct validity.

Multiple linear regression showed content quality ($\beta=0.219$, $p=0.020$), self-risk perception ($\beta=0.184$, $p=0.033$), and outcome expectations ($\beta=0.243$, $p=0.007$) significantly and positively predicted coping behaviors, explaining 21.8% of the variance. Outcome expectations had the highest standardized coefficient, indicating that functional expectations of health videos are the core driving force.

3.3. The Special Impact of False Information Concerns

Analysis of "false information concern" (B4) in self-risk perception revealed significant negative correlations with viewing intention (D1, $r=-0.190$, $p<0.05$), continuous viewing intention (D2, $r=-0.182$, $p<0.05$), and recommendation tendency (D3, $r=-0.212$, $p<0.05$). Higher concerns about information authenticity directly reduced seniors' willingness to engage with and share health videos, while showing no significant correlation with interactive behaviors like commenting or forwarding, reflecting a more direct inhibitory effect on basic viewing behaviors.

4. Discussion

4.1. The Fundamental Role of Content Quality

The research confirms that the professionalism and practicality of health videos play a foundational role in elderly coping behaviors ($\beta=0.219$), consistent with Slater's (1996) information credibility model^[4]. Elderly individuals aged 60-79 have strong demands for chronic disease management and daily health preservation. When videos present information through expert explanations and case demonstrations, they are more likely to gain trust. For example, medical experts simplifying professional knowledge through physical demonstrations not only enhance viewing willingness but also encourage the application of advice in daily life, demonstrating content quality's promotion of "cognition-behavior" transformation.

4.2. The Core Motivational Mechanism of Outcome Expectations

Outcome expectations, with the highest contribution rate ($\beta=0.243$), validate the core logic of the Uses and Gratifications Theory. The elderly view WeChat Channels as a tool for proactive health management, with behaviors driven by the expectation chain of "knowledge acquisition-health improvement." When videos promise "controlling blood pressure

through dietary advice” or “exercise programs to relieve joint pain,” the elderly not only continue watching but also generate social sharing behaviors to relatives and friends, forming a closed loop of “expectation satisfaction-behavior reinforcement.” This function-oriented usage motivation distinguishes the elderly from younger groups’ entertainment-oriented use, focusing more on content practical value.

4.3. The Dual Impact of Self-Risk Perception

Self-risk perception showed an overall positive effect ($\beta=0.184$), possibly driven by health anxiety-induced information-seeking behavior—elderly individuals more concerned about their health tend to obtain health knowledge through videos. However, the negative correlation of “false information concern” reveals a special contradiction in the digital age: on one hand, the elderly have weaker information discrimination abilities (Lv Yewen, 2021), leading to anxiety when facing unauthenticated content like “health remedies” or “miracle doctor advertisements”^[5-6]; on the other hand, this anxiety does not translate into active information verification but manifests as direct avoidance of viewing (negative correlations with D1, D2), reflecting the “information overload-cognitive defense” phenomenon caused by the digital divide. When unable to judge information authenticity, the elderly prefer to reduce exposure to mitigate risks, explaining why rural elderly have significantly lower health information acquisition capabilities than urban groups (Ran Xiaoxing & Hu Hongwei, 2022)^[7-8].

4.4. The Potential Influence of Social Recommendation Mechanisms

Although not included as a variable, the “Friends Likes” channel of WeChat Channels—based on the sample’s usage frequency—suggests its role: 68.7% of daily users prioritize browsing videos liked by friends. This content distribution based on trust chains can both enhance information reach and exacerbate false information dissemination. For example, a video on the “acid-base body theory” recommended by relatives and friends may gain significantly higher trust among the elderly than unfamiliar sources, but such pseudoscientific content can mislead health decisions, highlighting the double-edged sword effect of social recommendations among the elderly^[9-10].

5. Conclusion

This research, based on 125 elderly users in Beijing, reveals the generation mechanism of health-related video coping behaviors on WeChat Channels: content quality and outcome expectations form positive drivers, while self-risk perception generally promotes but concerns about false information inhibit behaviors. The innovation lies in extending the Uses and Gratifications Theory to health communication for the elderly, finding that functional expectations are the core variable beyond content quality. Practically, recommendations include platforms establishing professional review mechanisms for elderly health content and marking authoritative sources; content creators adopting age-friendly designs like large subtitles and slow speech; and the government promoting collaboration between “Healthy China” science resources and WeChat Channels to integrate high-quality content into public service systems^[11-12].

Limitations include the focus on urban Beijing samples and cross-sectional data that cannot capture behavioral dynamics. Future research could include rural groups for comparison and longitudinal tracking to deepen causal inference. As elderly digital access rates increase, this field holds continuing value for building an inclusive digital society^[12-13].

Disclosure statement

The author declares no conflict of interest.

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