

Associations Between TCM Short-Form Video Exposure and Health Maintenance Behaviors: The Mediating Roles of Outcome Expectations and Cultural Confidence



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Abstract: Traditional Chinese Medicine (TCM) has gained increasing prominence in China as a component of health literacy and self-care practices. However, how TCM-related information on social media is associated with individuals' perceptions and behavioral tendencies remains underexplored. Drawing on cultural confidence and outcome expectations, this study examines how exposure to TCM short-form videos is associated with young Chinese adults' (aged 18–34) willingness to adopt health maintenance behaviors. Results indicate that exposure to TCM short-form videos is positively associated with cultural confidence, outcome expectations, and willingness to adopt health maintenance behaviors. Outcome expectations significantly mediated this association. In addition, a significant serial mediation pathway was observed. These findings highlight the role of short-form video exposure in shaping health-related perceptions and behavioral tendencies, with practical implications for promoting TCM-related health practices among young Chinese adults

Keywords: traditional Chinese medicine, short-form videos, social media exposure, young adults

1. Introduction

Promoting the transmission of each nation's own traditional culture is widely recognized as critically important in a globalized context (Chen et al., 2024; Russo, 2011). This emphasis is particularly evident in collectivist societies such as China, where cultural continuity is closely tied to social values and national development. Among various cultural forms, TCM culture has received substantial attention and institutional support, leading to systematic efforts to promote its development (ZCX, 2023). A key feature of TCM lies in its emphasis on enhancing citizens' health literacy and encouraging self-care practices, which are associated with broader societal outcomes, includin

g social progress and economic development. In line with these objectives, the dissemination of TCM-related knowledge and accessible treatments has been strongly prioritized. Within this context, social media has emerged as a critical channel, significantly shaping individuals' approaches to health maintenance. Accordingly, the popularization of TCM has attracted increasing scholarly attention in recent years (Pu et al., 2021; Raquepo et al., 2023). Access to TCM has increased compared to earlier periods, particularly through digital platforms. For instance, Chinese college students have shown a relatively high willingness to engage in discussions about TCM online (Wang et al., 2024). Social media has also emerged as a key channel for disseminating TCM-related informat

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ion and treatment approaches during the COVID-19 pandemic, with these platforms actively promoting TCM treatments (Zhou, 2023). In addition,

TCM has increasingly been incorporated into “Internet + Chinese medicine” service systems, which are designed to support and deliver timely healthcare services for older adult patients with chronic diseases (Wang et al., 2023). Taken together, these developments suggest that the dissemination of TCM has become closely integrated into the daily lives of individuals in contemporary China. Accordingly, there is a need for further research to examine how TCM-related content on social media is associated with individuals’ perceptions and behavioral responses.

Growing empirical research has examined Chinese users’ engagement with social media and online platforms and how such engagement is associated with cognitive and behavioral responses.

For example, users report satisfaction when seeking diagnostic and treatment-related information via platforms such as Zhihu (Wang et al., 2024). Short-form video platforms, particularly Douyin and Kuaishou, have become central to daily information consumption and key channels for disseminating health-related content (Yao et al., 2022). Exposure to such content is associated with greater awareness of TCM culture and increased adoption of traditional health practices (Zhu et al., 2025). However, limited scientific grounding and insufficient emphasis on evidence-based knowledge in TCM-related media content may be linked to less favorable user evaluations (Wang et al., 2024). These mixed findings highlight the need for further research on how TCM-related media exposure is associated with individuals’ perceptions, attitudes, and behavioral responses in contemporary China

While prior research has examined the influence of social media on individuals’ adoption of TCM treatments, two key gaps remain. First, despite growing attention to health-related content on emerging platforms (e.g., short-form videos) and its association with behaviors such as vaccinati-

on and cancer screening (Kirkpatrick & Lawrie, 2024; Oh et al., 2023), the link between TCM-related information and health behavior change remains underexplored. Second, prior studies have primarily examined psychological and cognitive mechanisms, such as perceived reliability, self-efficacy, and attitudes (Dalmer, 2017; Deng & Liu, 2017; Niu et al., 2021), while overlooking the potential mediating roles of cultural factors, such as cultural confidence (CC) and previous experience (PE), as well as propositional attitudes, including outcome expectations (OE).

As discussed above, the present study aims to examine the association between exposure to TCM short-form videos (ETSFV) and willingness to adopt health maintenance behaviors (WAHMB) among young Chinese adults (aged 18–34). In addition, this study seeks to provide practical and policy-relevant implications for promoting the use of TCM-related diagnostic and treatment practices among young Chinese adults.

1.2. Hypotheses

Based on a review of previous literature, this study proposes the conceptual model shown below (see Figure 1). The hypotheses are summarized as follows:

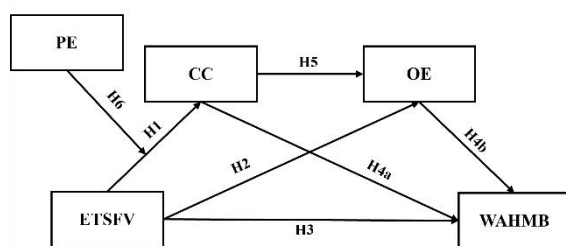


Figure 1. Research Model and Hypothesized Associations

Hypothesis 1: ETSFV is positively associated with young Chinese adults’ CC.

Hypothesis 2: ETSFV is positively associated with young Chinese adults’ OE.

Hypothesis 3: ETSFV is positively associated with young Chinese adults’ WAHMB.

Hypothesis 4a: CC may mediate the relationship between ETSFV and young Chinese adults’ WAHMB.

Hypothesis 4b: OE may mediate the relationship

between ETSFV and young Chinese adults' WAHMB.

Hypothesis 5: The association between ETSFV and young Chinese adults' WAHMB is sequentially mediated by CC and OE.

Hypothesis 6: PE moderates the association between ETSFV and young Chinese adults' CC.

2. Methods

2.1. Methods and data collection

The survey questionnaire was adapted from prior literature and carefully designed based on existing studies (Younger et al., 2012; Zeballos Rivas et al., 2021). Several items were refined following pilot testing with two focus groups of short-form video platform users (aged 18–34). The final instrument comprised five scales measuring ETSFV, CC, OE, PE, and WAHMB. The questionnaire was translated from English into Chinese using a rigorous back-translation procedure (Lor & Gao, 2020). It was further reviewed by two health communication experts from Beijing Institute of Graphic Communication and Central China Normal University, with expertise in health communication and media studies. All items were measured using a five-point Likert scale ranging from “strongly disagree” to “strongly agree.”

For participant recruitment, this study used the online survey platform Tencent Survey (<https://wj.qq.com/>; accessed on 12 March 2026), which is widely used in China-based research (Lu et al., 2025). Data were collected between 12 March and 17 April 2026. A total of 273 valid responses were retained after excluding 20 responses during the screening process. The hypotheses were tested using SPSS 31, employing descriptive statistics, hierarchical regression, and mediation and moderation analyses.

2.2. Ethics statement

Ethical approval was obtained from the Academic Committee of the School of Journalism and Communication at Beijing Institute of Graphic Communication on 5 March 2026. Informed consent was provided at the beginning of the online survey. Participants were informed that participati-

on was voluntary and that they could withdraw at any time without any negative consequences.

2.3. Reliability and validity

The reliability analysis indicated that all measures (ETSFV, CC, OE, PE, and WAHMB) demonstrated satisfactory internal consistency, with Cronbach's alpha values ranging from 0.87 to 0.96. These values exceed the commonly accepted threshold of 0.80, indicating excellent reliability. To assess construct validity, exploratory factor analysis (EFA) was conducted. The results showed that the Kaiser–Meyer–Olkin (KMO) values ranged from 0.87 to 0.94, meeting the recommended threshold for sampling adequacy (Nasiru & Md Dahlan, 2020). In addition, Bartlett's test was significant, supporting the suitability of factor analysis. Lastly, factor loadings for all items on their respective constructs exceeded 0.70, indicating satisfactory convergent validity.

3. Analysis

3.1. Descriptive data

A total of 273 valid responses were obtained. The respondents were predominantly female (N = 145, 53.1%) and male (N = 128, 46.9%). They were primarily aged 18–22 years (N = 135, 49.5%), followed by 23–27 years (N = 86, 31.5%) and 28–32 years (N = 52, 19.0%). Moreover, respondents' educational attainment included high school (N = 7, 2.6%), junior college (N = 31, 11.4%), an undergraduate degree (N = 144, 52.7%), and postgraduate education (master's and doctoral combined; N = 91, 33.3%). In addition, respondents' monthly income was grouped into five categories: ≤ 2,999 RMB (N = 21, 7.7%), 3,000–5,999 RMB (N = 68, 24.9%), 6,000–9,999 RMB (N = 64, 23.4%), 10,000–14,999 RMB (N = 66, 24.2%), and ≥ 15,000 RMB (N = 54, 19.8%).

3.2. Hypothesis testing

The hypothesized model fit was initially assessed by specifying ETSFV as the independent variable, CC and OE as mediators, and WAHMB as the dependent variable. PE was included as a

moderator. The model demonstrated acceptable fit to the data ($\chi^2(8) = 17.39$, $p = .026$, CFI = 0.98, TLI = 0.96, SRMR = 0.031, RMSEA = 0.066, 90% CI [0.021, 0.108]). Accordingly, to test the direct associations proposed in Hypotheses 1–3, path analyses were conducted with ETSFV predicting CC, OE, and WAHMB, while controlling for demographic variables (age, income, education level, and gender) (Jaakkola et al., 2016; Rađević et al., 2023; Richaud et al., 2013). The results indicated that ETSFV was positively associated with CC ($\beta = 0.39$, $t = 6.37$, $p < 0.001$, 95% CI [0.18, 0.36]), OE ($\beta = 0.51$, $t = 8.79$, $p < 0.001$, 95% CI [0.35, 0.56]), and WAHMB ($\beta = 0.63$, $t = 12.07$, $p < 0.001$, 95% CI [0.57, 0.79]). Therefore, Hypotheses 1–3 were supported.

To test Hypotheses 4(a–b) and 5, Hayes' PROCESS macro (Model 6) was used to examine the mediation and serial mediation relationships. Bootstrapping with 2,000 resamples was applied to generate bias-corrected 95% confidence intervals. The results indicated that CC was not significantly associated with WAHMB ($B = 0.02$, $t = 0.21$, $p = 0.84$, 95% CI [-0.16, 0.20]), and the indirect association via CC was not significant ($B = 0.01$, $p > 0.05$, 95% CI [-0.04, 0.05]). Therefore, Hypothesis 4a was not supported. In addition, OE was positively associated with WAHMB ($B = 0.57$, $t = 7.76$, $p < 0.001$, 95% CI [0.43, 0.71]), and the indirect association via OE was significant ($B = 0.26$, $p < 0.001$, 95% CI [0.17, 0.37]). Furthermore, CC was positively associated with OE ($B = 0.78$, $t = 13.65$, $p < 0.001$, 95% CI [0.67, 0.89]), and the serial indirect association from ETSFV to WAHMB via CC and OE was significant ($B = 0.12$, $p < 0.001$, 95% CI [0.07, 0.18]). Therefore, Hypotheses 4b and 5 were supported.

Finally, the moderating role of PE was examined using Hayes' PROCESS macro (Model 7). Bootstrapping with 2,000 resamples was applied to generate 95% confidence intervals. The results indicated that the interaction between ETSFV and PE was not significantly associated with CC

($ETSFV \times PE \rightarrow CC$, $\beta = 0.10$, $t = 1.79$, $p = 0.07$, 95% CI [-0.02, 0.40]). Therefore, Hypothesis 6 was not supported. In other words, the association between ETSFV and CC did not vary significantly across different levels of PE among young Chinese adults.

4. Discussion

4.1. Summary of key findings

Growing empirical research has increasingly examined users' engagement with social media, particularly health-related content associated with TCM. However, despite this expanding body of work, the associations between TCM-related media exposure and individuals' perceptions, attitudes, and behavioral responses remain underexplored in contemporary China. The present study addresses this gap by incorporating the key constructs of cultural confidence and outcome expectations to examine how exposure to TCM short-form videos is associated with young Chinese adults' (aged 18–34) willingness to adopt health maintenance behaviors.

The findings indicate that exposure to TCM short-form videos is positively associated with cultural confidence, outcome expectations, and willingness to adopt health maintenance behaviors. This pattern aligns with established perspectives suggesting that exposure to health information on social media is linked to individuals' expectations and behavioral tendencies (Zeballos Rivas et al., 2021). Regarding the mediating mechanisms, outcome expectations emerge as a significant mediator in the association between exposure and willingness to adopt health maintenance behaviors. In contrast, cultural confidence does not exhibit a significant independent mediating role. Nevertheless, cultural confidence remains relevant within a serial mediation pathway. Specifically, exposure to TCM short-form videos is associated with higher cultural confidence, which is in turn linked to stronger outcome expectations, ultimately contributing to greater willingness to adopt health maintenance behaviors. In other words, frequent exposure

re to TCM-related content on short-form video platforms is associated with enhanced perceptions of pride and confidence in traditional medicine. This heightened cultural confidence is further linked to stronger expectations regarding the benefits of TCM for personal health, which subsequently relates to an increased willingness to engage in TCM-based health maintenance practices.

4.2. Limitations and future research

This study has several limitations that need to be acknowledged. First, the sample size was only 273, and it consisted mainly of young Chinese adults aged about 18-34 years. Therefore, the results may not accurately reflect the actual effects of exposure to TCM short videos on the health behaviors of Chinese people of all ages. Future studies should aim for a larger and more diverse sample, including different age groups, to improve the broadness of the results. Second, this study employed convenience and non-probability sampling methods, which may limit its representation of the broader population in terms of demographic characteristics. To ensure generalizability and representativeness, future studies should consider using more efficient sampling methods, such as stratified or quota sampling techniques. Third, as this study is cross-sectional in design, it cannot establish causality between key predictors. To explore the relationship between independent and dependent variables in more depth, we recommend using longitudinal study designs (such as two-wave panel surveys) or experimental approaches to obtain more significant results. Finally, this study did not consider cognitive factors (e.g., perceived value) and social factors (e.g., subjective norm) that may influence young Chinese adults' willingness to adopt health maintenance behaviors. We strongly encourage researchers to explore the mediating mechanisms of these factors to understand the relationship between exposure to TCM short videos and the adoption of health maintenance behaviors.

Conflict of Interest

The authors declare that they have no conflicts of interest to this work.

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