The Influence of Narrative Communication and Academic Communication on the Acceptance of Traditional Chinese Medicine

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Abstract. The level of public acceptance of TCM is not only determined by medical factors but also by communication style. This study aimed to experimentally compare narrative and academically framed messages to determine their effects on participants' level of trust, involvement in TCM, belief in TCM theory, and intention to try TCM therapies. Participants with prior knowledge of TCM (N = 684) were randomly assigned to read a narrative or academically framed message with the same level of factual content and then asked to complete a post-exposure survey. Independent-samples t-tests and Pearson correlation were used. Significantly more trust, engagement, and behavioral willingness were associated with narrative communication compared to academic communication, while the difference in belief in the theoretical foundations of TCM was relatively small. Furthermore, trust and engagement were stronger predictors of willingness than belief across the two formats, suggesting that experiential responses are central to the process of motivating TCM practices. Mechanism analyses also revealed that while narrative communication was associated with increased persuasion overall, the relationship between evaluation and intention was similar across the two formats. The results of this study support the idea that narrative formats are useful as "persuasion amplifiers" and do not fundamentally alter the process of decision-making and that the inclusion of experiential responses and scientific explanations of TCM practices has value for health communication related to culturally embedded medical practices.

Keywords: Narrative persuasion, Health communication, Traditional Chinese Medicine

1. Introduction

Public acceptance of Traditional Chinese Medicine (TCM) depends not only on medical information but also on how that information is communicated. Narrative and academically framed messages differ in their emphasis on experiential engagement versus scientific explanation, and prior research has shown that these formats can shape how nonexpert audiences evaluate health and science information [1]. More broadly, health communication research suggests that message framing can influence engagement, trust, and behavioral responses, sometimes producing effects beyond changes in factual belief [2].

Although both narrative and academic formats have been shown to influence health beliefs, they may operate through different psychological mechanisms related to causal understanding and information acceptance [3]. These differences are particularly relevant for culturally embedded practices such as TCM, whose public understanding is strongly shaped by media representation and ethical debate in contemporary communication environments [4,5].

However, experimental comparisons of narrative and academic communication in the context of TCM remain limited. The present study addresses this gap by examining how message framing influences trust, engagement, belief in TCM theory, and willingness to try TCM therapies.

2. Method

The current research employed a survey of participants exposed to either an informative explanation or a narrative story about Traditional Chinese Medicine (TCM), with equivalent content but different presentation methods. Participants were randomly allocated to each condition and completed equivalent surveys directly after. Out of 705 participants, results are presented for those with prior knowledge of TCM (N = 684).

Measures were collected on five constructs: demographics, exposure condition, trust in message, engagement, belief in TCM, and willingness to behave. Trust was measured with one item asking participants to rate how credible they find the message on a 5-point Likert scale. Engagement was measured as the mean of several items measuring attention and engagement (1-5 scale; acceptable reliability). Belief was measured by asking participants whether they believe in TCM theoretical principles, and willingness was measured by asking participants whether they are willing to try TCM therapies.

Independent samples t-tests were conducted to compare the two conditions, and correlations were examined between trust, engagement, belief, and willingness with the Pearson correlation method. Effect sizes (Cohen's d) were reported where appropriate

3. Result

Analyses were conducted on the sample of respondents who reported prior familiarity with Traditional Chinese Medicine (TCM) before the experiment (N = 684). The sample consisted of a general audience with diverse demographic backgrounds and substantial exposure to TCM-related information through social media, online videos, and news sources, making the experimental context comparable to real-world media environments.

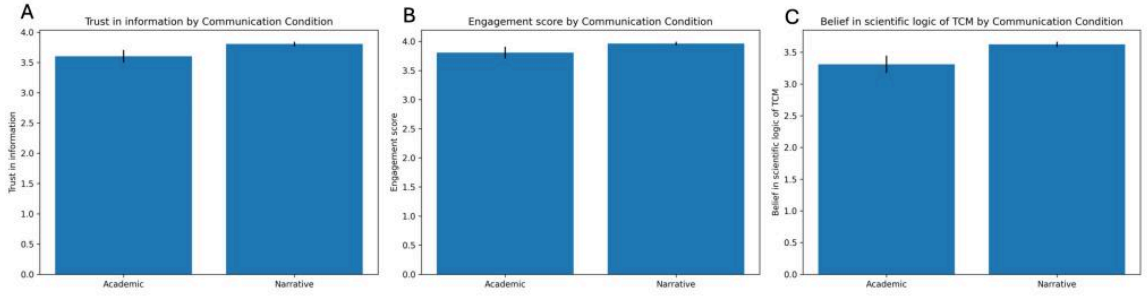

Figure 1. Effects of communication format on trust, engagement, and belief

(A) Mean trust in the information presented, measured on a 5-point Likert scale, by communication condition. (B) Mean engagement score, reflecting participants' interest and

involvement with the content, by communication condition. (C) Mean belief in the scientific logic of traditional Chinese medicine (TCM), reflecting endorsement of theoretical principles such as Yin–Yang and the Five Elements, by communication condition.

Bars represent group means and error bars indicate standard errors of the mean. Results show that narrative communication elicited higher trust and engagement than academic communication, whereas differences in belief were smaller and less consistent. Across both communication conditions, participants reported moderate to high levels of engagement, indicating that both the academic and narrative texts were effective in attracting audience attention (Figure 1B). However, responses differed across evaluative dimensions. Participants expressed relatively positive attitudes toward the safety of herbal medicine and TCM practices, whereas endorsement of the scientific logic underlying TCM theories was less favorable overall (Figure 1C).

Between-condition comparisons revealed systematic effects of message framing. Participants in the Narrative condition reported higher trust in the information than those in the Academic condition (Figure 1A), along with higher engagement scores (Figure 1B). In contrast, differences in belief regarding the scientific logic of TCM were comparatively small and less consistent across conditions (Figure 1C), suggesting that narrative framing primarily influenced experiential evaluations rather than abstract theoretical endorsement.

Behavioral outcomes followed a similar pattern. Participants exposed to narrative messages reported significantly higher willingness to try TCM therapies than those in the academic condition (Figure 2A). By comparison, differences in composite pro-TCM attitudes were smaller and less stable (Figure 2B), indicating that behavioral intention was more sensitive to message framing than overall attitudinal orientation.

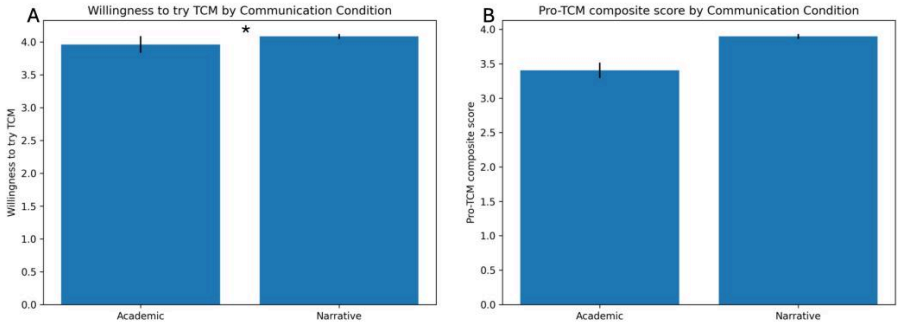

Figure 2. Effects of communication format on behavioral willingness and overall attitudes

(A) Mean willingness to try TCM therapies (e.g., acupuncture, cupping, moxibustion) by communication condition. (B) Mean pro-TCM composite score, aggregating multiple attitudinal items reflecting general openness and positive orientation toward TCM.

Bars represent group means and error bars indicate standard errors of the mean. Narrative communication was associated with higher behavioral willingness than academic communication, while differences in overall pro-TCM attitudes were comparatively modest.

Mechanism analyses further clarified these patterns. Trust in the information was strongly associated with willingness to try TCM therapies in both the Academic condition ($r = .68$; Figure 3A) and the Narrative condition ($r = .60$; Figure 3B). Engagement demonstrated even stronger associations with willingness, particularly in the Academic condition ($r = .83$; Figure 3C), and remained substantial in the Narrative condition ($r = .66$; Figure 3D). Across both communication formats, belief in TCM theory showed weaker associations with willingness than either trust or engagement.

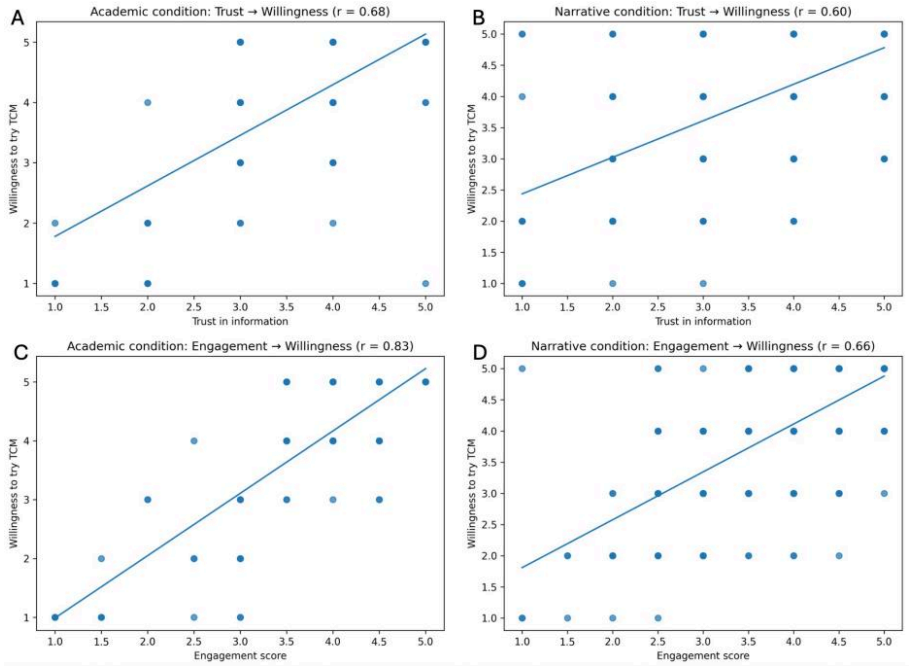

Figure 3. Trust and engagement as mechanisms underlying behavioral willingness

(A) Relationship between trust in the information and willingness in the academic condition. (B) Relationship between trust in the information and willingness in the narrative condition. (C) Relationship between engagement score and willingness in the academic condition. (D) Relationship between engagement score and willingness in the narrative condition.

Each point represents an individual participant. Solid lines indicate linear best-fit trends. Across both communication formats, higher trust and higher engagement were strongly associated with greater willingness to try TCM, indicating that behavioral willingness is closely linked to experiential evaluations rather than belief change alone.

Collectively, these results indicate that narrative framing is associated with modest increases in trust, engagement, and behavioral openness, while willingness to try TCM therapies is primarily linked to experiential evaluations rather than theoretical belief. Although both communication formats successfully engaged participants, the narrative format was more effective in promoting readiness to act toward TCM practices.

4. Discussion

The results of this research have shown that narrative and academic communication formats have different levels of effectiveness while relying on similar psychological mechanisms to influence TCM acceptance. Specifically, it was shown that narrative communication formats always resulted in higher levels of trust, engagement, and willingness to behave compared to academic communication formats. At the same time, the relationships between these variables and willingness to behave remained stable. These findings suggest that narratives make communication more persuasive not by changing the mechanisms of decision-making but by placing individuals on a higher level of experiential evaluation within the same general framework discussion.

It was shown that narrative communication was especially effective in increasing perceived credibility and engagement levels, while support for TCM's scientific logic was only slightly affected. These findings suggest that increased engagement with TCM can be explained to a lesser

extent by belief changes and more by affective and relational responses to the message. Trust and engagement have been identified as major drivers of willingness to behave in both communication formats, often surpassing the impact of abstract belief variables.

Understanding these differences in terms of effects and these similarities in terms of mechanisms helps to resolve potential contradictions between average effects and correlational structures. While narrative styles improved average levels of trust and engagement, the underlying processes by which these predictors influenced willingness to comply remained similar to those in the control condition. In a sense, narrative messages are persuasive multipliers, not catalysts for fundamentally distinct mental processes.

These findings extend existing health communication research to a culturally situated and sometimes contentious area of medicine. In a more practical sense, these findings suggest that, in order to reach a broader audience, health communicators do not necessarily need to rely on technical arguments to promote public compliance. In fact, a combination of experiential narratives and clear scientific explanation could be an effective tool in promoting public health.

Several limitations warrant consideration. The post-exposure design precludes conclusions about long-term attitude change, and behavioral willingness was assessed via self-report rather than observed behavior. Future research should examine longitudinal effects, test hybrid narrative–academic formats, and explore audience heterogeneity in responsiveness to different message styles.

Overall, the results indicate that narrative communication increases acceptance of TCM primarily by strengthening trust and engagement, while both narrative and academic approaches share common psychological mechanisms linking evaluation to action.

5. Conclusion

This research clearly demonstrates that communication format is an important factor in influencing public acceptance of Traditional Chinese Medicine (TCM). Although narrative and academically framed messages presented the same factual information, the narrative communication format was associated with significantly higher levels of trust, engagement, and intention to use TCM therapies. At the same time, the psychological associations between these experiential judgments and behavioral intention were relatively constant across formats, suggesting that storytelling can improve persuasion by strengthening existing associations rather than changing the way people judge health information.

Regardless of format, trust and engagement were found to be more important predictors of intention than belief in the scientific rationale of TCM. This result highlights the significance of affective and relational responses to media-based health communication, especially with regard to culturally embedded or disputed practices. People can become receptive to behavior even if they are not sure about the underlying theoretical principles, which emphasizes the pragmatic significance of messages that promote trust and engagement rather than abstract scientific reasoning.

Taken together, the findings move the theories of narrative persuasion forward by highlighting the distinction between format-level effectiveness and mechanism-level similarity. The narratives appear to operate as persuasive amplifiers, situating the audience within the same evaluative framework but at higher levels of psychological readiness for action.

In terms of practical application, the findings of the study would appear to indicate that hybrid approaches, which combine personal narratives with clear scientific explanation, may be particularly effective in communicating about TCM and other forms of complementary medicine. Future studies should seek to examine the long-term effects of narrative persuasion and examine behavioral

outcomes that go beyond self-reported intentions, as well as examine differences in audience responsiveness to communication style.

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