Adoption, Processing, and Persuasion Mechanisms of Health Information in Digital Media: A Review of Panel 1 at the MHM 2025

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Abstract

On 6 July 2025, Panel 1—"Adoption, Processing, and Persuasion Mechanisms of Health Information in Digital Media"—took place during the 8th "Medicine, Humanity and Media" Health Communication International Conference at Peking University. Six early-career scholars—Yinglin Wang (City University of Hong Kong), Haoning Xue (University of Utah), Fen Zhou and Xincheng Huang (South China University of Technology), Yanpei Chen (University of Texas at Austin), and Haoyu Wang (Renmin University of China)—shared new empirical work on digital health communication. Drawing on a survey of Chinese young adults, Y. Wang found that adoption of parental online health advice depends more on relational closeness than on perceived credibility. Using eye-tracking with 1,467 U.S. participants, Xue observed an inverted-U effect in which moderate message-sensation value in short videos maximized attention, cognitive engagement, and risk perception. Through a 2 × 2 factorial experiment, Zhou showed that inoculation messages reduce worries about vaccine side-effects and PET-CT radiation and, via attitude change, increase behavioural intent. Huang demonstrated that internally activated moral licensing has a greater impact on responsible-drinking intentions than external gain–loss framing. From 27 qualitative interviews, Chen revealed how patriarchal ideologies across family, institutional, and online

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cyberchondria subtypes; rural residence and low income predicted membership in the dysregulated group, marked by a maladaptive search–anxiety cycle driven by brooding and avoidance.

Keywords

Digital health communication, Message-sensation value, Inoculation messaging, Moral licensing, Cyberchondria, Communicative disenfranchisement

On the afternoon of July 6, 2025, *Panel 1: Adoption, Processing, and Persuasion Mechanisms of Health Information in Digital Media* was held as part of the 8th "Medicine, Humanity and Media" Health Communication International Conference & Doctoral Symposium Conference Program at the School of Journalism and Communication, Peking University. The panel brought together six emerging scholars—Yinglin Wang (City University of Hong Kong), Haoning Xue (University of Utah), Fen Zhou and Xincheng Huang (South China University of Technology), Yanpei Chen (University of Texas at Austin), and Haoyu Wang (Renmin University of China)—who presented original research addressing key issues in digital health communication. Their work explored how individuals engage with, evaluate, and are influenced by health information in digital media environments. The panel also featured invited commentary from Professor May O. Lwin, President's Chair Professor of Communication Studies and Chair of the Wee Kim Wee School of Communication and Information at Nanyang Technological University, and Associate Professor Shaohai Jiang from the Department of Communications and New Media at the National University of Singapore.

Y. Wang presented a paper titled "Credibility and Adoption of Online Health Information Shared by Parents: A Study of Young Adults in Mainland China." Framed within the broader context of everyday digital media use, the study investigates how young adults perceive and respond to health information shared by their parents through online platforms. It specifically explores how information credibility, familial relationships, and individual media literacy interact to influence young adults' intentions to adopt such information. To test the study's four hypotheses, Y. Wang employed independent-sample t-tests and hierarchical regression analyses. To further examine potential mediating mechanisms, she applied both the Four-Step Method of Mediation Analysis and Structural Equation Modeling (SEM) to survey data. The results reveal a pervasive "credibility gap" between generational groups, suggesting the existence of latent intergenerational communication barriers in Chinese families. Notably, strong parent–child relationships were found to directly encourage the adoption of parental health advice—even when the credibility of the information was perceived as low. Additionally, high levels of eHealth literacy among young adults did not necessarily translate into greater scepticism toward the health content shared by their parents.

During the discussion, Jiang emphasized the importance of clarifying how the third-person effect functions within strong-tie familial networks. He also recommended that the rationale for participant sampling be explained more thoroughly and that the proposed model be streamlined to better reflect the hierarchical, authority-oriented structure of Chinese families. Lwin added that the conceptual framing should not rely on selectively cited literature but should instead be anchored in a broader family socialization framework. She further encouraged the author to engage more deeply with scholarship on misinformation, exposure pathways, and reverse socialization. In particular, she called for a clearer theorization of the parental role across various socialization channels and urged that the research questions be developed with closer attention to intergenerational dynamics specific to Asian cultural contexts.

Xue presented a paper titled "The Attentional Mechanism of Short Videos' Persuasive Effects." Drawing on data from 1,467 participants in the United States, the study examined how variations in message sensation value (MSV)—operationalized through short videos on COVID-19 and climate change—shaped audience attention, cognitive processing, emotional responses, and overall persuasive outcomes. Using eye-tracking technology, the research demonstrated that higher levels of MSV significantly boosted visual attention. Interestingly, the moderate MSV condition proved most effective in fostering deeper cognitive engagement, strengthening message credibility, and heightening risk perception. Together, these findings indicate that moderate sensory stimulation may optimize the persuasive impact and communicative effectiveness of health-related short videos, particularly for younger viewers.

During the commentary session, Lwin praised the integration of the Heuristic–Systematic Model with Cognitive Overload Theory as a robust theoretical framework for explaining the dual effects of sensory stimulation on persuasion. She further suggested that future research incorporate physiological indicators—such as facial electromyography, skin conductance response, and heart rate variability—alongside eye-tracking data to gain a more comprehensive understanding of how emotional arousal mediates the relationship between sensory input and systematic processing.

Zhou presented a paper titled "Are Inoculation Messages Effective? An Experiment on Secondary Risks of Health Behaviours." The study investigated whether inoculation messages—consisting of pre-emptive warnings and refutational content—could mitigate public concerns about the secondary risks associated with certain health behaviours. In this study, secondary risks were defined as vaccine side effects and radiation exposure from PET-CT scans. A 2×2 factorial experiment manipulated the presence or absence of inoculation content within the health communication materials. The results indicated that including inoculation messages significantly reduced participants' perceived secondary risks and, by improving attitudes, indirectly increased their behavioural intentions. This indirect effect followed a chain-mediated pathway: reduced risk perception fostered more favourable attitudes, which subsequently enhanced behavioural intention. However, the direct effects varied by topic. A marginal improvement in behavioural intention was observed in the HPV vaccination scenario, whereas no significant change emerged in the PET-CT condition. Collectively, these findings suggest that addressing secondary risk concerns can strengthen message effectiveness by shifting attitudes, although the extent to which this translates

into actual behavioural uptake may depend on issue-specific factors and the nature of perceived risks.

In the discussion, Jiang noted that the conceptual definition of secondary risk requires further refinement and that the theoretical foundations of the research questions and hypotheses should be more fully developed. He also recommended adding manipulation checks and providing more detailed descriptions of the stimulus materials to bolster internal validity. Lwin emphasized the importance of clearly specifying and controlling for the influence of the primary message before evaluating secondary effects. She further suggested examining whether the refutational content merely elicited heuristic (i.e., shallow) processing. Both reviewers agreed that the study offers preliminary quantitative evidence on how fear of secondary risks may inhibit engagement in preventive health behaviours.

Huang presented a paper titled "Behind the Mask of Responsibility: The Effects of Message Framing and Moral Licensing on Responsible Drinking Persuasion." Focusing on responsible drinking—a health behaviour characterised by low risk perception and strong social embeddedness—the study explored how external message framing (gain vs. loss) and internal moral licensing (operationalized through recall of alcohol-related moral behaviours) shaped individuals' attitudes and behavioural intentions. The findings indicated that message framing significantly influenced participants' attitudes toward the advertisement but had no direct effect on their attitudes toward responsible drinking or on their behavioural intentions. In contrast, the moral licensing condition fostered more favourable attitudes toward responsible drinking, which in turn mediated a positive effect on behavioural intention. No significant interaction emerged between the two variables. Taken together, these results suggest that, in the context of responsible drinking, internally activated moral self-perceptions may exert greater persuasive power than externally framed messages.

In the discussion, Jiang observed that the study's theoretical framework would benefit from deeper grounding in its cultural context. He recommended integrating the concept of drinking as a form of social obligation in Chinese culture to enhance the study's interpretive relevance. He further suggested that the literature review more clearly articulate the theoretical rationale for the proposed mediation and moderation mechanisms. From a methodological standpoint, Jiang raised concerns about the adequacy of the sample size ($N = 140$) for detecting the hypothesised effects and advised conducting a power analysis to strengthen the study's statistical validity.

Chen presented a paper titled "Unheard Voices: Communicative (Dis)enfranchisement in Women's Health Experiences in Contemporary China." Drawing on 27 in-depth interviews, the study systematically applies the Theory of Communicative Disenfranchisement (TCD) to the domain of women's gynecological health in China. It identifies two enduring ideological structures: the subordination of women to men and the framing of female physiological functions as impure. The study further examines how these ideologies are enacted across multiple discursive domains— including the family, healthcare institutions, education systems, and social media—through communicative practices of devaluation, stigmatization, silencing, and neglect. These practices, in

turn, generate both individual and structural consequences, such as informational asymmetry, delayed access to medical care, emotional distress, and disruptions in social relationships.

In the discussion, Lwin acknowledged the practical and socio-cultural significance of the topic, emphasizing that "this issue holds considerable significance within the Asian context." She encouraged the author to broaden the theoretical foundation beyond keyword-based literature searches by integrating seminal works from sociology and anthropology on gender, power, and agency. Lwin also observed that the current sample primarily consists of highly educated urban women and suggested revising the title to reflect this demographic—for example, "Health Experiences of Young Urban Women in Contemporary China." She further advised the author to explicitly acknowledge this sample limitation in the discussion section and to propose future research directions that include rural and ethnic minority women. Finally, she recommended adding a justification for the sample size to strengthen the study's methodological transparency and rigor.

H. Wang presented a paper titled "Cyberchondria Subtypes and Their Relationship with Brooding, Reflective Pondering, and Information Avoidance." Based on a sample of 500 participants, the study combined Latent Profile Analysis (LPA) and mediation analysis to identify three distinct subtypes of cyberchondria: adaptive seekers, anxious seekers, and dysregulated seekers. The findings indicate that health anxiety contributes to hypochondriacal behaviour through two primary psychological pathways. The first is a maladaptive loop—driven by the interaction of brooding and information avoidance—characterized by a repetitive "search–anxiety–research" cycle. The second pathway, centered on reflective pondering, illustrates a more constructive cognitive route that appears to buffer against excessive health-related anxiety. The study also revealed that individuals with rural household registration and lower income were significantly more likely to fall into the dysregulated subtype, underscoring how structural inequality intersects with cognitive coping styles and health information behaviours. These findings highlight the limitations of merely discouraging health-related online searches and point to the need for tailored digital health interventions that account for users' psychological profiles.

During the discussion, Lwin and Jiang commended the study for its methodological innovation and timely relevance but emphasized two key areas for improvement. First, the theoretical and practical implications of identifying cyberchondria subtypes and their underlying mechanisms should be more explicitly connected to the field of health communication. Second, they recommended refining the narrative structure to establish a clearer progression from subtype identification to explanatory models. The reviewers further encouraged the author to frame health anxiety as a core outcome of health communication and to align the discussion more closely with actionable strategies—such as credibility signalling, emotional regulation support, and cross-disciplinary intervention frameworks—that could inform targeted and scalable digital health initiatives.

Xue from the University of Utah was awarded the Best Paper Award in panel 1 for her presentation titled "The Attentional Mechanism of Short Videos' Persuasive Effects."

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Note

This conference report summarizes the presentations and discussions from Panel 1: Adoption, Processing, and Persuasion Mechanisms of Health Information in Digital Media, held on July 6, 2025, at the 8th "Medicine, Humanity and Media" Health Communication International Conference. Descriptions of the individual papers draw on the presenters' data, analyses, and interpretations as shared during the session, while the commentary sections reflect the invited experts' observations and recommendations.