

Jiayin WANG

Annenberg School for Communication and Journalism & Mann School of Pharmacy and Pharmaceutical Sciences,
University of Southern California, Los Angeles, California, United States

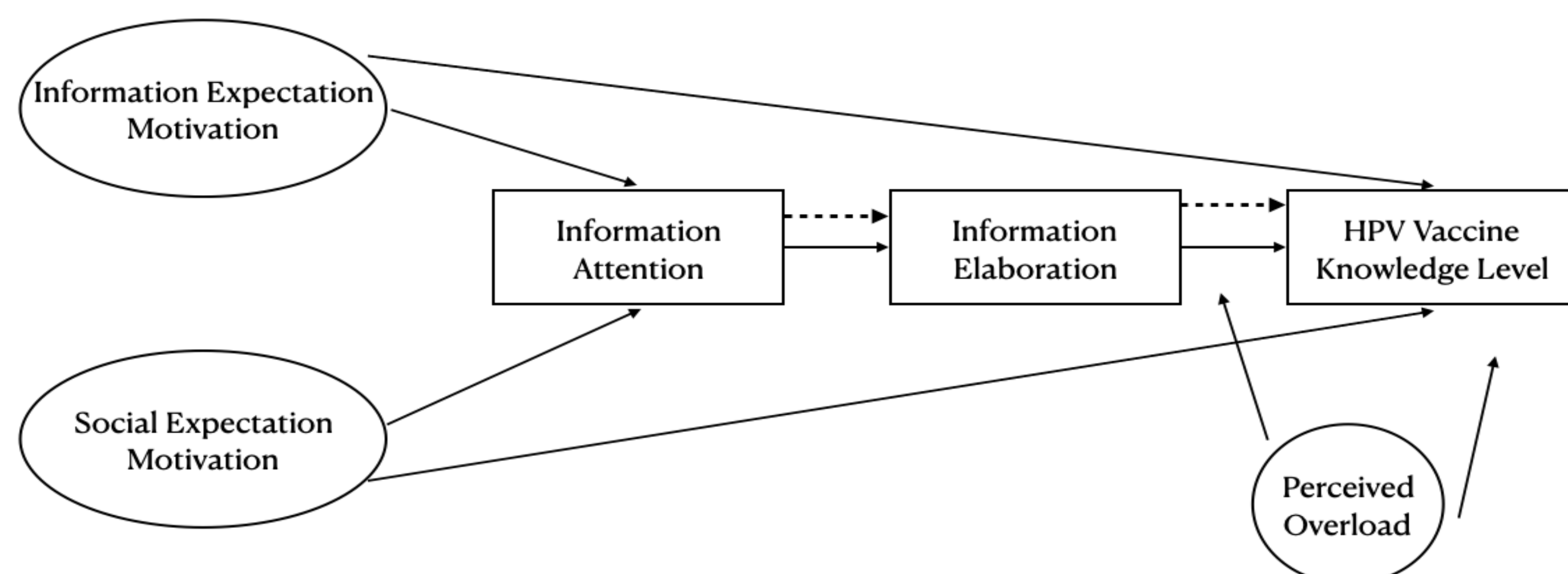
INTRODUCTION

Due to the limited supply in China mainland, the nine-valent HPV vaccine has been in short supply in the mainland. As a result, Chinese social media tends to feature imperfect and incorrect one-sided health literacy science that deifies the efficacy of the nine-valent. Social media, as an important channel for people to access health information nowadays, also shapes the level of people's health knowledge. Therefore, it is even more important to explore the mechanisms influencing HPV vaccine knowledge in this context.



CONCEPTUAL FRAMEWORK

- ❑ **RO1:** Do information expectation motivation and social expectation motivation directly influence HPV vaccine knowledge?
- ❑ **RO2:** Do the degree of information attention to relevant topics and the ability to elaborate information continuously mediate the effect of expectancy motivation on HPV vaccine knowledge?
- ❑ **RO3:** Does the degree of perceived overload of social media reports about the nine-valent vaccine mediate the effect of information elaboration ability on HPV vaccine knowledge?



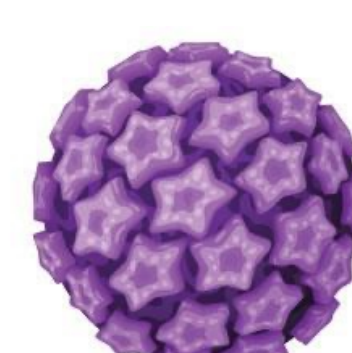
Based on the **cognitive mediator model**, cognitive expectation motivation tends to influence the level of relevant knowledge through mediators. In the age of social media, the level of attention to relevant information and the elaboration of the relevance of noticed information in the mind all play a role in this because of the cultivation effect. Therefore, the study proposes a continuous dual mediation effect based on **Information Attention** and **Information Elaboration**. The redundancy and imperfection of health information in social media as compared to traditional health promotion channels also tend to trigger a **perceptual overload** of incorrect information at the stage of correlational elaboration, and thus the study added it as a **moderating variable**.

CONCLUSIONS

The effects of information-expectation motivation and social-expectation motivation on HPV vaccine knowledge levels were not significant. However, information attention and level of elaboration on HPV vaccine information did play a mediating role and were moderated by perceived information overload on the nine-valent vaccine. Under the premise of a scarcity of the nine-valent, HPV vaccine promotion in China mainland needs to recognize the role of social media in mediating communication through cognitive psychology and be wary of communication that exaggerates the effects of the nine-valent in social media, so as to achieve scientific patient health promotion.

ACKNOWLEDGEMENT

Photo/Icon: Flaticon & Harvard Health



CONTACT

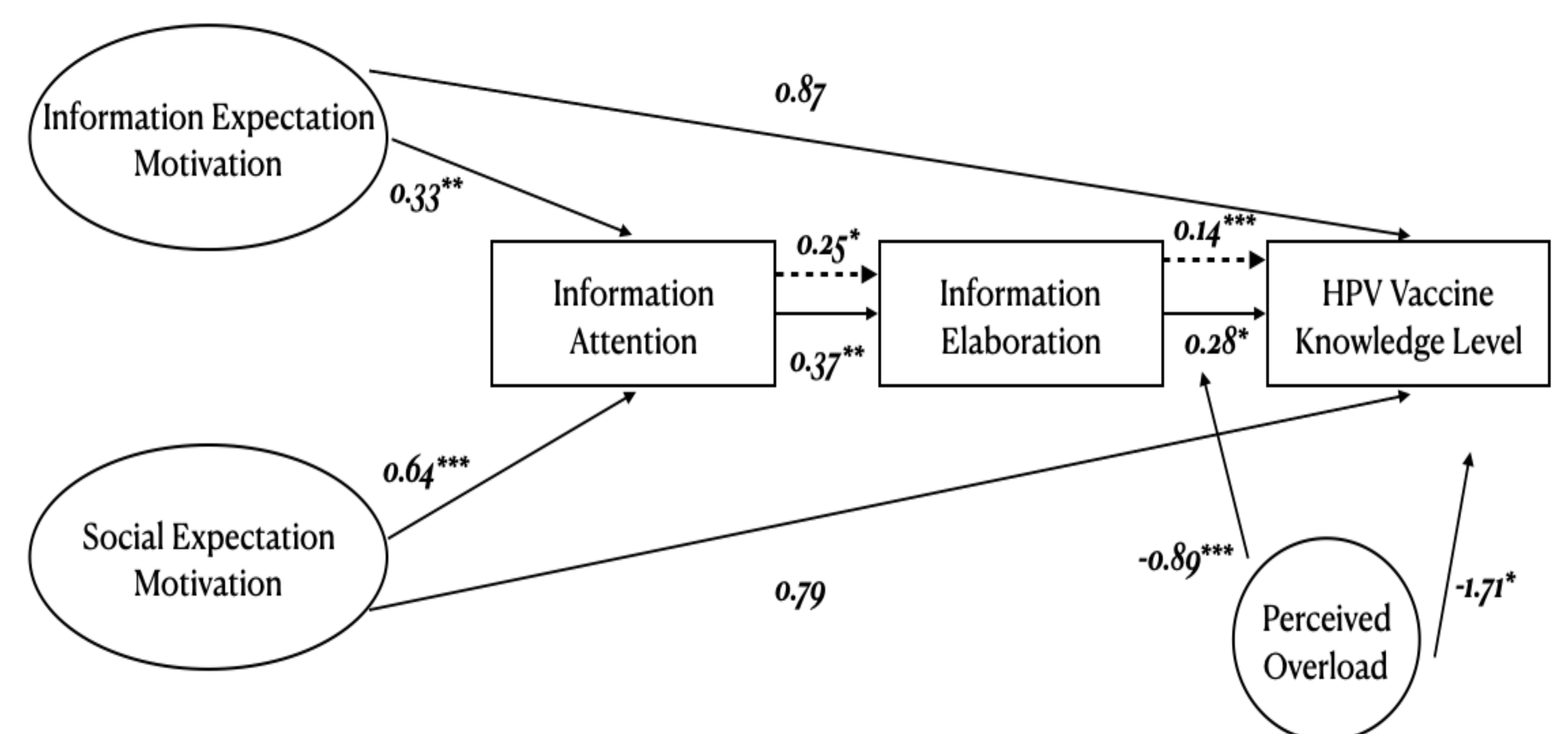
E-mail: jiayinw@usc.edu

METHODS & RESULTS

• Questionnaire:

Since only women are allowed to receive HPV vaccine in mainland China, the audience of the questionnaire were all women who had received the HPV 9-valent vaccine in mainland China. A total of 491 valid questionnaires were collected. Age, income, and the grade of the city they lived in were the control variables.

The questionnaire measured a total of five dimensions of variables, including the four variables testing the continuous mediator model: cognitive expectancy motivation, degree of Information Attention, Information Elaboration ability, and HPV vaccine knowledge level, as well as the Perceived Overload variable, which tested the moderating effect. The results of the structural equation modeling are as follows:



- **Cognitive Expectation Motivation:** five-point Likert scale self-report, divided into two separate measures of information expectation motivation (4 items, such as using social media in order to be informed about the HPV vaccine, etc.) and social expectation motivation (4 items, such as using social media in order to stay in touch with others on the topic of HPV)
- **Information Attention:** 5-point Likert scale self-report of subject matter attention in four sections, including “HPV Prevention,” “HPV Risk”, “HPV Vaccine Information” and “HPV Treatment”
- **Information Elaboration:** 4 items (whether related issues are associated with the content of the HPV vaccine viewed, whether it is a regular reflection, related to personal experience, etc.)
- **HPV Vaccine Knowledge:** HPV Vaccine Knowledge will be based on the HPV Vaccine Positive and False Scale with 18 items developed by Perez et al. in 2016, with the addition of statements such as "Only the nine-valent vaccine is effective against HPV viruses (False)" in the event that demand for the nine-valent vaccine exceeds supply
- **Perceived Overload:** 3-item self-report (e.g., whether bivalent quadrivalent vaccine is considered ineffective because of media-hyped effects of the nine-valent vaccine)