

Online Seeking Behaviour and Chinese Residents' Self-rated Health: An Empirical Study from the Perspective of Trust Transfer

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Introduction

Background

Online health information is crucial for early diagnosis and disease prevention. This study examines how Chinese residents' online health information-seeking behaviours affect their self-rated health and explores demographic variations in this impact.

Research Questions

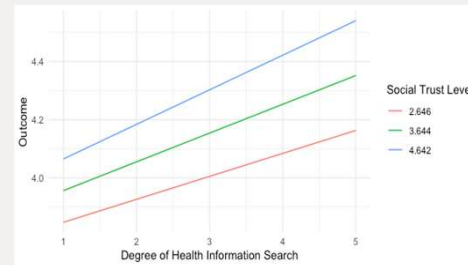
1. Does internet health information search affect residents' self-assessed health?
2. What role does trust play between health information search and self-assessed health?
3. Is there notable variability in the potential effect?

Hypothesis

1. There is a significant positive relationship between online searching and health.
2. Trust has a significant moderating role in the relationship between internet information search and residents' self-rated health.
3. Different groups receive different health returns from internet health searches (the elderly vs. the young; male vs. female, educated vs. less educated).

Results & Figures

1. Primary model & Moderating effect



Variables

- **Outcome Variable:** Level of self-rated health
- **Independent Variable:** Degree of online information seeking (time, frequency, usage)
- **Moderator:** Trust with three dimensions: social trust, trust in health system, trust in doctors.

2. Heterogeneity Analysis

Table 4-6 Results of Heterogeneity Analysis by Age and Gender

	18-45 years old	45-60 years old	60 years old and over	male	female
Extent of Internet health search	4.025** (0.013)	0.609** (0.015)	0.651** (0.020)	0.029** (0.013)	0.019 (0.012)
constant term (math.)	4.305** (0.199)	2.780** (0.491)	3.101** (0.483)	3.906** (0.182)	4.063** (0.171)
observed value	949	791	798	1124	1414

* p < 0.05, ** p < 0.01, *** p < 0.001, standard errors in parentheses

Table 4-7 Results of Heterogeneity Analysis of Household Registration and Educational Attainment

	Agricultural household registration	non-agricultural household registration	Primary and below	Junior high school and above
Extent of Internet health search	0.025** (0.011)	0.021 (0.015)	0.071** (0.023)	0.012 (0.009)
constant term (math.)	3.995** (0.144)	4.100** (0.195)	3.491** (0.311)	4.335** (0.117)
observed value	755	1283	365	1273

* p < 0.05, ** p < 0.01, *** p < 0.001, standard errors in parentheses

- Online health search has a **significant positive effect** on the health of residents with primary school and below education level, while the effect on junior high school and above education level is **not significant**.

3. Propensity Score Matching Results

Table 4-9 Results of propensity value matching (one-to-one matching)

modelling	typology	process group	control group	discrepancy	Bootstrap Standard Error	T-test
Self-assessment of health	unmatched	3.696	2.986	0.711		16.39
	ATT	3.535	3.227	0.308		0.175
	ATU	2.984	3.122	0.138		0.110
	ATE			0.240		0.118

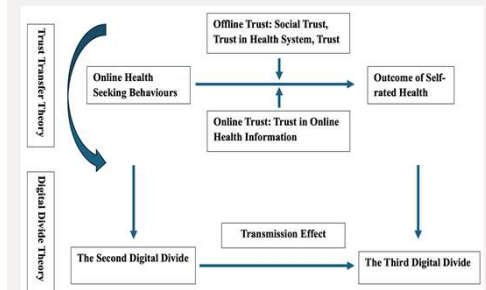
Robustness Check

Result of the t-test is 1.90 > 1.65. The propensity score matching result is significant, indicating that the conclusion of an increase in the extent of health information search on the internet enhances residents' self-rated health has **statistical significance**.

Additional Figures

Theoretical Framework: two dimensions

1. Trust Transfer Theory
2. Digital Divide Theory



- Trust transfers from offline to online
- Digital health inequalities transfer from the second to the third digital divide.

For future connections

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Methods

- **Data:** Chinese General Social Survey (CGSS) 2021, Sample size: 2360
- **Model:** OLS to assess moderating effect, OLogit Model and propensity score matching to ensure the robustness
- $y = \beta_1 X_1 + \beta_2 M_1 + \beta_3 X_1 * M_1 + \epsilon_1$

Findings

1. Searching for health information on the internet **positively influences** self-rated health, but evaluating the quality of that information does not.
2. Trust in society, the healthcare system, and doctors **strengthens the beneficial effects** of health information searches, acting as **moderating effects**.
3. Internet health searches impact various demographic groups differently, with more pronounced benefits for **middle-aged and older individuals, men, and residents with lower educational levels**.

Conclusions

- The study suggests that the **digital health divide persists**, with technology not fully bridging health disparities.
- **Trust plays a crucial role in online health information searches**, with offline trust influencing online behavior.
- For better health outcomes, **policy efforts** should focus on increasing trust in online health information and enhancing the online health search environment.

References:

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