Antecedents of Consumer Trust in Online Health Information: Findings from the Health Information National Trends Survey

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Intro

- A dramatic increase of consumer's search for health information online
  - Pew Research Center (2005)
- Low credibility
  - Eysenbach, Powell, Kuss and Sa (2002)
- Consumer trust in online health information

Literature Review

- Trust in online health information
  - Source authority
  - Information currency
  - Easiness to read
  - Inclusion of scientific references
  - Professional site design

Literature Review (Continued)

Predictors of Trust

- Personal capital
  - Resources: income, education, health, good look
- Social capital
  - Network ties in a person's social relationship
  - Trust is one mail element of social capital
  - The breadth and depth of social network predicts...
- Trust transference
  - Transfer from a trusted third party to another party with which the trustor has little or no knowledge
- Information Features

Research Questions & Hypotheses

- Personal Capital
  - RQ1a: Does education predict trust in online health information?
  - RQ1b: Does income predict trust in online health information?

Research Questions & Hypotheses Continued

- Social Capital
  - H1a: People who participate in an online support group for people with a similar health or medical issue trust online health information more than those who do not.
  - H1b: People who visit a social networking Web site such as MySpace or Second Life trust online health information more than those who do not.

Research Questions & Hypotheses Continued

- Trust transference
  - RQ2a: Does trust in health information provided by doctors predict trust in online health information?
  - RQ2b: Does trust in health information provided by family and friends predict trust in online health information?
  - RQ2c: Does trust in health information provided by traditional media including radio, newspapers/magazines, and television predict trust in online health information?
  - RQ2d: Does trust in health information provided by government health agencies predict trust in online health information?

Research Questions & Hypotheses Continued

- Information Quality
  - H2a: The more effort to locate health information, the less trust in online health information.
  - H2b: The harder to understand health information, the less trust in online health information.

Methods

- Sample
  - 2007 HINTS mail sample, 3582 adults
  - Gender
    - 1382 (38.6%) males
    - 2191 (61.2%) females
  - 18 to 95 years old; M= 52 (*SD* = 16.83)
  - Race
    - 2479 (69.2%) Caucasians
    - 440 (12.3%) African Americans
    - 314 (8.8%) Hispanics
    - Asians, American Indian or Alaska Natives, and Native Hawaiian or other Pacific Islanders

Methods

- *Measures*
  - *Trust in online health information*
  - *Personal capital (RQ1a & RQ1b)*
    - Income
    - Education
  - *Social capital indicators (H1a and H1b)*
    - Participation in an online support group
    - Visiting social networking Web sites
  - *Trust in other sources of health information (RQ2a, b, c, and d).*
    - a doctor, family or friends, newspapers or magazines, radio, television, and government health agencies,
  - *Information features (H2a & H2b)*
    - “It took a lot of effort to get the information you needed”
    - “The information you found was hard to understand.”

Methods

- Analysis
  - SAS Surveyreg procedure
  - Unadjusted

Results

- Personal Capital (RQ1a and RQ1b)
  - Income: $F(1, 3581) = 2.14$, $p > .05$
  - education: $F(1, 3581) = 1.12$, $p > .05$.
- Social capital (H1a and H1b)
  - participation in online support groups
    - $F(1, 3581) = 6.52$, $p < .05$; $\beta = -.13$ ($SE = .05$)
  - visiting social networking Web sites
    - $F(1, 3581) = 2.28$, $p > .05$.

Results

- Trust transference
  - trust in health information provided by doctors
    - F (1, 3581) = .76, $p > .05$.
  - trust in health information provided by informal interpersonal sources including family and friends
    - F (1, 3581) = .19, $p > .05$.
  - trust in health information offered **by traditional media**
    - newspapers and magazines: F (1, 3581) = 19.55, $p < .001$, β = .12 (*SE* = .03),
    - TV : F (1, 3581) = 65.47, $p < .001$, β = .18 (*SE* = .02).
    - Radio: F (1, 3581) = 4.46, $p < .05$, β = -.05 (*SE* = .02).
  - trust in health information offered **by government health agencies**
    - F (1, 3581) = 26.93, $p < .001$, β = .11 (*SE* = .02).

Results

- Info features (H2a & H2b)
  - the harder to find health information, the less trust in online health information,
    - F (1, 3581) = 17.50, $p < .05$, β = -.07 (*SE* = .02)
  - the harder to understand health information, the less trust in online health information,
    - F (1, 3581) = 11.69, $p < .01$; β = -.06 (*SE* = .02).

Discussion and Conclusions

- trust in online health information
  - Personal capital: education and income are not significant.
    - health literacy; self-confidence
  - Social capital: participation in online support groups but not visiting social network websites
    - Bonding vs. bridging social capital
  - Trust transfer
    - traditional mass media and government health agencies
    - Similarity between trust targets
  - Information characteristics
    - easiness to find and to understand

Limitations & Future Research

- Directionality
  - Cross-sectional
- Analyses
  - Unadjusted
  - Telephone sample and mode effects
- Only a small fraction of participants participated in online support groups (3%) or used social networking Web sites (17%)
  - Young adults were less than 25% of the surveyed respondents