Moderating Role of Perceived Health Status on Privacy Concern Factors and Intentions to Transact with High versus Low Trustworthy Health Websites

**Introduction**

The study examines the relative role of health information privacy concern factors and perceived health status on the trade-off between trust and discount when buying vitamins online. The study relies on Utility Theory to argue that the privacy concern factors and perceived health status impact one’s preference for trust over discount.

**Research Methodology**

- Web based lab experiment comprising of a scenario grid of 11 websites ranging in terms of high trust (offering low discount) to low trust (offering high discount)
- Total 245 subjects participated. 55 responses were eliminated.
- Examined discriminant and convergent validity using exploratory factor analysis
- Examined reliability using Cronbach alpha
- Data was analyzed using Ordinary Least Square Regression
- All the multivariate variables were estimated by averaging the item scores
- Moderation analysis was performed by multiplying the centered variables (Ray et al. 2005)

**Literature Review and Theory**

- Research suggests that people are concerned for the privacy of their health information (Bansal et al. 2008; Malhotra et al. 2004; Westin 2006)
- People are concerned that once their health information is released, it cannot be made secret again (Rindfleisch 1997), that the information may fall in wrong hands (USA Today.com 2008)
- Those who perceive their health to be “poor” are more sensitive about their health information (Bansal et al. 2010)
- Privacy concerns have been defined as comprising of four subconstructs: collection, unauthorized secondary use (internal / external), improper access, and errors (Smith et al. 1996; Stewart and Segars 2002)
- Utility theory suggests that people tend to maximize benefits. Those who are more concerned for privacy protection would trade trust for discount. Those who are less concerned would like to avail discount at the expense of perceived privacy protection.

**Conclusion and Implications**

- Collection and error concerns are positively associated with trust over discount. Improper access is positively associated with discount over trust.
- People probably feel that HIPAA explicitly protects them from unauthorized secondary use and improper access.
- People still feel unprotected for collection and error concerns for which they probably rely on the implicit protection via trust in the health website.
- Other reason for the negative role of improper access could be the higher perceived likelihood of improper access of the user’s health information stored with the trustworthy companies than with the lesser known companies. E.g., Hacking of Google, Citibank, Pentagon etc.
- Moderation analysis suggests that less healthy people use the explicit protection to save money in order to buy more medication.
- Health websites need to follow different strategies in order to gain their clients’ business. These strategies need to vary depending upon the perceived health status of their users.
- One impression is that companies need to assure their users about collection and error concerns, in particular, because findings of this study suggest that the users are willing to pay a premium in lieu of protection against these two concerns.

**Abbreviations**

- **H1** Preferences of Trust over Discount
- **H2** Unauthorized secondary use
- **H3** Improper Access
- **H4** Errors
- **H5** Preference of Trust over Discount
- **H6** Financial Status
- **H7** Poor Health Status
- **H8** Poor Health Status

**Result of the Regression Analysis**

<table>
<thead>
<tr>
<th>Hypothesis / variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
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<tbody>
<tr>
<td>Intercept</td>
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<td>3.07***</td>
<td>2.88***</td>
<td>3.03***</td>
<td>2.94***</td>
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<td>0.35***</td>
<td>0.36***</td>
<td>0.35***</td>
<td>0.35***</td>
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<td>-0.19</td>
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</table>

**Literature Cited**


**Definition of the Privacy Concern Factors (Smith et al. 1996)**

| Collection | Collecting too much information on the users |
| Secondary Use | Usage of the user information for other purposes, without the users approval |
| Improper Access | Unauthorized access to the user information |
| Errors | Errors in the user information |

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