

The Relationship among Trustworthiness, Website Atmosphere, Customer Trust, Website Image, and Stickiness: The Moderating Effects of Gender

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Abstract

This study aims to identify how the perception of trustworthiness and website atmosphere influences customer trust and website image to enhance stickiness, as well as the extent to which gender moderates the relationships between the constructs. Appropriate measures were developed and tested on 203 respondents in east provinces in China with a cross-sectional questionnaire survey. The path relationships of the research model were analyzed by structural equation modeling (SEM) using AMOS 18.0. The results confirmed that trustworthiness and website atmosphere have positive impacts on customer trust and website image. Customer trust and website image have positive impacts on stickiness. Meanwhile, the moderating effects of gender in the relationships between trustworthiness, website atmosphere and customer trust are significant. Thus, the managers should focus on trustworthiness and website atmosphere to improve stickiness through customer trust and website image.

Keywords: Trustworthiness, Website atmosphere, Customer trust, Website image, Stickiness, Gender

1. Introduction

According to an analysis by the Boston Consulting Group, by the end of the year 2015, the size of China's e-commerce market will possibly surpass that of the U.S. market and become the world's next e-commerce superpower [1].

In general, lack of trust is a barrier to the adoption of electronic services. Trustworthiness in an electronic context is a "perception of confidence in the electronic marketer's reliability and integrity" [2], while trust in the Internet is associated with individual perceptions of the institutional environment [3, 4]. Thus, this tells that trustworthiness is closely related to trust.

Developing and maintaining relationships with customers has become a key marketing strategy for service firms and retailers [5]. Li *et al.*, [6] revealed trust to be an important predictor to stickiness intention. Unlike research on store image, few studies have examined website image. In fact, most of them focus on related concepts such as website quality or disparate characteristics that researchers use as antecedents to specific explanatory variables of purchase behavior, often lumping them together under the less accurate term of online beliefs [7] or website attributes [8].

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Although trustworthiness, customer trust, and website image have played important roles in internet shopping, few studies have discussed the factors simultaneously. Thus, this study investigates how a customer's trust and website image have an impact on stickiness, and which the factors of trustworthiness and website atmosphere are the most important, as well as examines the moderating effects of gender in Chinese online settings.

2. Literature Review

Trustworthiness is described as "being honest, telling the truth, keeping promises, and being loyal so people can trust you [9]. There is much research into trust in online environments have combined trust (which is the willingness to depend) and trustworthiness (which describes attributes of the trustee) [9]. Since trustworthiness of internet vendor is an important predictor for online buying [10], internet merchants should display behaviors and cues that present consumers' trust in their ability, integrity, predictability, and benevolence when dealing with or serving online shoppers [11]. Gupta and Kabadayi [12] suggested that the three distinct trusting beliefs (*i.e.*, ability, integrity, and benevolence) are positively related to loyalty in an online environment. Based on previous studies, this paper proposes the dimension of trustworthiness of internet shopping vendor as integrity, benevolence, and predictability.

Website atmosphere can be defined as "the conscious designing of website environments to create positive effects in users in order to increase favorable consumer responses" [13]. Richard and Chandra [14] suggested that atmosphere is a central cue (high task-relevant) which includes structure, organization, informativeness, information content effectiveness, and navigational characteristics, and peripheral cue (low task-relevant) which refers to entertainment. This model was evaluated as a major step toward understanding online consumer behavior [15]. Ha and Stoel [16] suggested that positive perceptions of e-shopping quality (web design, customer service, privacy/security, and atmospheric/experiential) predict consumers' beliefs about trust. Based on previous studies, this study adopted navigation, structure, informativeness, and information content effective-ness as four dimensions of website atmosphere.

Trust is a multi-disciplinary concept, incorporating ideas from economics, marketing, sociology, psychology, organization behavior, strategy, information systems, and decision sciences [17]. Kong and Hung[18] proposed how people form trust attitude through peripheral (reputation, disposition to trust, situational normality, structural assurance, and web site quality) and central route (ability, benevolence, integrity, and web site quality). Harris and Goode [13] further revealed that consumers' perceptions and interpretations of online service environment exert a powerful, direct influence over trust that, in turn, is associated with consumers' purchase intentions. Li *et al.*, [6] revealed trust to be an important predictor to stickiness intention.

Website image is defined as "consumers' perception of a website as reflected by associations related to the website (including sub-sites) held in memory" [19]. A website's capacity to persuade can be affected by the characteristics that the firm creates when building the site, such as information quality, credibility of the source, the brand or the site's capacity to handle transactions [20]. Ailawadi and Keller [21] also proposed that measurement of store images can be improved by capturing five key dimensions which includes an atmosphere. Because trust can be seen as a belief and image can be viewed as an attitude, the relationship between trust and image can be inferred. Store image affects various attitudinal and behavioral responses of the consumers towards the retailer such as the customer loyalty that may create a strong store patronage intention, great willingness to pay a price premium, and a strong feeling of affiliation or liking [22].

Wu *et al.*, [11] refined stickiness as "a high frequency of returning to a website." Eastlick *et al.*, [24] found that trust is an important antecedent for individuals to maintain

continuous and valuable relationships with e-retailers. Chebat et al. [23] showed that mall image had a significant positive influence on mall attitude, mall patronage, and word-of-mouth communications. Thus, the following hypotheses are suggested to identify the relationships between the constructs in internet shopping of China:

- H1. Trustworthiness will have a positive effect on customer trust.
- H2. A website atmosphere will have a positive effect on customer trust.
- H3. Trustworthiness will have a positive effect on a website image.
- H4. A website atmosphere will have a positive effect on a website image.
- H5. Customer trust will have a positive effect on a website image.
- H6. Customer trust will have a positive effect on stickiness.
- H7. A website image will have a positive effect on stickiness.

Men show more interest in internet purchase, spend more money and feel more trusting, though women who purchase through this medium do so more frequently and have more favorable attitudes towards the content of the website [25]. Thus, we will propose that the difference in gender acts as a moderating effect.

- H8. The relationship between trustworthiness and customer trust is moderated by gender.
- H9. The relationship between website atmosphere and customer trust is moderated by gender.
- H10. The relationship between trustworthiness and a website image is moderated by gender.
- H11. The relationship between website atmosphere and an image is moderated by gender.
- H12. The relationship between customer trust and a website image is moderated by gender.
- H13. The relationship between customer trust and stickiness is moderated by gender.
- H14. The relationship between a website image and stickiness is moderated by gender.

3. Methodology

The research is designed to confirm the relationships among trustworthiness, website atmosphere, customer trust, website image, and stickiness, as well as to identify the moderating effect of gender in Chinese internet shopping. The research model is shown in Figure 1.

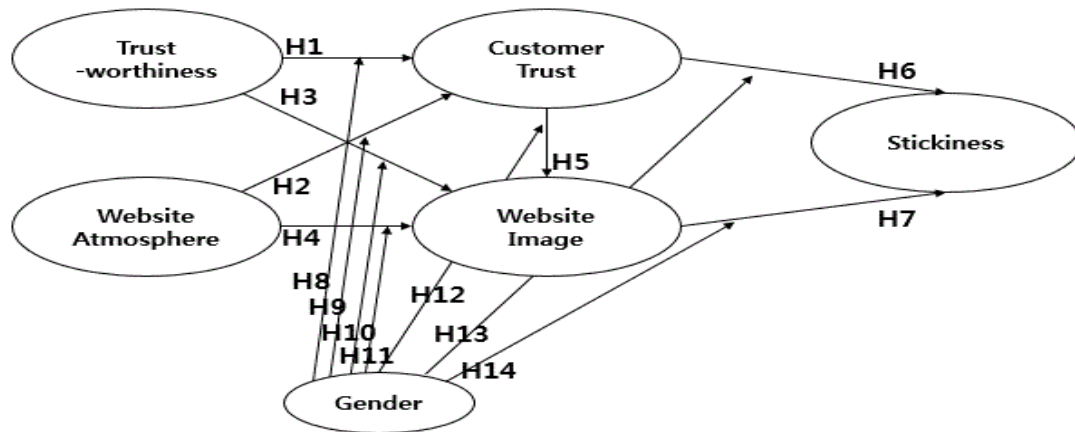


Figure 1. Research Model

The measures used for this model and the sources from which they are drawn from are presented in Table 1. All of the study measures were adopted from prior studies. Standard procedures for measurement development were applied wherever needed involving the use of multi-item indicators for reliability and uni-dimensionality. The research has eleven constructs, each having multiple items that are measured using a seven-point Likert-type scale (1 = strongly disagree and 7 = strongly agree).

The participants were asked to respond to the survey questionnaires based on their most recent experience of internet shopping. The online survey form was distributed to Shandong province, Liaoning province, Beijing, Shanghai and some other cities located in the East of China. These cities are the coastal areas which are more developed compared to the western and middle areas of China. The survey period was from October 7 to October 28, 2013 and of the 500 questionnaires, 224 questionnaires were eliminated due to missing data, resulting in a final sample of 276 respondents.

In order to test the proposed interrelationships among perception of trustworthiness of internet shopping vendor, website atmosphere, customer trust, website image, and stickiness, structural equation modeling (SEM) was performed using analysis of moment structure (AMOS). Structural equation modeling allowed us to examine the causal relationships among concepts in the model and to test the model against the obtained measurement data to identify how well the proposed model fits the data [26]. SEM is an appropriate statistical method to examine hypothesized relationships among constructs proposed in this study.

Table 1. Measurement Scales

| Construct | Item | Reference |
|-----------|--|------------|
| Ability | Ab1. Internet vendors have the ability to handle sales transactions on the Internet. | [12], [11] |
| | Ab2. Internet vendors know how to provide excellent service. | |
| | Ab3. The internet vendors appear to be well qualified in the area of e-commerce. | |
| | Ab4. Internet vendors are competent. | |
| Integrity | In1. Internet vendors are honest to their consumers. | [10], [30] |
| | In2. Internet vendors act sincerely in dealing with customers. | |
| | In3. I think that the advice given by internet vendors is their best judgment. | |
| | In4. The internet vendors seem to have a strong sense of integrity. | |
| | In5. The internet vendors are reliable. | |

| | | |
|-----------------------------------|--|------------|
| Benevolence | Be1. The internet vendors actively respond to consumer questions. Be2. The internet vendors appear to go out of its way to help me. Be3. The internet vendors seem to really look out for my needs and desires. Be4. I think that internet vendors are mean well. Be5. I think internet vendors intentions are benevolence. Be6. I think I can count on internet vendors to consider how their actions affect me. | [10], [12] |
| Predictability | Pr1. I am quite certain about what internet vendors will do. Pr2. The information quality provided by the internet vendors is consistent. Pr3. The actions and behavior of the internet vendor are predictable. | [10], [11] |
| Navigational Cues | Nc1. It is easy to use. Nc2. Navigational problems are limited. Nc3. There are good search engine to find information. Nc4. Easy keywords to find information are used. | [34], [35] |
| Structure | St1. The structure is well-organized. St2. It allows a great overview of its structure. St3. The structure is straightforward. | [13], [25] |
| Informativeness | If1. I think it is an informative site. If2. I think it is a resourceful site. If3. The website is a good source of product information. If4. This website supplies relevant information. | [36], [13] |
| Information Content Effectiveness | Ice1. Information is accurate. Ice2. Information is up-to-date. Ice3. The content or information on this web site is useful for buying the products or services that it sells or markets. Ice4. This web site can increase my shopping effectiveness. | [37], [25] |
| Customer Trust | Ct1. Internet shopping is reliable. Ct2. Internet shopping can be trusted. Ct3. I can rely on internet vendors to keep the promises that they make. Ct4. Online shopping has always provided me with positive experience. | [30], [38] |
| Website Image | wi1. The website is friendly. wi2. In general, the image of this website is good. wi3. Shopping in this website is nice. | [39], [23] |
| Stickiness | St1. I will spend more time in this website. St2. I will increase the frequency of visits to this website. St3. I am willing to recommend this website to others St4. I am willing to continuously visit this website. | [11], [40] |

4. Findings

A brief profile of the subjects is provided here. The male to female ratio was 40.6-59.4 percent and the company employees accounted for 47.1 percent, followed by the students, which accounted for 28.6 percent. The college graduate accounted for 69.9 percent and 34.8 percent of the respondents did the shopping more than 20 times per a month. Items purchased online were clothing (68.1 percent), books and magazines (50.4 percent), household items (44.2 percent), and digital products (34.1 percent).

Table 2. Profile of the Respondents

| City | | Job | |
|---------------------------------|-------|-------------------------------|-------|
| Shangdong | 26.1% | Student | 28.6% |
| Liaoning | 15.9% | Company employee | 47.1% |
| Beijing | 18.5% | Privately owner | 10.5% |
| Shanghai | 20.3% | Government official | 4.0% |
| Others | 19.2% | Others | 9.8% |
| Gender | | | |
| Male | 40.6% | Female | 59.4% |
| Age | | Education Level | |
| Less than 18 | 0.0% | high school | 4.0% |
| 18~24 | 35.5% | college graduate | 69.9% |
| 25~30 | 55.4% | postgraduate or PH.D | 26.1% |
| More than 30 | 9.1% | | |
| Experience of Internet Shopping | | Internet shopping per a month | |
| Less than one year | 23.9% | 1~5 times | 19.6% |
| 1 ~2 years | 41.3% | 6~10 times | 29.0% |
| 3~4 years | 26.4% | 11~20 times | 16.7% |
| More than 5 years | 8.3% | More than 20 times | 34.8% |

Confirmatory factor analysis (CFA) was performed to assess the overall model fit of the measurement model (see Table 3). The model fit indices showed that chi-square = 561.835, df = 364, p=0.000, chi-square/df = 1.544, RMR=0.048, GFI=0.857, TLI =0.953, CFI=0.973, and RMSEA=0.058, which suggests that the measurement model reasonably fits the current data. Further, the results of the reliability test showed that the alpha values of all eleven constructs used in this study exceeded the minimum requirement for reliability of 0.70, indicating that multiple measurement items were highly reliable for measuring each construct [26]. Also, convergent validity was examined with the factor loadings in the measurement model. All confirmatory factor loadings exceeded the accepted level of 0.5, and all factor loadings were significant at the alpha level of 0.01 [27]. Furthermore, average variance extracted (AVE) of all constructs exceeded the recommended 0.5 threshold [26].

Table 3. Confirmatory Factor Analysis

| Construct | Items | Std. Estimate | S.E. | C.R. | Composite reliability | AVE | Cronbach's α | |
|------------------|----------------|---------------|-------|--------|-----------------------|-------|---------------------|-------|
| Trustworthiness | Ability | Ab1 | 0.771 | | | 0.837 | 0.631 | 0.831 |
| | | Ab2 | 0.814 | 0.091 | 11.519 | | | |
| | | Ab3 | 0.797 | 0.078 | 11.203 | | | |
| | Integrity | In1 | 0.810 | | | 0.889 | 0.729 | 0.882 |
| | | In2 | 0.908 | 0.069 | 15.274 | | | |
| | | In3 | 0.840 | 0.064 | 13.791 | | | |
| | Benevolence | Be1 | 0.880 | | | 0.881 | 0.714 | 0.865 |
| | | Be2 | 0.910 | 0.058 | 18.043 | | | |
| | | Be3 | 0.735 | 0.079 | 12.577 | | | |
| | Predictability | Pr1 | 0.712 | | | 0.779 | 0.541 | 0.781 |
| | | Pr2 | 0.788 | 0.127 | 9.905 | | | |
| Pr3 | | 0.703 | 0.126 | 8.987 | | | | |
| Navigational cue | Nc1 | 0.867 | | | 0.893 | 0.735 | 0.888 | |
| | Nc2 | 0.900 | 0.060 | 17.335 | | | | |
| | Nc3 | 0.803 | 0.061 | 14.378 | | | | |
| | St1 | 0.843 | | | | | | |

| | | | | | | | | |
|----------------|---|-------|-------|--------|--------|-------|-------|-------|
| Web | Structure | St2 | 0.837 | 0.067 | 14.833 | 0.890 | 0.729 | 0.891 |
| Site | | St3 | 0.881 | 0.065 | 16.004 | | | |
| atmosphere | Informativene ss | If1 | 0.921 | | | 0.926 | 0.862 | 0.925 |
| | | If2 | 0.936 | 0.047 | 21.173 | | | |
| | Information Content effectiveness | Ice1 | 0.836 | | | | | |
| | | Ice2 | 0.840 | 0.073 | 14.418 | 0.871 | 0.693 | 0.867 |
| | | Ice3 | 0.821 | 0.072 | 13.902 | | | |
| Customer trust | Ct1 | 0.945 | | | | | | |
| | Ct2 | 0.937 | 0.039 | 24.356 | 0.910 | 0.773 | 0.903 | |
| | Ct3 | 0.741 | 0.050 | 14.224 | | | | |
| Website image | Wi1 | 0.816 | | | | | | |
| | Wi2 | 0.853 | 0.074 | 14.382 | 0.89 | 0.728 | 0.895 | |
| | Wi3 | 0.889 | 0.075 | 15.279 | | | | |
| Stickiness | St1 | 0.907 | | | 0.94 | 0.824 | 0.904 | |
| | St2 | 0.909 | 0.058 | 17.124 | | | | |

Model Fit Indices: $\chi^2(364) = 561.835$, $p = 0.000$, $CMIN/DF = 1.544$, $RMR = 0.048$, $GFI = 0.857$, $TLI = 0.953$, $CFI = 0.963$, $RMSEA = 0.052$

A second-order confirmatory factor analysis determines the importance of each dimension. Trustworthiness was identified as a second-order factor ($\chi^2(61) = 141.9$, $p = 0.000$, $RMR = 0.039$, $NFI = 0.943$, $GFI = 0.926$, $CFI = 0.966$, $RMSEA = 0.069$). The second-factor loading of integrity is 0.972, benevolence is 0.892, predictability is 0.825, and ability is 0.799. Website atmosphere was identified as a second-order factor ($\chi^2(23) = 46.0$, $p = 0.003$, $RMR = 0.015$, $NFI = 0.983$, $GFI = 0.966$, $CFI = 0.991$, $RMSEA = 0.060$). The second-factor loading of structure is 0.967, navigational cue is 0.943, information content effectiveness is 0.897, and informativeness is 0.855.

In Table 4, no pair of measurements is found with correlations that exceed the criterion of 0.9 suggested by Hair et al. [26], indicating that no multicollinearity exists among the constructs. This study assumed Kline's proposal that the discriminant validity can be established when an inter-factor correlation is below 0.85 [28]. Fornell and Larcker [29] suggested a more robust method of measuring discriminant validity, in which a correlation between two constructs should be lower than the squared root of the AVE value for any of the two constructs. According to these suggestions, all constructs have discriminant validity.

Table 4. Correlations and Discriminant Validities of All Constructs

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|----|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 1 | 0.794 | | | | | | | | | | |
| 2 | 0.654 | 0.854 | | | | | | | | | |
| 3 | 0.594 | 0.799 | 0.845 | | | | | | | | |
| 4 | 0.565 | 0.592 | 0.623 | 0.736 | | | | | | | |
| 5 | 0.463 | 0.471 | 0.482 | 0.553 | 0.857 | | | | | | |
| 6 | 0.484 | 0.486 | 0.491 | 0.486 | 0.770 | 0.854 | | | | | |
| 7 | 0.398 | 0.348 | 0.356 | 0.371 | 0.714 | 0.744 | 0.928 | | | | |
| 8 | 0.454 | 0.464 | 0.454 | 0.489 | 0.682 | 0.750 | 0.704 | 0.832 | | | |
| 9 | 0.482 | 0.555 | 0.628 | 0.608 | 0.473 | 0.511 | 0.381 | 0.590 | 0.879 | | |
| 10 | 0.490 | 0.528 | 0.577 | 0.549 | 0.613 | 0.622 | 0.480 | 0.651 | 0.755 | 0.853 | |
| 11 | 0.377 | 0.422 | 0.495 | 0.473 | 0.389 | 0.442 | 0.348 | 0.589 | 0.647 | 0.636 | 0.908 |

Note: 1 = Ability, 2 = Integrity, 3 = Benevolence, 4 = Predictability, 5 = Navigational cue, 6 = Structure, 7 = Informativeness, 8 = Information content effectiveness, 9 = Customer trust, 10 = Website image, 11 = Stickiness. *The squared root of the average variance extracted (AVE) value is in bold type on the diagonal.

Structural equation modeling is used for confirmation and the additional exploratory improvement of a hypothesized model. The goodness-of-fit statistics of the proposed model showed that the model reasonably fits the current data (Chi-square = 634.587, $df = 403$, $p = 0.000$, Chi-square/ $df = 1.575$, $RMR = 0.055$, $GFI = 0.847$, $TLI = 0.950$, $CFI = 0.957$, and $RMSEA = 0.065$).

Support was found for all six hypotheses. Path coefficients are seen in Table 5 that indicate the relationship between the variables tested in the hypotheses. H1 was supported, indicating that trustworthiness of Internet shopping vendor is strongly associated with customer trust. H2 was also supported, indicating that website atmosphere is directly associated with customer trust. H3 was not supported, indicating that trustworthiness of Internet shopping vendor is not directly associated with website image. H4 was supported, indicating that website atmosphere is strongly associated with website images. H5 was supported, indicating that customer trust is directly associated with a website image. H6 was supported, indicating that customer trust is directly associated with stickiness. Finally, H7 was supported, indicating that a website image is strongly associated with stickiness.

Table 5. Results of Hypothesis Testing

| Hypothesis Path | Std. Estimate | S.E. | t-value | p-value | Results |
|---|---------------|-------|---------|---------|----------|
| H1: Trustworthiness → Customer trust | 0.618 | 0.136 | 6.761 | 0.000 | Accepted |
| H2: Website atmosphere → Customer trust | 0.145 | 0.086 | 2.044 | 0.041 | Accepted |
| H3: Trustworthiness → Website image | 0.012 | 0.076 | 0.166 | 0.868 | Rejected |
| H4: Website atmosphere → Website image | 0.419 | 0.055 | 6.517 | 0.000 | Accepted |
| H5: Customer trust → Website image | 0.518 | 0.052 | 7.042 | 0.000 | Accepted |
| H6: Customer trust → Stickiness | 0.306 | 0.089 | 3.341 | 0.000 | Accepted |
| H7: Website image → Stickiness | 0.463 | 0.132 | 4.825 | 0.000 | Accepted |

Model Fit Indices: χ^2 (403) = 634.587, p= 0.000, CMIN/DF = 1.575, RMR = 0.055, GFI = 0.847, CFI = 0.957, TLI = 0.950, RMSEA = 0.053

In addition, the results of the moderating effects of a gender showed that H8 and H9 are significant at the levels of 0.05 and 0.01 through a Chi-square (χ^2) value comparison for the free model and the constrained model. However, the moderating effects of H10, H11, H12, H13, and H14 are not significant at the level of 0.05.

Table 6. Results of Hypothesis Testing

| Path | Male (n = 77) | | Female (n = 126) | | Free model | Constrained model |
|---------|--|---------|------------------|---------|----------------------------|----------------------------|
| | Coefficient | t-value | Coefficient | t-value | | |
| H8 | 0.388 | 3.421** | 0.888 | 6.045** | | χ^2 (807) = 1,375.689 |
| TW → CT | Chi-square difference test: $\Delta \chi^2(1) = 5.362^*$ (significant) | | | | | |
| H9 | 0.499 | 3.872** | -0.164 | -1.606 | | χ^2 (807) = 1,386.257 |
| WA → CT | Chi-square difference test: $\Delta \chi^2(1) = 15.930^{**}$ (significant) | | | | | |
| H10 | 0.068 | 0.784 | -0.091 | -0.705 | χ^2 (806) = 1,370.327 | χ^2 (807) = 1,371.396 |
| TW → WI | Chi-square difference test: $\Delta \chi^2(1) = 1.069$ (insignificant) | | | | | |
| H11 | 0.287 | 2.845** | 0.487 | 5.087** | | χ^2 (807) = 1,371.405 |
| WA → WI | Chi-square difference test: $\Delta \chi^2(1) = 1.078$ (insignificant) | | | | | |
| H12 | 0.534 | 4.395** | 0.582 | 5.507** | | χ^2 (807) = 1,370.594 |
| CT → WI | Chi-square difference test: $\Delta \chi^2(1) = 0.267$ (insignificant) | | | | | |
| H13 | 0.227 | 1.435 | 0.318 | 3.025** | | χ^2 (807) = 1,370.551 |
| CT → ST | Chi-square difference test: $\Delta \chi^2(1) = 0.224$ (insignificant) | | | | | |
| H14 | 0.426 | 2.598** | 0.517 | 4.616** | | χ^2 (807) = 1,370.412 |
| WI → ST | Chi-square difference test: $\Delta \chi^2(1) = 0.085$ (insignificant) | | | | | |

TW: Trustworthiness, WA: Website Atmosphere, CT: Customer Trust, WI: Website Image, ST: Stickiness, *: p<0.05, **: p<0.01.

5. Conclusions

The theoretical implications of this study take several forms. First, it confirmed the relationships between trustworthiness of internet shopping vendor and customer trust towards online shopping [30, 31]; website atmosphere and image [16]; customer trust and stickiness [6]; website image and stickiness [23, 32]. Accordingly, both high trustworthiness and website atmosphere increase internet shoppers' stickiness.

Second, trustworthiness of internet shopping vendor can be conceptualized as a composite of four dimensions such as ability, integrity, benevolence, and predictability, which are at the second-order level of abstraction. Integrity is the most important factor for trustworthiness. This implies that when consumers estimate Internet shopping vendor, its integrity can play the most important role in enhancing trustworthiness and website images.

Third, website atmosphere can be conceptualized as a composite of four dimensions such as navigational cue, structure, informativeness, and information content effectiveness, which are at the second-order level of abstraction. Structure is the most important factor for trustworthiness. This implies that when consumers estimate website atmosphere, its structure can play the most important role. In addition, the indirect effect of website atmosphere on stickiness is a little greater in comparison to trustworthiness.

Fourth, although customer trust is a significant predictor for stickiness, website images can be a more significant predictor for it. The result is not consistent with Lai et al. [33]'s study. This implies that Chinese consumers can make much of website images in comparison with customer trust.

Fifth, gender moderated the relationships between trustworthiness and customer trust, website atmosphere and customer trust. This implies that male and female consumers' perceptions of customer trust can be different. There were some differences in perceptions of website image and stickiness between male and female respondents. Thus, the managers should consider gender as a demographic segmentation.

The conclusion is the primary research contribution, that is, customer trust and website image should be simultaneously considered in one model as indicators to predict stickiness, as well as focus on the roles of trustworthiness and website atmosphere to enhance customer outcome. Internet shopping vendors should consider market segmentation by gender, which has a different effect on customer trust. The vendors should also deploy effective strategies to build trustworthiness and website atmosphere.

The research presents some important future research avenues. A starting point for future research is to use more representative samples. Second, given that individuals' willingness to trust can be influenced by their cultures, some studies may want to use subjects from different cultures to test the cross-cultural validity of the findings. Third, the moderating role of purchase task should be examined in further study. Gupta and Kabadayi [12] suggested that for consumers with task-free motive, benevolence and integrity-related beliefs are the key drivers of loyalty, while ability-related beliefs do not drive loyalty. On the other hand, for consumers with a goal-directed motive, the ability and integrity-related beliefs are the key drivers of loyalty, while benevolence-related beliefs are not influential. Fourth, it will necessary for a longitudinal research to accurately track consumers' perceptions of trustworthiness and website atmosphere for future research.

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