An Empirical Investigation of Consumer Experience on Online Purchase Intention

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Abstract. In order to examine which kind of consumer experience affect shopping site familiarity and then affect customer trust and consumer choice. This study found website usage and advertising to be the most influential predictor of a consumer’s website familiarity, particularly their level of subjective familiarity. E-WOM also impacts familiarity. However, only objective familiarity can increase trust levels, subjective familiarity cannot. These conclusions indicate the more actual know the more trust. Results also displayed that trust play an important part in the consumers’ concern to make a purchase decision.

Introduction

Nowadays, more and more consumers are using online shopping worldwide. Researchers in psychology have confirmed that familiarity is the emotion that develops cumulatively over time, formed quite persistently and differently from short-term affective factors. Scholars found that familiarity accrues naturally with years of social interaction. When customers’ experience increases, customers’ familiarity is likely to increase.

Besides, trust also plays an important role on online shopping. Trust placed by the consumer in a website is considered the antecedents of the consumer’s commitment to a website. Trust is found that the rate of successful transactions on e-commerce systems enforced by trust management remains very high. This study focus on the key factors underlying customers’ intention to purchase through Internet. We use online purchase intention instead of actual behavior because, based on the theory of reasoned action proposed by Ajzen & Fishbein (1980), intention is considered the best immediate factor in the relationship between attitude and behavior, and is appropriate to test consumers’ behavior [1]. The purpose of the study is to examine which kind of consumer’s experience affect shopping website familiarity, and how does website familiarity affect customer trust and consumer choice. Meanwhile, this study tries to give the clear definition of subjective familiarity and objective familiarity in the context of online, and to test the difference between online consumers’ subjective familiarity and objective familiarity on their buying decision.

Theoretical Background and Hypothesis

The source of prior experience is not necessarily the object itself, but the meaning of it or an object which semantically relates to the current object. Familiarity relies on memory of prior experience. The fact that different experiences may lead to different types of expertise is a good argument in favor of a multidimensional concept of familiarity. Moreover, brand familiarity is the most rudimentary form of consumer knowledge and brand familiarity is context-independent and is affected in more or less the same way by advertising exposures and product usage. Advertising stimuli can also influence the affective responses of customers. Studies have indicated a positive relationship between an advertisement in general and the affective responses of customers.

Online consumer reviews offer more consumer-oriented information and describe experience-based product attributes in terms of usage situations. Accordingly, subjective information, rather
than standardized and objective information, has a more profound effect, and the effect of subjective information may differ between consumers with different levels of knowledge. Similarly, Park et al. (2008) categorized review contents into two different types: the attribute-centric review and the benefit-centric review. In attribute-centric reviews, arguments supporting reviewers’ evaluations are based on technical attributes such as numbers representing attribute levels. By contrast, in benefit-centric reviews, supporting arguments convey subjective interpretations about such technical attributes [6]. Park et al. (2008) showed that consumers with expertise tend to prefer attribute-centric reviews to benefit-centric ones. Consumers with no expertise prefer benefit-centric reviews to attribute-centric ones [6].

Objective information is characterized as factual search-type information such as prices and product specifications, whereas subjective information tends to be more personal, experience-based, and subject to personal interpretations of product/service such as wine, restaurants, and travel experiences. Previous research has shown that consumers have a distinct preference for objective information when they search for information online and a distinct preference for subjective information when dealing with offline information sources [8]. Studies suggested that objective and easily understood messages have a stronger effect than subjective and/or affective messages and there is no differential effect produced by review attributes [5,7]. Following this, we propose our hypotheses:

H1: Website usage has a positive effect on subjective familiarity.
H2: Website usage has a positive effect on objective familiarity.
H3: E-WOM has a positive effect on subjective familiarity.
H4: E-WOM has a positive effect on objective familiarity.
H5: Advertising has a positive effect on subjective familiarity.
H6: Advertising has a positive effect on objective familiarity.

Lack of consumer trust is a critical obstacle to the success of transactions. This obstacle is especially difficult as it relates to online shopping, where parties to transactions cannot physically see each other. People have lower levels of trust when communication is via the Internet rather than face-to-face. Trust is important to online exchanges characterized by uncertainty, anonymity, lack of control, and potential opportunism. Both online initial trust and familiarity with online purchasing have a positive impact on purchase intention. When conducting transactions online, a consumer cannot physically check the product quality before making a purchase, or monitor the safety and security of his or her personal information or credit card numbers [5].

Familiarity can influence trust, in two ways. First, familiarity can build trust when the vendor shows trustworthy behavior or ruin it if the vendor does not. Second, familiarity provides a framework within which specific favorable expectations from the trusted party can be made [4]. Given that increasing a user’s familiarity with website increases the likelihood of user trust the following operationalized hypotheses should be supported:

H7: Subjective familiarity has a positive effect on trust.
H8: Objective familiarity has a positive effect on trust.

From the relationship marketing perspective, Yoon (2002) addressed that the level of trust has been conceptualized to be contingent upon the consumers’ perceived level of interaction between company which provides information and consumers who receive it [9]. In online consumer literature, website trust goes beyond consumer’s satisfaction with the functional performance of the product. Consistent with the importance of online trust, the role of post-purchase trust on the Internet. Furthermore, the absence of trust may be unable to retail those customers who are satisfied [8]. This suggests that trust may act as a moderator to satisfaction in strengthening further behaviors. The trust will play important roles in purchasing decision. Such arguments are supported by the empirical findings of Bentle (1983) who find a strong relationship between online trust and behavioral intent. Behavioral intent may include willingness to navigate further activities, such as revisiting to the same site, engaging in interactivity with the web site, and purchasing from the site. So trust influences the willingness to buy in a particular web site [2]. Following this, we propose our hypothesis:
**Methodology**

We chose JD.com for our research object because of its rapid growth in recent years. Based on previous research of online shopping experiences, website familiarity, trust, and purchase intention, we selected survey items for the measurement of each construct and developed a questionnaire that included those items. Four questionnaire items were used to measure purchase intention, and five questionnaire items were used to measure advertising and subjective familiarity. For the measurement of e-WOM, trust, six questionnaire items were used. The above items were measured on a seven-point Likert scale, from “strongly disagree” to “strongly agree”. Particularly, the variable of “objective familiarity” was measured by ten items, which there is only one correct answer to each question.

The survey was divided into two parts. The main part was hardcopy questionnaires, that were collected by undergraduate students in Zhengzhou University, and the others were collected by online survey. Both two parts used convenience and random sampling methods. A total of 405 surveys were distributed, and 403 were returned. After eliminating 89 responses due to incompleteness or the absence of Internet shopping experience, a sample of 317 (78.3%) was ultimately employed in our empirical analysis: the sample includes 202 female and 115 male for the analysis of the gender difference. All of these including 47 online surveys and 270 hardcopy surveys.

In this study, Statistical analysis of the data was conducted using a three phase approach that included the use of the Windows versions of SPSS 20.0 and AMOS21.0. First, a confirmatory factor analysis (CFA) identifies the measurement model, which shows the relationship between the observed and latent variables. It also enables a comprehensive assessment of construct validity including convergent and discriminant validity. Second, the structural model estimates a causal relationship among the latent variables, and tests the hypotheses given the complex relationships among constructs. It indicates a direct and indirect influence between particular latent variables and certain other latent variables in the model.

**Results**

In the first phase, the sample characteristics of respondents were identified. In the second phase, a confirmatory factor analysis (CFA) was conducted to measure the adequacy of the measurement model. Reliability using construct reliability and item reliability were tested. Construct validity was determined by using convergent and discriminant validity. In the third phase, the structural equation model was used to estimate parameters and test hypotheses.
The demographic characteristics tested were education, occupation, disposable income, age and gender. In the total of 317 respondents, 36% of the respondents were male (n = 115) and 64% were female (n = 202). The age of respondents of 20-24 years old was 86.4%. Seven-six percent of the respondents had disposable income lower than 1,000 Yuan per month, with 8% over 1500Yuan. More than 45% respondents reported surf the Internet 7 days per week, and 77.6% surf the Internet 30min-3 hours per day.

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A reliability test was conducted to test the internal consistency of results using the coefficient alpha. Cronbach alpha coefficient is the most general measure of reliability for a multi-item scale [3]. As Nunnally (1978) suggested, a minimum value of .70 was employed for assessing the internal consistency of the construct. The Cronbach alpha coefficients for all constructs in the main study were greater than .70.

The coefficient alpha estimates for each of the six constructs in the main study are listed as follows: website usage (α = .88), E-WOM (α = .86), advertising (α = .87), subjective familiarity (α = .92), trust (α = .91) and purchase intention (α = .85) (see Table 1). Based on the suggested cut off points, all measures appeared to be good indicators of each construct with multiple items.

The Maximum Likelihood (ML) method was applied to the CFA model. The Maximum Likelihood method reduces bias even when the condition of missing at random is not completely satisfied (Little & Rubin, 2002) and it improves parameter estimates to minimize a specified fit function. The results for the measurement model of website usage, E-WOM, advertising, subjective familiarity, objective familiarity, trust and purchase intention showed an acceptable fit ($\chi^2=868.2, df = 390, \chi^2/df = 2.23$, Root Mean Square Error of Approximation (RMSEA) = .06, Normed Fit Index (NFI) = .87, Relative Fit Index (RFI) = .84, Comparative Fit Index (CFI) = .92, Incremental Fit Index (IFI) = .92, and Parsimony Normed Fit Index (PNFI) = .73).

Convergent validity can be assessed by examining composite reliability of constructs (CR), average variance extracted (AVE), and factor loading estimates for constructs. Regarding composite reliability scores for every construct (ranging from 0.85 to 0.91, as shown in Table 1) are well above 0.70, which is the suggested benchmark for acceptable reliability [3]. AVE is recommended to exceed 0.50. Table 1 shows that AVE score for every construct, ranging from 0.53 to 0.71, satisfies this requirement. All factor loadings are mostly over 0.7. Thus the convergent validity of the latent constructs is confirmed.

Table 1. AVE and Correlations among Latent Constructs.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Composite Reliability</th>
<th>AVE</th>
<th>USAGE</th>
<th>EWOM</th>
<th>AD</th>
<th>SUBF</th>
<th>TRU</th>
<th>PI</th>
<th>OF</th>
</tr>
</thead>
<tbody>
<tr>
<td>USAGE</td>
<td>0.91</td>
<td>.67</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EWOM</td>
<td>0.87</td>
<td>.53</td>
<td>-.01</td>
<td>0.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AD</td>
<td>0.88</td>
<td>.59</td>
<td>.13**</td>
<td>.00</td>
<td>0.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUBF</td>
<td>0.92</td>
<td>.71</td>
<td>.50**</td>
<td>.00</td>
<td>.53**</td>
<td>.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRU</td>
<td>0.89</td>
<td>.63</td>
<td>.14*</td>
<td>.16**</td>
<td>.38**</td>
<td>.27**</td>
<td>.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI</td>
<td>0.85</td>
<td>.59</td>
<td>.19**</td>
<td>.15**</td>
<td>.37**</td>
<td>.30**</td>
<td>.55**</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>OF</td>
<td>0.80</td>
<td>.60</td>
<td>.25**</td>
<td>.01</td>
<td>.20**</td>
<td>.38**</td>
<td>.26**</td>
<td>.22**</td>
<td>.77</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed)

Note: Diagonal elements are the square roots of average variance extracted (AVE)

Discriminant validity ensures that a construct is actually discrete from other constructs[3]. The square roots of average variance extracted estimates in each construct should exceed the correlations associated with constructs in the model. As shown in Table 1, all square roots of AVE are greater than the corresponding inter-construct correlation estimates. All of these test results suggest good discriminant validity.
Six latent constructs (website usage, E-WOM, advertising, subjective familiarity, trust and purchase intention) and 31 observed variables were included for testing the structural model. The Maximum Likelihood (ML) estimation method was applied to test the base model using AMOS 21.0 based on no violation of the normality assumption. The ML method provides unbiased, more consistent and more efficient parameter estimates (Jaccard & Wan, 1996). The overall fit statistics for the proposed model was acceptable ($\chi^2 = 1027.5$, df = 45251, $\chi^2$/df = 2.27, Root Mean Square Error of Approximation (RMSEA) = .06, Comparative Fit Index (CFI) = .91, Incremental Fit Index (IFI) = .91, and Parsimony Normed Fit Index (PNFI) = .73). These indices show that the proposed model fits the data at a moderate level.

The path relationships between the seven latent variables (website usage, E-WOM, advertising, subjective familiarity, objective familiarity, trust and purchase intention) were assessed. Hypotheses 1 to 9 were examined to determine whether significant relationships existed in the proposed model. Most proposed paths were supported except two, for the relationship between E-WOM and subjective familiarity (H3) and the relationship between subjective familiarity and trust (H7).

Hypotheses 1 and 2 posited the significant relationship between website usage and subjective familiarity (H1) as well as website usage and objective familiarity (H2). The results revealed that the consumers’ website usage was positively related to their subjective familiarity ($\beta = .46$, p =.000) and objective familiarity ($\beta = .30$, p = .000). Thus, Hypotheses 1 and 2 were supported.

Hypotheses 3 and 4 reported mixed results. Hypothesis 3 was not supported with significant causal relations between E-WOM and subjective familiarity ($\beta = .04$, p>.05). However, hypothesis 4 was supported with E-WOM and objective familiarity ($\beta = .20$, p =.013). This suggests that E-WOM will positively impact a consumer’s knowledge in what they know about shopping website issues.

Hypotheses 5 and 6 were also supported. This suggests that advertising had strong and significant positive relationship with objective familiarity and objective familiarity ($\beta = .48$, p = .000), ($\beta = .58$, p = .000).

Hypothesis 7 was not supported, indicating that subjective familiarity ($\beta = -.09$, p = .26) has no significant relationship with trust. Hypothesis 8 proposed that objective familiarity would positively and significantly influence trust. The results revealed that that objective familiarity has strong significant relationship with trust ($\beta = .72$, p = .000). Therefore, H8 was supported.

Finally, the paths from trust related positively to purchase intention was also supported, indicating that trust can strongly influence purchase intention ($\beta = .63$, p = .000).

**Discussions**

From an academic standpoint, this study developed objective familiarity measurements in an online shopping context. The issue of measuring objective familiarity has become an increasingly important in online shopping literature. The existing objective familiarity measurement items is very few, and comes from the general marketing literature, although may be suitable to measure objective familiarity in consumer goods market, are not suitable in the online shopping market. Another contribution of this research is the development of a theoretical framework identifying how the direct experiences and indirect experiences influence the familiarity constructs and predicting causal relationships between those constructs within an online shopping context.

In addition, from the managerial point of view, this study shows that the direct experience of shopping website such as website usage can increase consumers’ subjective familiarity and then influence their trust to the website, finally influence their purchase behavior. Indirect experience such as advertising can increase consumers’ both subjective familiarity and objective familiarity, and E-WOM can increase consumers’ objective familiarity as well. Then from a shopping website’s perspective, the marketing mix involves how the specific knowledge of website usage will be promoted, and information about the website is a key part of this process. So, more usage experiences and advertising exposes are good methods to improve the consumers’ website’s familiarity. The shopping website can increase opportunities of website usage. Such as set all kinds
of entrances consumers can easy to find. If the company has two kinds of sale mode, online store and entity store, then the company can set up experience zone in the entity shop.

Reference


