The Impact of Different Types of Satisfaction on C2C Platform Loyalty

Completed Research Paper

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Abstract

Online satisfaction is regarded as an important construct in both the marketing and IS literatures. However, online satisfaction has been treated primarily as a unified concept in previous research, some researchers indicate that satisfaction can be differentiated into several types. We identify four types of customer satisfaction in the C2C online shopping context, viz.: economic satisfaction, social satisfaction, transaction-specific satisfaction and overall satisfaction. In addition, we identify the different antecedents and consequences of these four types of satisfaction. The results of a survey of 239 online buyers indicate that economic satisfaction is positively related to price, product quality and service quality, while social satisfaction is positively related to relationship with the sellers and service quality. Both economic satisfaction and social satisfaction exert a positive impact on overall satisfaction with the website. Finally, all these types of satisfaction can lead to online loyalty. Implications and suggestions for future research are discussed.

Keywords: economic satisfaction, social satisfaction, transaction-specific satisfaction, overall satisfaction, loyalty, C2C Platform
Introduction

Consumer to Consumer (C2C) forms of electronic commerce have contributed to new trends of doing business in the 21st century. According to a recent report (Q3/2010) into Chinese online shopping behaviour (http://www.iresearch.com.cn/View/125972.html), transaction volume has increased at a rate of 76.6% year-on-year; C2C contributes a significant proportion of this volume. The remarkable success of C2C in China promotes researchers to investigate C2C e-commerce from several perspectives, including technological, cognitive and marketing (Chen et al. 2007). However, it has been noted that not only is much of the prior China-focused e-commerce literature anecdotal (Martinsons 2008, P 332), but also that the C2C context tends to be overlooked, with most researchers focusing on the B2C market (Oh 2002).

It has been proposed that customer satisfaction and loyalty would differ in online and offline situations and can be caused by different aspects of brand impact and price sensitivity. (Shankar et al. 2003). Besides, customer satisfaction is recognised as both a critical factor and an objective in marketing (Erevelles and Leavitt 1992; McQuility et al. 2000). Both practitioners and researchers believe that customer satisfaction can affect customer loyalty and retention, which may eventually engender higher levels of profit (Jones and Suh 2000; Reichheld and Sasser 1990). Researchers also suggest that gaining and sustaining customer loyalty is the ultimate aspiration of service providers because loyal customers “buy more, are easier to reach, and act as enthusiastic advocates” (Harris and Goode 2004). The relationship between satisfaction and loyalty has been confirmed in previous online and offline research (Lam et al. 2004). However, in online shopping situations, Jones and Leonard (2006) further indicate that satisfaction in C2C e-commerce is significantly different from that in both B2B and B2C e-commerce. They found that factors of service quality can contribute to C2C satisfaction, even though the same factors had not been found to be significant in previous studies of B2C e-commerce. As such, investigating the relationship between satisfaction and loyalty in the C2C context is an important and interesting topic that could advance our understanding of how to enhance both online customer satisfaction and loyalty.

While most marketing research focuses on measurements, antecedents and outcomes of customer satisfaction, relatively little attention has been paid to the different perspectives and functions of customer satisfaction. As a result, many researchers treat customer satisfaction as a unified concept (e.g. Kim et al. 2008), though this can limit our understanding on customer satisfaction. Nevertheless, Jones and Suh (2000) demonstrate that overall satisfaction and transaction-specific satisfaction have different impacts on repurchase intentions in various situations. In offline business contexts, as well as the B2C and B2B contexts, the object of transaction-specific satisfaction and overall satisfaction often refers to a company since the behavior and attitudes of salespeople can be seen as representing the company they work for (Bhattacharya et al. 2005). However, in the case of C2C online shopping platforms (such as eBay and TaoBao), online sellers do not have this role and are relatively independent of the platform on which their shop is established, yet their performance may affect the platform’s image, and by extension, that of the parent company as well. Moreover, in the C2C online shopping context, information and services provided by sellers are more salient compared to offline situations because online buyers cannot touch or evaluate products. In addition, TaoBao, a famous and leading C2C shopping platform in China, might suffer from users’ (online customers) complaints because of inappropriate online seller behavior. Under these circumstances, it is necessary to investigate the difference between transaction-specific satisfaction with a specific online seller and overall satisfaction with the website in the C2C online shopping context.

Geyskens, Steenkamp and Kumar (1999) indicate that satisfaction can be evaluated from both economic and non-economic aspects. Geyskens and Steenkamp demonstrate two reasons for distinguishing “social satisfaction” and “economic satisfaction”: one is that a “channel member’s activities may produce economic satisfaction with its counterpart, while undermining the counterpart’s social satisfaction, or vice versa” (Geyskens and Steenkamp 2000, p.12). The second is that these two different types of satisfaction may have different consequential and interactive effects. Consequently, distinguishing these two types of satisfaction can increase our understanding of the role of satisfaction in managing effective long-term relationships. Marketing strategies lead buyers to pay more attention to the interactive aspects of the service and ignore rational analysis towards the core service quality from a technical perspective (Crosby and Stephens 1987). While the interactive aspects mostly happen during the communication process between buyers and sellers, social satisfaction and economic satisfaction can be conceptually distinct from a customer’s perspective. More importantly, it has been found that social interaction and social relations...
are critical influences of customer loyalty in the Chinese C2C context (Chen et al. 2007). Hence, in our research, we further divide transaction-specific satisfaction into social satisfaction and economic satisfaction because previous research studied social and economic satisfaction in specific transaction situations (Dabholkar et al. 2009).

We followed the transaction-specific satisfaction evaluation model from Parasuraman, Zeithaml and Berry (1994) to confirm the antecedents of satisfaction. Given a different context to that of Parasuraman et al., we conducted a small scale set of pre-survey interviews in order to explore the antecedents of customers' satisfaction. According to the results of these interviews, we found that product quality, price and service quality are all critical factors leading to customer satisfaction, which indicates that the transaction-specific satisfaction evaluation model can be used in our research. In this way, we integrate the four different aspects of customer satisfaction in our research model, viz.: social satisfaction, economic satisfaction, transaction-specific satisfaction, and overall satisfaction with the website, studying these types of satisfactions' antecedents and impact on loyalty.

The results of the interviews also indicate that the relationship between online sellers and buyers is also a potential antecedent of satisfaction. In the current competitive and dynamic business environment, companies have shifted their focus from manufacturer-based quality to customer driven quality, especially after the development of the relationship marketing concept. In this respect, Babin and Griffin (1998, p.127) state that “the era of relationship marketing has emphasized customer satisfaction as a key measuring stick indicating overall marketing performance”. Building relationships between buyers and sellers is important for online sellers because a good relationship can enhance customer overall satisfaction and loyalty (Caceres and Paparoidamis 2005). Hence, relationship with seller, as an important antecedent of customer satisfaction, is also included in our research model.

Literature Review

Transaction-specific Satisfaction and Overall Satisfaction

Jones and Suh (2000) suggest that shopping satisfaction can be divided into two categories: transaction-specific satisfaction and overall satisfaction. Transaction-specific satisfaction has been defined as “the consumer’s dis/satisfaction with a discrete service encounter” and overall satisfaction has been defined as “the consumer’s overall dis/satisfaction with the organization based on all encounters and experiences with that particular organization” (Bitner and Hubbert 1994, pp. 76-77). Transaction-specific satisfaction refers to specific encounter experiences which vary from experience to experience, while overall satisfaction refers to an overall attitude based on past cumulative encountered experiences. Hence, overall satisfaction can be regarded as an aggregation of all previous transaction-specific satisfaction instances (Veloutsou et al. 2005). Further, overall satisfaction is relatively stable compared to transaction-specific satisfaction.

Jones and Suh (2000) conducted a comprehensive study investigating different impacts of transaction-specific satisfaction and overall satisfaction on repurchase intentions. The results of their research indicate that overall satisfaction has a direct influence on repurchase intentions as well as a moderating effect on the relationship between transaction-specific satisfaction and repurchase intention. In addition, their research also confirms that these two types of satisfaction can be differentiated from each other.

In addition, Parasuraman et al. (1994) propose that the concept of transaction-specific satisfaction is necessary for studying the relationship between service quality and customer satisfaction because studying transaction-specific satisfaction in customer satisfaction research and overall satisfaction in service quality research without clear divisions often leads to confusion about the relationship between customer satisfaction and service quality. They further propose in their conceptual model that evaluation of service quality, product quality and price are all antecedents of transaction-specific satisfaction (Parasuraman et al. 1994).

In C2C online shopping platforms (such as eBay and TaoBao), the relationship between sellers and the platform is special. On the one hand, online sellers adopt the platform as their business base and follow the rules of the platform. On the other hand, online sellers are also relatively independent of the platform.
on which their shop is established. Despite this independence, inappropriate seller behavior may affect the platform's image. During the course of transactions, online buyers will mostly interact with individual sellers instead of the platform. Hence, transaction-specific satisfaction with the particular sellers and overall satisfaction with the website are worthy of investigation.

**Social Satisfaction and Economic Satisfaction**

The concepts of social satisfaction and economic satisfaction have been proposed in both the B2B and the B2C context (Dabholkar et al. 2009; Geyskens and Steenkamp 2000). Geyskens et al. (1999) conducted a meta-analysis of satisfaction and found that it is not a unidimensional construct. They discovered that research on the economic aspects of satisfaction differed from that undertaken into the social aspects of satisfaction. In addition, given that economic satisfaction and social satisfaction have different antecedents and impacts, it is critical to differentiate them conceptually.

Economic satisfaction is defined as “evaluation of the economic outcomes that flow from the relationship” with a partner (Geyskens and Steenkamp 2000, p13). Ruekert and Churchill (1984) first proposed the concept “satisfaction with the financial performance” to differentiate satisfaction at a general level. Economic satisfaction emphasizes effectiveness, productivity and financial outcomes of the relationship (Geyskens et al. 1999). Social satisfaction on the other hand is defined as “…evaluation of the psychological aspect of … [a] relationship, in that interactions with the exchange partner are fulfilling, gratifying and facile” (Geyskens and Steenkamp 2000). Unlike economic satisfaction, social satisfaction is derived from the interpersonal level, stressing enjoyment of the personal interaction because the partner is “concerned, respectful, and willing to exchange ideas” (Geyskens et al. 1999).

In previous research, social satisfaction and economic satisfaction are mainly studied in the context of channel member relationships. Geyskens and Steenkamp (2000) indicate that these two types of satisfaction have different impacts on channel members’ response strategies. Dabholkar et al. (2009) extend these concepts to the B2C context and demonstrate that both social and economic satisfaction can lead to buying intentions through trust and commitment. Chen, Zhang and Xu (2009) indicate that C2C online customers can get both economic value and social support through social interactions, which shows that social satisfaction and economic satisfaction could also be valid in the online C2C context.

**Theoretical Model Development**

According to our definition of economic satisfaction and social satisfaction, we propose product quality, price, service quality and relationship with sellers as antecedents of both economic satisfaction and social satisfaction in the C2C context. The reason we choose these factors as antecedents is not only because of the result of our interviews with actual online buyers, but also because we found theoretical support from previous research.

We employed perceived product quality in our research. Since we aim to study satisfaction and loyalty from the online buyers’ perspective, investigating customers’ perceived quality should fit our research context. Perceived product quality has been defined as a “consumer’s judgment about a product’s overall excellence or superiority” (Tsiotsou 2005, p. 210). Zeithaml (1988) argued that objective quality may not exist since all quality is perceived by someone, be it customers or managers. Howard also demonstrates that “…consumers differ in their perceptions. It is the perception that affects behavior, not the attribute itself” (Howard 1977, p. 28).

Parasuraman et al. demonstrate that quality-evaluation antecedents include a mix of service (intangible) and product (tangible) features and “fall along a continuum anchored by ‘tangible dominant’ at one end and ‘intangible dominant’ at the other” (Parasuraman et al. 1994, p.121). Further, both product quality and service quality have been confirmed to have a positive influence on satisfaction (Kim et al. 2008). In C2C online shopping platforms, a buyer needs to communicate with a seller in order to obtain information about a product. Following a purchase, sellers still need to deliver the product as well as be responsible for post sales issues. Hence, online buyers’ economic satisfaction comes from both the tangible product and the intangible service quality of the seller. In addition, it has been proposed that C2C markets are riskier
than B2C because of the “physical separation and anonymity of traders” (Xu et al. 2010, p511). Hence, the function of service quality would be salient to decrease buyers’ perceived risk from C2C markets.

H1. Product quality will positively affect economic satisfaction.

It has been indicated that empathy and knowledge of the salesperson are important service features (Parasuraman et al. 1994). In the C2C online shopping context, communication between sellers and buyers is undertaken through online conversations. During their online interaction process, a number of sources of information can be drawn upon to increase customer satisfaction, notably: seller’s knowledge about the product (i.e. assurance, an economic aspect); and seller’s care and concern for buyers (i.e. empathy, a non-economic aspect). Empathy and assurance are two important dimensions of service quality; assurance refers to the “knowledge and courtesy of employees and their ability to inspire trust and confidence”; empathy is defined as the “caring, individualized attention the firm provides its customers” (Parasuraman et al. 1988). Sellers’ knowledge about the product can ensure that buyers get more professional information about the product, thereby leading to more confidence in transactions; care and concern act as a form of empathy in the relationship and enable buyers to feel that they are cared for and paid personal attention. Both of these attributes of seller behaviour can increase a buyer’s social satisfaction.

In previous research, service quality has been found to have a positive impact on customer satisfaction as an integrated concept. When customer satisfaction is divided into two types of social satisfaction and economic satisfaction, Dabholkar et al. (2009) propose that economic satisfaction is related to rational factors such as cognitive trust and calculative commitment, while social satisfaction is related to emotional factors such as affective trust and affective commitment. Similarly, empathy is related to the emotional side of social satisfaction while assurance is related to the rational side of economic satisfaction. Hence, we hypothesize that,

H2. Assurance will positively affect economic satisfaction.

H3. Empathy will positively affect social satisfaction.

Customer satisfaction is considered to be an outcome of evaluation of the rewards and sacrifices made as a result of the transaction (Howard and Sheth 1969). According to this logic, price, from the perspective of sacrifices, is considered to be an important attribute of evaluation of satisfaction (Su 2007). Jiang and Rosenbloom argued that price perception plays a more important role in e-retailing context because price cues are easier for buyers to depend on while products are not available to be examined (Jiang and Rosenbloom 2005). Previous research also indicates that price is an important determinant in C2C online markets which cannot be ignored. Strader and Ramaswami listed several factors which affect C2C online buyers’ choice of seller, in which price ranks first (Strader and Ramaswami 2002). Kohli, Devaraj and Mahmood (2004) indicate that lower prices can lead to greater customer satisfaction in B2C shopping experiences because customers benefit from superior choice since prices on the Internet are often lower than in conventional shopping channels. In addition, Bansal, McDougall, Dikolli and Sedatole also propose that website attributes, including price, can lead to overall website satisfaction (2004). Parasuraman et al. (1994) propose that price has a positive impact on transaction-specific satisfaction. Since price is the most prominent factor in an economic sense, it leads to the following hypothesis,

H4. Price perception will positively affect economic satisfaction.

Personal relationships are a dominant factor in Chinese social life. Yang (1994) stated that relationships “have the sense of ‘social connections’” and “are based implicitly (rather than explicitly) on mutual interest and benefit”. However, little research has focused on the relationship between online buyers and sellers. A relationship is considered to be personal and particularistic (Wang 2007), which is appropriate to the C2C online shopping context because most sellers in C2C websites communicate with their buyers directly. It is suggested that a relationship acts as a critical factor in influencing interaction processes and members’ effectiveness (Chou et al. 2006). It is argued that buyer-seller relationships constitute an important antecedent of customer satisfaction (Anderson and Weitz 1989). Nielson (1998) demonstrates
that a successful relationship can promote information sharing and lead to more benefits. Chen et al. (2007) indicate that in Chinese C2C shopping platforms, social relations can exert a stronger influence on loyalty than transaction services. Accordingly, during online transactions, a good relationship between buyers and sellers can enhance their communication, enabling buyers to make a better purchase decision. In addition, a successful relationship might help sellers make better recommendations to buyers because sellers know which product is more suitable for the buyer. Besides, mutual understanding developed between sellers and buyers can also enhance communication efficiency.

At the same time, a successful relationship can also lead to greater social satisfaction. Researchers contend that there is an emotional bond between parties who are involved in a good relationship (Barnes 1997). Jap, Manolis and Weitz (1999, P. 303) find that “high-quality relationships tend to exhibit more friendliness, less question asking, disagreement, and compliance behavior as compared with lower-quality relationships”. Hence, buyers are more likely to enjoy their transaction experiences when interacting with sellers with whom they have a high quality relationship. Accordingly, we hypothesize that,

H5. The relationship with a seller will positively affect economic satisfaction.
H6. The relationship with a seller will positively affect social satisfaction.

The relationship between transaction-specific satisfaction and overall satisfaction has been demonstrated by Jones and Suh (2000). Since overall satisfaction is obtained through experiences of past transaction-specific satisfaction, each new transaction-specific satisfaction experience can affect overall satisfaction. The distinguishing feature of online C2C shopping platforms is that a shopping platform is composed of many independent sellers. In addition, there exists a casual relationship between sellers and the platform, different from the close relationship between a traditional organization and its employed salespersons. Even though the website promulgates many rules to regulate seller and buyer behavior, aiming to protect their interest not to be harmed during the transaction process, inappropriate behavior cannot be avoided. If buyers have unpleasant shopping experiences, they are more likely to be inclined to attribute them to ineffective management of the website (Chen et al. 2009). Correspondingly, pleasant shopping experiences can lead them to believe that the website is effectively managed. The same logic can be applied to the positive relationship between satisfaction with a seller and overall satisfaction with the website. Even though sellers do not have a close relationship with the website, buyers always consider them to be associated with the website. Pizzutti and Fernandes (2010) demonstrate that a customer's perception towards a certain online seller can positively impact perceptions towards the whole system. Accordingly, we propose that,

H7. Economic satisfaction will positively affect overall satisfaction with the website.
H8. Social satisfaction will positively affect overall satisfaction with the website.

The relationship between satisfaction and loyalty has been confirmed by previous research (Anderson and Sullivan 1993). It has been suggested that satisfaction can lead to higher levels of business loyalty (Caceres and Paparoidamis 2005). Jones and Suh (2000) demonstrate that both transaction-specific satisfaction and overall satisfaction can lead to repurchase intention, a typical behavior of loyal customers. Hence, we propose that,

H9. Social satisfaction will positively affect loyalty.
H10. Economic satisfaction will positively affect loyalty.
H11. Overall satisfaction with the website will positively affect loyalty.
Research Methodology

The survey method was adopted to test our hypotheses. We chose TaoBao’s website (www.taobao.com) as the research context primarily because it has the largest share (84.8%) of the C2C online market in China (http://www.iresearch.com.cn/View/125972.html). From TaoBao’s website, we selected eight categories of tangible products: digital products; cosmetics; clothes; accessories; food, sports & stationery; mother & child; and household. These categories are pre-assigned by TaoBao and are listed in the homepage of the website. We randomly identified 10-15 shops within each of the eight categories and then obtained the identities of 800 buyers (between 1 and 15 from each shop who had bought a product from this shop within the last week). We then used TaoBao’s online message system to invite all 800 to participate in an online survey. We attempted to motivate responses by running a lucky draw (participation was optional) with 13 respondents winning between RMB30 and 100 (US$5-16). Altogether, we received 269 valid responses (a 33.63% response rate). Table 1 shows the demographic information of the respondents.
Table 1. Demographics of Respondents

<table>
<thead>
<tr>
<th>Items</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>44.60%</td>
</tr>
<tr>
<td>Female</td>
<td>55.40%</td>
</tr>
<tr>
<td><strong>Age range</strong></td>
<td></td>
</tr>
<tr>
<td>Below 20</td>
<td>2.95%</td>
</tr>
<tr>
<td>20-29</td>
<td>71.38%</td>
</tr>
<tr>
<td>30-39</td>
<td>24.16%</td>
</tr>
<tr>
<td>40 or above</td>
<td>1.51%</td>
</tr>
<tr>
<td><strong>Educational Level</strong></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>37.55%</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>59.48%</td>
</tr>
<tr>
<td>Master or above</td>
<td>2.97%</td>
</tr>
<tr>
<td><strong>Personal income in RMB (monthly)</strong></td>
<td></td>
</tr>
<tr>
<td>Below 1000</td>
<td>41.26%</td>
</tr>
<tr>
<td>1000-3000</td>
<td>32.34%</td>
</tr>
<tr>
<td>3001-5000</td>
<td>14.87%</td>
</tr>
<tr>
<td>5001-10,000</td>
<td>8.18%</td>
</tr>
<tr>
<td>Above 10,000</td>
<td>3.35%</td>
</tr>
</tbody>
</table>

Following Churchill’s (1979) suggestions, most of the survey items were adapted from the previous literature, with some of the items customised to fit our research context more appropriately. We developed new measures for product quality and relationship with sellers; the items we developed are mainly based on prior related research and the key words of the definition of the constructs we intend to measure. All items in the survey were measured using seven-point scales anchored from “strongly disagree” to “strongly agree”. Table 2 presents the source of the items and the English version of the questionnaire is presented in Appendix A. In order to guarantee the content validity, three MIS PhD students who had online buying experience in TaoBao were invited to review and critique the measurement items. Since the research was to be conducted in China, all instrument items were translated into Chinese, following the translation committee approach (Van de Vijver and Leung 1997).

Table 2. Constructs & Sources

<table>
<thead>
<tr>
<th>Construct</th>
<th>Number of items</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Quality</td>
<td>3</td>
<td>Self-developed</td>
</tr>
<tr>
<td>Price Perception</td>
<td>3</td>
<td>(Voss et al. 1998)</td>
</tr>
<tr>
<td>Assurance</td>
<td>3</td>
<td>(Parasuraman et al. 1988)</td>
</tr>
<tr>
<td>Empathy</td>
<td>3</td>
<td>(Parasuraman et al. 1988)</td>
</tr>
<tr>
<td>Relationship with Seller</td>
<td>3</td>
<td>Self-developed</td>
</tr>
<tr>
<td>Economic Satisfaction</td>
<td>3</td>
<td>(Dabholkar et al. 2009)</td>
</tr>
<tr>
<td>Social Satisfaction</td>
<td>3</td>
<td>(Dabholkar et al. 2009; Geyskens and Steenkamp 2000)</td>
</tr>
<tr>
<td>Overall Satisfaction with the Website</td>
<td>4</td>
<td>(Jones and Suh 2000)</td>
</tr>
<tr>
<td>Loyalty</td>
<td>3</td>
<td>(Caceres and Paparoidamis 2005)</td>
</tr>
</tbody>
</table>
Results

Measurement Model

We followed two-stage analytical procedures (Hair 1998) to examine the measurement model and structural relationships. According to the procedures, content validity, convergent validity and discriminant validity were examined to validate the measurement model.

Content validity was assessed by reviewing the literature and pilot-testing the instrument. During the pilot-test, we dropped some items because of their low item-to-total correlations. We examined the value of factor loadings, Cronbach’s Alpha, composite reliability and the average variance extracted (AVE) to assess convergent validity. The results of CFA (Confirmatory Factor Analysis) show that all loadings were above 0.6. As shown in Table 3, Cronbach’s Alpha scores ranged from 0.689 to 0.947, which were above the benchmark value of 0.60 (Flynn et al. 1990), and the composite reliability ranged from 0.828 to 0.967, which were higher than the recommended value of 0.7 (Nunnally 1978). Further, all constructs' AVEs were above 0.5. The results indicate that our measurement model has good convergent validity (Chin 1998; Fornell and Larcker 1981).

We compared the relationship between correlations among constructs and the square roots of AVEs as recommended by Fornell and Larcker (1981) to assess the discriminant validity. As shown in Table 4, all the constructs’ square roots of AVE were greater than the correlations between constructs, which confirmed the discriminant validity. However, given that some inter-construct correlations were high, we further conducted a Chi-square test to compare the Chi-square difference between the constrained and unconstrained model as an alternative test. The results showed that all of the differences were significant. Hence, the measurement model demonstrated good discriminant validity.

<table>
<thead>
<tr>
<th>Measures</th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Satisfaction (ES)</td>
<td>0.689</td>
<td>0.828</td>
<td>0.617</td>
</tr>
<tr>
<td>Product Quality (PQ)</td>
<td>0.915</td>
<td>0.946</td>
<td>0.855</td>
</tr>
<tr>
<td>Price Perception (PP)</td>
<td>0.888</td>
<td>0.930</td>
<td>0.817</td>
</tr>
<tr>
<td>Empathy (EM)</td>
<td>0.693</td>
<td>0.831</td>
<td>0.621</td>
</tr>
<tr>
<td>Social Satisfaction (SS)</td>
<td>0.745</td>
<td>0.855</td>
<td>0.664</td>
</tr>
<tr>
<td>Loyalty (LO)</td>
<td>0.947</td>
<td>0.967</td>
<td>0.907</td>
</tr>
<tr>
<td>Relationship with Seller (RS)</td>
<td>0.888</td>
<td>0.930</td>
<td>0.817</td>
</tr>
<tr>
<td>Assurance (AS)</td>
<td>0.832</td>
<td>0.900</td>
<td>0.750</td>
</tr>
<tr>
<td>Overall Satisfaction with the Website (OS)</td>
<td>0.931</td>
<td>0.951</td>
<td>0.831</td>
</tr>
</tbody>
</table>
Table 4. Correlations between Constructs

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ES</td>
<td>0.785</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. PQ</td>
<td>0.552</td>
<td>0.925</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. EM</td>
<td>0.568</td>
<td>0.616</td>
<td>0.788</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. SS</td>
<td>0.408</td>
<td>0.639</td>
<td>0.580</td>
<td>0.815</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5. LO</td>
<td>0.486</td>
<td>0.768</td>
<td>0.518</td>
<td>0.714</td>
<td>0.952</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. RS</td>
<td>0.081</td>
<td>0.240</td>
<td>0.291</td>
<td>0.592</td>
<td>0.354</td>
<td>0.904</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. AS</td>
<td>0.566</td>
<td>0.523</td>
<td>0.574</td>
<td>0.444</td>
<td>0.459</td>
<td>0.214</td>
<td>0.866</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. PP</td>
<td>0.573</td>
<td>0.721</td>
<td>0.592</td>
<td>0.520</td>
<td>0.636</td>
<td>0.161</td>
<td>0.598</td>
<td>0.904</td>
<td></td>
</tr>
<tr>
<td>9. OS</td>
<td>0.390</td>
<td>0.618</td>
<td>0.489</td>
<td>0.503</td>
<td>0.540</td>
<td>0.193</td>
<td>0.437</td>
<td>0.551</td>
<td>0.912</td>
</tr>
</tbody>
</table>

Note: The shaded numbers in the diagonal row are square roots of the average variance extracted.

Further, Table 4 showed that several inter-construct correlations were higher than 0.60. We thus analyzed the Variance Inflation Factors (VIFs) and the tolerance values to test for potential multicollinearity. The results showed that the highest VIF was 3.60, well below the 10.0 threshold, and the lowest tolerance value was 0.28, well above the benchmark value of 0.10 (Kutner et al. 2005). Thus, multicollinearity was not a significant problem in this research. In addition, we tested the common method bias of the dataset by Harmon’s single-factor method (Carr 2007). The results showed that five constructs had eigenvalues greater than 1.0, accounting for 69.43% of the variance. Meanwhile, the first construct explained 20.77% of the variance. Meanwhile, through comparing the fit between the one-factor model and the measurement model, we found that the fit of the one-factor model (χ²= 3314.79, d.f.= 350) was considerably worse (p < 0.01) than the fit of the proposed model (χ²= 620.39, d.f.= 314). It indicates that common method bias is not a serious issue to impact the results of this study.

Structural Model

Partial Least Squares (PLS) Graph Version 3.00 was selected to test the structural model.

The results of PLS analysis are shown in Figure 2, indicating that product quality (β=0.248, p<0.01), assurance (β=0.327, p<0.01) and price perception (β=0.211, p<0.01) have a significant effect on economic satisfaction. Hence, H1, H2 and H4 are supported. It has also been shown that relationship (β=0.462, p<0.01) and empathy (β=0.446, p<0.01) have a positive influence on social satisfaction, suggesting that H3 and H6 are supported. However, no significant relationship is found between relationship with the seller and economic satisfaction. As such, H5 is not supported. Besides, both economic satisfaction (β=0.222, p<0.01) and social satisfaction (β=0.413, p<0.01) have a significant effect on overall satisfaction. Thus, H7 and H8 are also supported. Finally, we can see that economic satisfaction (β=0.191, p<0.01), social satisfaction (β=0.540, p<0.01) and overall satisfaction (β=0.194, p<0.01) all have a positive impact on loyalty. So, H9, H10 and H11 are all supported. In addition, it is necessary to highlight the high levels of explained variance in economic satisfaction (R²= 0.437), social satisfaction (R²= 0.532), overall satisfaction (R²= 0.294) and loyalty (R²= 0.584). We summarise our findings in Table 5.
Table 5 Findings

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Findings</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1. Product quality will positively affect economic satisfaction.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H2. Assurance will positively affect economic satisfaction.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H3. Empathy will positively affect social satisfaction.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H4. Price perception will positively affect economic satisfaction.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H5. The relationship with a seller will positively affect economic satisfaction.</td>
<td>Unsupported</td>
<td></td>
</tr>
<tr>
<td>H6. The relationship with a seller will positively affect social satisfaction.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H7. Economic satisfaction will positively affect overall satisfaction with the website.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H8. Social satisfaction will positively affect overall satisfaction with the website.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H9. Social satisfaction will positively affect loyalty.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H10. Economic satisfaction will positively affect loyalty.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H11. Overall satisfaction with the website will positively affect loyalty.</td>
<td>Supported</td>
<td></td>
</tr>
</tbody>
</table>

Discussion

This study explores online customer satisfaction based on transaction-specific satisfaction evaluation proposed by Parasuraman et al. (1994). Besides, we also include overall satisfaction with the website in our research model. We further classify transaction-specific satisfaction into social satisfaction and economic satisfaction. The research findings support most of the hypotheses and thus confirm that these two types of satisfaction can be differentiated in the C2C online shopping context. The relationship between these types of satisfaction, their antecedents and effects on loyalty has also been studied.
According to the results of the data analysis, service quality, price and product quality are all significant influences of transaction-specific satisfaction. These findings are consistent with Parasuraman et al.’s (1994) proposition of the antecedents of transaction-specific satisfaction evaluations. More importantly, although Parasuraman et al. proposed these antecedents in offline situations (Parasuraman et al. 1994), our research indicates that these factors are important factors in the online C2C shopping context as well. Besides, our research also confirms the positive relationship between transaction-specific satisfaction and overall satisfaction and their impact on loyalty.

The ACSI (American Customer Satisfaction Index) indicates that satisfaction among American customers is more quality driven than price or value driven (Kohli et al. 2004). However, our research shows that for Chinese C2C buyers, price exerts almost as strong an effect on satisfaction as does product quality, which indicates that Chinese online buyers are quite price sensitive and would like to buy a good quality product at a reasonable price. During interviews, many buyers contended that a key reason to buy from TaoBao sellers was because the products on TaoBao were much cheaper than those obtainable in offline markets. Some buyers even formed the habit of comparing prices between online and offline markets before purchase and were willing to purchase from an online website only if there was a price advantage online.

Contrary to our expectation, the study did not support a relationship with the sellers as an antecedent of economic satisfaction. This suggests that a good relationship with a seller would not help to improve a buyer’s economic satisfaction. A possible explanation is that because we measured post-purchase satisfaction instead of pre-purchase satisfaction, so, when considering economic satisfaction, buyers are more likely to focus on the product itself instead of the purchasing process. As we argued before, a good relationship between buyers and sellers can enhance the efficiency of the whole transaction process; however, the relationship itself cannot enhance product characteristics such as quality. Also, Wang (2007) indicates that during social interactions, affective value is more important than monetary value, which also explains why relationship does not exert an impact on economic satisfaction.

Although both social satisfaction and economic satisfaction have a positive effect on overall satisfaction and loyalty, social satisfaction exerts a stronger impact than economic satisfaction on both overall satisfaction and loyalty. Hence, when considering overall satisfaction, online buyers are more likely to be affected by social satisfaction which is positively related to sellers’ empathy and their relationship with sellers. These findings once again confirm the effect of a relationship marketing strategy and suggest that customers are not particularly rational even in the online context. Pavlou and Dimoka (2006) similarly found that benevolence exerts a stronger effect than credibility. According to this logic, social satisfaction from sellers’ caring behavior will be more impressive to buyers than economic satisfaction, since a caring relationship cannot be imitated easily while similar products of the same price and quality can be found easily through searching on the same shopping platform.

Relationships with sellers also exert a significant impact on social satisfaction which confirms our hypothesis. Little research has focused on relationship issues in the online context. Researchers have proposed that it is difficult to build relationships in the online context because switching costs are very low; a competitor is never more than a few clicks away (Yang and Peterson 2004). However, our interview data suggests that some buyers can find something in common with the sellers and build a relationship with them during the transaction process. Also, the study results indicate that a relationship is a critical antecedent of social satisfaction, which has a stronger effect on loyalty than economic satisfaction. The important contribution of relationships and social satisfaction accords with Chinese “guanxi orientation”: Chinese people are inclined to maintain a harmonious relationship with the people around them. Our research findings indicate that guanxi orientation is not only embodied in offline but also in online social activity.

Compared to western online buyers, we find both similar attributes and different

**Limitations and Future Research**

There are some limitations to this study which future research should address. Different kinds of products might exert different effects on buyers’ evaluation, which could further affect customer satisfaction and loyalty. In this research, we only classify different products in a fairly general way and mainly focus on
tangible products. Future research could make a clearer categorisation of products and so investigate whether customer loyalty varies according to the product category.

Although all the square roots of AVEs are greater than the correlations between the constructs and the following Chi-square test confirmed the discriminant validity, some correlations between constructs are still quite high indicating that measurement of the construct can be improved. Thus, although the specific concept that underlies each of the different types of customer satisfaction can be differentiated according to the results of the study, more work should be done on the measurements.

The study mainly stresses interaction between buyers and sellers. However, we believe that the nature of the platform and the interaction between the platform and buyers are also important factors which can lead to customer satisfaction and loyalty. As such, we strongly recommend researchers to combine factors from both the platform and individual sellers into research on customer satisfaction.

The study was conducted in the context of a Chinese online shopping platform. However, online consumers’ behaviour can be expected to differ across cultures. Therefore, readers should be cautious when generalizing the results to different cultural contexts. Hence, future research should also include cross-cultural comparisons so as to enhance our understanding of online buyers’ satisfaction.

Implications

This study contributes to the emerging literature on understanding customer satisfaction in the Chinese C2C online shopping context by classifying customer satisfaction into transaction-specific satisfaction, overall satisfaction, economic satisfaction and social satisfaction. In most prior research, satisfaction has been treated as a general concept. However, our research indicates that different types of satisfaction have different antecedents and different impacts on overall satisfaction and loyalty. The study has several implications for theory and practice.

Firstly, we confirm the transaction-specific satisfaction model which was proposed by Parasuraman et al. (1994) in the online C2C context. Although researchers indicate that there are many new factors influencing customer satisfaction in e-commerce, such as privacy and website design (Kim et al. 2009), our research confirms that traditional factors, namely, price, service quality and product quality are still important antecedents which have a significant impact on customer satisfaction. This finding is in accordance with Yang and Fang (2004) who indicate that the key determinants to customer satisfaction lie within the domain of traditional service quality dimensions. Secondly, we employed overall satisfaction with the website to study the relationship between individual online sellers and the shopping platform. Although the C2C platform and individual sellers are relatively independent, individual sellers’ performance can still impact on the customers’ impression of the whole platform which further impacts on other sellers sharing the same platform. According to this logic, the reputations of the platform and each individual online shop are implicitly connected.

Thirdly, we further differentiate transaction-specific satisfaction into social and economic satisfaction. This extends previous research that treated transaction-specific satisfaction as a one-dimensional construct (e.g., Jones and Suh 2000). In this way, these four types of satisfaction were integrated in a single research model. By exploring the antecedents and outcomes of each type of satisfaction, the research contributes to a better understanding of how they were formed. More importantly, our research also indicates that social and economic satisfaction behave differently with regard to their link with their antecedents, thus providing support for the nomological validity of treating transaction-specific satisfaction as a two-dimensional construct. To the best of our knowledge, this research is the first study to investigate social satisfaction and economic satisfaction in the C2C online shopping context. Szymanski and Henard (2001) conducted a meta-analysis focused on customer satisfaction and found some confounding results. For example, the relationship between satisfaction and repeat purchasing behaviour is significantly positive in some studies, but insignificant in other studies. Classifying satisfaction as we have done in this study may offer a possible explanation for this discrepancy. It has been proposed that online customers’ satisfaction can be affected by both cognitional and emotional factors (Chea and Luo 2008); differentiating economic satisfaction and social satisfaction provides a better elaboration of the components of customers’ satisfaction. Even though these three types of satisfaction have all been found
to be important as predictors of loyalty in our study, they do have different antecedents and might have different roles in different contexts.

Fourth, previous research on the relationship between service quality and customer satisfaction treats both satisfaction and service quality as uni-dimensional constructs. Our research indicates that both of these concepts can be differentiated from the emotional and rational perspectives. Finally, the results of the study enrich our understanding of how relationship building enhances loyalty through social satisfaction building.

There are also some practical implications for both online sellers and online platforms. A major practical implication of this study is that social satisfaction is found to have a strong effect on customer satisfaction and loyalty, while relationship with the sellers is a critical determinant of satisfaction. Hence, online sellers should try to build and maintain a good relationship with their buyers during the transaction process. Although offering high quality products and services is a basic requirement, sellers should realize that both products and services can be easily imitated in the online context; nevertheless, relationship building can be more useful in retaining the buyer as a loyal customer.

Managers of C2C platforms should realize that inappropriate behavior conducted by a single seller can not only harm the seller’s shop but also harm the reputation of the whole shopping platform. Chen et al. indicate that members composed of buyers and sellers constitute a C2C platform’s core competitive resource, which is different from B2C vendors who take their products and related services as their main competency. Maintaining harmonious relationships between members is thus critical for the long term development of the platform (Chen et al. 2009). As such, when there is a disagreement between sellers and buyers, website managers should take both sides’ interest into consideration, instead of over protecting the sellers’ interest, so as to retain the customers on the platform.

References


Appendix A. Measurement Items

Product Quality
1. During this transaction, the product quality is good.
2. During this transaction, the product quality meets my expectations.
3. During this transaction, the product matches the description.

Price Perception
1. During this transaction, the price was very reasonable.
2. During this transaction, the product was worth the price.
3. During this transaction, I don't think the seller cheated me on the price.

Empathy
1. During this transaction, the seller gave me personal attention.
2. During this transaction, the seller knew what my needs were.
3. During this transaction, the seller would help if I had a problem.

Assurance
1. The seller is familiar with the product that s/he sells.
2. The seller had enough professional knowledge to answer my questions about the product.
3. The seller could assess the quality of the product that he/she sells.

Relationship with the seller
1. I think this seller could be treated as a good friend.
2. I could chat with this seller about something more than the transaction alone.
3. I feel close to this seller compared to other sellers.

Economic Satisfaction
1. During this transaction, I was satisfied with the speed of the response from the seller.
2. During this transaction, I was satisfied that I could easily find the product that I needed in this shop.
3. During this transaction, I was satisfied with the relevant information I could get from the transaction.

Social Satisfaction
1. During this transaction, this seller won't leave me in the dark about things I ought to know.
2. During this transaction, interactions between the seller and I are characterized by pleasure.
3. During this transaction, online conversations with the seller are enjoyable.

Overall Satisfaction
1. Overall, I am satisfied with my shopping experience in TaoBao.
2. Overall, I am pleased with my shopping experience in TaoBao.
3. Overall, my shopping experience in TaoBao is pleasant.

Loyalty
1. I will consider patronising this online shop again in the future.
2. I will purchase from this online shop in the future if I intend to buy a similar product.
3. I will recommend this online shop to my friends.