Impact of Value Co-Creation on Customer Loyalty: The Role of Trust and Satisfaction

Hamza Kaka Abdul Wahab, Accra Institute of Technology, Ghana
Meng Tao, School of Business Administration, Dongbei University of Finance and Economics, Dalian, China & International Business College, Dongbei University of Finance and Economics, Dalian, China
Faizan Alam, Global Institute of Management and Economics, Dongbei University of Finance and Economics, Dalian, China*
Elikem Chosniel Ocloo, Accra Technical University, Ghana

ABSTRACT

The study examines the crucial role of value co-creation impacts on customer loyalty (attitudinal and behavioural loyalty) in the Chinese self-service food industry, especially in “Hot Pot,” also known as “Huo Guo,” taking into account the mediating impact on customer trust and satisfaction. The authors collected 377 valid Chinese customers’ questionnaires to assess the conceptual model with a purposive sampling method, and data were analyzed using SmartPLS3 software. The findings show that value co-creation positively impacts customer satisfaction, whereas satisfaction fully mediates the association between value co-creation and trust. The findings further portray that consumer satisfaction partially mediates the association among value co-creation and attitudinal and behavioural loyalty. Based on the results, another key finding is that consumer satisfaction has an insignificant impact on behavioural loyalty. Notably, the findings provide a menu of potential managerial implications to enhance customer satisfaction and loyalty.

KEYWORDS
Attitudinal and Behavioural Loyalty, Consumer Satisfaction, Consumer Trust, Hot-Pot, Value Co-Creation

1. INTRODUCTION

Intangible assets like reputation, status, organizational identity, brand familiarity, and goodwill are essential for organizations. They also help in generating value that can be sustained continuously (Chen et al., 2021; Haralayya, 2021). Moreover, loyalty as an intangible asset is one that a firm can boast of (Cossio-Silva et al., 2016). Organizations strive to meet the needs of both their existing and potential customers in this competitive business and marketing environment. They invest many resources into research, production, and promotion to achieve this. All the investments may likely not materialize; hence, to get a competitive edge over rival organizations, they need the loyalty of their customers, either through attitudinal or behavioral dimensions (Cossio-Silva et al., 2016).

DOI: 10.4018/IJE4.309390
*Corresponding Author

This article published as an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.
Market research carried out posited that about 135 start-ups failed due to the circumstances that products and services were unable to satisfy the needs of the market, which represents 42 percent; on the other hand, 14 percent of the failure was attributed to ignoring customers, whereas 17 percent failed as a result of the absence of a business model (Insights, 2019).

Customers have become sophisticated, demanding, and well-informed in recent times because of their easy access to information and being spoilt with choices. Hence, they now purchase value, not product. From this backdrop, firms need to engage both potential and existing customers in value creation development because getting their customers involved in the production process makes them feel appreciated and give off their best, which ultimately brings about satisfaction and also for the survival of the organization.

Customers, however, become loyal to a firm when they are part of the creation of the output in the production process because it gives the customers the perception of a quality service received (Vega-Vázquez et al., 2014). For instance, in 2017, Forbes magazine depicted co-creation as the second most effective and efficient business model that brings about success among firms (Altman, 2017). In recent times, firms have taken advantage of co-creation to generate new product concepts from customers (Sogn-Grundvag et al., 2008; Lorenzo, 2021). This, however, enables firms to reduce the cost of new product development, promotion, and market research.

Value co-creation is the view from the organization’s perspective. Still, recent studies of the concept have revealed that it can also be viewed from the customer’s and other stakeholders’ perspectives (Cossío-Silva et al., 2016; Qi & Roe, 2018). Engaging in the development of value creation gives some level of satisfaction and trust to consumers, which leads to loyalty (Yang et al., 2014). From the firm’s viewpoint, the important uniqueness of this study has to do with the firm meeting its set objectives as a result of loyalty depending on customer satisfaction and trust. It has been established that in an attempt to win over a new customer to become loyal, the cost is far greater than the cost of serving an existing loyal customer (Prashar & Verma, 2020).

Moreover, loyal customers are always ready to spend more on goods they are familiar with and recommend them to others (Acheampong et al., 2021; Srivastava, 2017). There is a notion that businesses hoping to achieve customer loyalty see it as a crucial part of their organization’s objectives (Oliver, 1999). Numerous researchers consider attitudinal loyalty (ATTL) as a precursor of behavioral loyalty (BHL) (Bandyopadhyay & Martell, 2007; Carpenter, 2008; Rayne, 2019). On the other hand, some scholars contradict the assertion that ATTL is the antecedent of BHL. Further, both ATTL and BHL are seen as instigators of market share, and both loyalty dimensions are deemed to be interrelated instead of cause-effect.

The increase in trust and satisfaction makes customers feel at home when they get something, especially in the food sector (Asti et al., 2021). This study portrays that consumer trust and satisfaction perform crucial roles in developing VCC in a “hot pot” food industry among the Chinese. This, therefore, could lead to both BHL and ATTL.

In the report entitled “Chinese Hot Pot Big Data” by Meituan and Dianping research institute in 2015 (Statista, 2020), there are six categories of hot pot in China: Sichuan Yunnan and Guizhou, Guangdong, East, and Hainan. The Chinese hot pot industry has witnessed tremendous growth since 2018, and this was a result of the expansion with around a twenty-one percent (21%) increase in stores and the employment of twenty-two percent (22%) increase in employees (Statista, 2020). There were over four hundred thousand (400) “Hot Pot” eateries in China as of 2018, whereas more than half were Chongqing or Sichuan kind (Statista, 2020). Moreover, because of its profitability against other types in the catering industry, it has become attractive to numerous new entrants into the market across China (Statista, 2020). Further, according to Statista (2020), the total revenue in the Chinese hot pot sector shot up to almost 876 billion Yuan.

Nevertheless, the study’s primary goal is to investigate how trust and satisfaction impact consumers in the co-creation procedure that brings about buyer loyalty in the self-service food sector in China, popularly known as “Hou Guo” in Chinese and “Hot Pot” in English. Moreover, we
try to answer how trust and satisfaction impact consumers who visit any “Huo Guo” or “hot pot” joints individually or with their family since they prepare the food they buy. Hot pot is a popular food among the Chinese, and consumers can cook vegetables and meat in a pot of boiling potage fixed on a table (McDougall, 2021). The content of “Hot Pot” in this present study centres on two individuals preparing and enjoying “Hot Pot” at “Hai di Lao” a famous “Hot Pot” joint in Dalian in the Peace Plaza Building.

Irrespective of the fact that there are numerous studies pertaining to value co-creation and despite the interest from managers of organizations, from the perspective of the customer, which is usually stressed on a partial aspect of it (Groth, 2005; Fang et al., 2008), and academics about the concept of the value co-creation, knowledge as to the manner customers participate in the creation of value has left a lot to be desired of (Payne et al., 2008). Even though researchers express the necessity to recognize several outcomes of value co-creation (Gummerus, 2013; Ranjan & Read, 2016; Yi & Gong, 2013), besides little facts occur on the effects of value co-creation (Cossío-Silva et al., 2016; Vega-Vazquez et al., 2013) in the background of a self-serviced food sector. In contrast, the literature lacks the incorporation of buyer satisfaction and trust in the association among VCC and loyalty. This lacuna is to be filled by the above gap. Hence, this research again aims to evaluate the ATTL and BHL dimensions of loyalty as carried out by Cossío-Silva et al. (2016) by adding satisfaction and trust as mediators between VCC behaviour and loyalty dimensions.

2. THEORETICAL BACKGROUND AND LITERATURE REVIEW

The value co-creation (VCC) model was adapted from Cossío-Silva et al. (2016) and expanded by adding customer satisfaction and trust. VCC model portrays the correlation between VCC behaviour and the loyalty dimensions such as attitudinal loyalty (ATTL) and behavioral loyalty (BHL) (see Cossío-Silva et al., 2016). Despite this fact, the 90 VCC model shows the relationships between VCC and the two loyalty dimensions, Thus, ATTL and BHL, the conceptual model for this study (see Figure 2), have different perspectives. First, Figure 2 is validated because the study intends to investigate how buyer satisfaction and trust mediate between VCC behaviour and the two loyalty dimensions (ATTL and BHL). Secondly, the conceptual model intends to portray the impact of consumer satisfaction and trust on ATTL and BHL individually on VCC. The inclusion of satisfaction and trust in the model is the foremost objective of this research. Thirdly, the association among ATTL and BHL included in the model bolster the findings between the two loyalty dimensions. Finally, the study examines the impact of VCC on trust through customer satisfaction.

2.1 Value Co-Creation

Over the years, the investigation on Value co-creation (VCC) has dwelled on coming up with customer experiences. The unique process of co-creation and also exhibiting the practices, processes, and nature of VCC (see Ramaswamy & Ozcan, 2016; Wang & Hajli, 2014) exploring the VCC circle in social commerce (Yu et al., 2020), co-creation from the angle of social capital (Yang & Li, 2016), service relationships of VCC in business-to-consumer and business-to-business (Watanabe, 2020). Scholars have also elaborated how consumers’ motivations to engage in VCC processes (Roberts et al., 2014; Xie et al., 2008) to understand how value can be co-created.

VCC in the firms and service industry varies from firms in the manufacturing industry (Hsiao et al., 2015). The disparities in this are related to outcomes pertaining to consumers, which include: customer turnover intention (Revilla-Camacho et al., 2014), customer loyalty (Hsiao et al., 2015), customer satisfaction (Vega-Vazquez et al., 2013), and outcomes that are related to firms such as increasing functional and technical qualities (Zhao et al., 2015), creation of core competency and competitive advantage that can be sustained firm performance, sustainability of service organizations and the firm’s profitability. As forerunners in VCC, scholars have accorded roughly attention to the marketing and strategy literature (Polese et al., 2011). VCC traces its roots in value creation, and
it is a significant pillar of the service-dominant (S-D) logic. As a construct of S-D logic, value co-creation can transpire at numerous levels in the S-D logic literature. These include; co-production, co-consumption, the co-formation of an idea, co-creation of meaning, co-design, co-promotion, co-distribution, co-maintenance, co-experiencing, co-disposal, and co-outsourcing (Frow et al., 2010). Moreover, despite the value co-creation levels enumerated above, scholars are yet to reach a consensus regarding the VCC development (Vargo & Lusch, 2010).

Two approaches are involved in value creation. Thus, the firm-centered approach and the participatory approach (Polese et al., 2011). The former has to do with the internal idea of value creation which is seen as restricted in nature, whereas the latter has to do with the combination of theories and business models that bring about relationships, networks, and interaction (Polese et al., 2011). Thus, co-creation has to do with the combination of value creation among the supplier (service source) and the consumer. The combined effort is needed to establish a relationship (Vega-Vazquez et al., 2013).

The above argument can be deduced that to co-create value, there is a combined effort by all the parties that are engaged in the process due to the exchange relationship, a combination of resources, and the provision of services (Vargo et al., 2008). Ultimately, in line with this understanding, firms must realize that integrating resources should supersede the firms (Prahalad & Ramaswamy, 2004). In this instance, the customer engages in the process by executing a sequence of activities to accomplish a particular objective.

One of the most researched constructs in service marketing literature is customer satisfaction. Customer satisfaction is seen as a “congenial fulfillment” of preferences, goal, or need after using goods. Scholars have studied the association between VCC behaviour (VCCB) and consumer satisfaction (Vega-Vazquez et al., 2013). Their findings have postulated that VCCB is a significant precursor to customer satisfaction, perceived as attitudinal (Lengnick-Hall et al., 2000). This could also be a result of 1988 good employees’ service-related behaviours.

Further, Vega-Vazquez et al. (2013) posited that VCC behaviour is significantly linked with buyer satisfaction and a cause of buyer satisfaction. When participating in the creation of value, customers are expected to get some satisfaction in the process. Vega-Vazquez et al. (2013) suggested that buyers get satisfied whenever they actively create value. Moreover, the customer’s involvement in the VCC process directly impacts the organization’s customer retention and profitability (Vega-Vazquez et al., 2013). Customer participation in creating value, hence, brings about satisfaction.

Though there are relationships between the following marketing constructs: trust, satisfaction, and perceived value, literature on loyalty and value co-creation is scanty. However, Cossío-Silva et al. (2016) establish a straight relation between VCC and ATTL. In their study, they posited VCC is having an impact on customers’ ATTL. Even though the empirical research in the domain of VCC and BHL is scarce, in the model, we created a relationship between them and assumed that the impact could be expected in the self-service food context. From the backdrop of these, we, therefore, formulate the following hypotheses:

**H1:** Value co-creation behaviour has a positive influence on customer satisfaction.

**H1a:** Value co-creation behaviour has a positive influence on attitudinal loyalty.

**H1b:** Value co-creation behaviour has a positive influence on behavioral loyalty.

### 2.2 Customer Satisfaction

According to Cai & Xu (2006), literature on consumer behaviour and marketing has generally posited that customer satisfaction (SAT) is a significant notion that is usually measured with regard to standards. Ultimately, numerous theories have been posited to describe customer satisfaction, such as Value-Precept Theory, Equity Theory, Evaluation Congruity Theory, Attribution Theory, Dissonance Theory, and Expectancy-Disconfirmation Theory (Yüksel & Yüksel, 2008).
Engel et al. (1968) and Howard & Sheth (1969) dwelled on the dissonance theory, which was established by Festinger (1957). Whereas other researchers (Anderson, 1973; Olshavsky & Miller, 1972) relied on the assimilation contrast theories postulated by Sheriff & Hovland (1961). Oliver (1977), however, dwelled on the adaptation level theory posited by Helson (1964) and established the Expectancy-Disconfirmation model to explore individual satisfaction, acknowledged greater credence among scholars. From this perspective, satisfaction can be deduced as a level valuation whereby customers’ expectations are being met or surpassed by the organization (Dash et al., 2021; Kursunluoglu, 2011; Vranesevic et al., 2004).

In a modern business context, where many organizations scramble for the same customers, for most business and marketing-oriented firms, customer satisfaction is treated as a significant objective to help the firms achieve market share and impact retaining customers (Hansemak & Albinsson, 2004). Consumers generally judge product performance or service after using it against their prior expectations. Hunt et al. (2012) suggest that satisfaction is based on individual judgment. Kassim & Abdullah (2010) and Tao et al. (2021) indicate that satisfaction impacts building trust with customers. Moreover, it has been established that satisfaction forms the basis of both attitudinal (intent) and behaviouiral (word-of-mouth) loyalty (Kassim & Abdullah, 2010). From these theoretical backdrops, we, therefore, formulate the resulting hypotheses:

H2: Customer satisfaction is positively associated with trust.
H3: Customer satisfaction is positively associated with attitudinal loyalty.
H4: Customer satisfaction is positively associated with behavioral loyalty.

2.3 Trust

Scholars (Siegrist, 2021; Tao et al., 2021) treated trust as a concept whereby a party entrusts confidence in another party’s reliability and integrity. Trust as a construct transcends both individual and the firm level (Alam et al., 2022; Nawaz et al., 2020; Singh, 2021). It is crucial to note that trust is a significant factor when building and maintaining relationships between a firm and its customers, despite the challenges that come with it (Tao et al., 2021). It has been posited that in business-to-business relationships, scholars have used trust in different forms ((Hendriks et al., 2021). For instance, Ferm & Thaichon (2021) used trust as a theoretical precursor of customer loyalty. Since the turn of the millennium, studies in customer loyalty literature do not treat the loyalty construct as a whole since it is uncertain. For example, loyalty was divided into attitudinal and behavioral loyalty (Cossío-Silva et al., 2016), whereas Kassim & Abdullah (2010) used word of mouth (WOM) and intent as loyalty dimensions. When treating loyalty and the factors that create it, such as; perceived value, customer satisfaction, and trust, care ought to be taken. In addition, some studies suggest that customer satisfaction brings about loyalty (Cossío-Silva et al., 2016).

As per Caceres & Paparoidamis (2007), loyalty and commitment are impacted positively due to trust, which ultimately brings about valuable two-way relationships. Therefore, loyalty epitomizes the manner of maintaining a long-lasting relationship established by trust (Lin et al., 2018). Moreover, Acheampong et al. (2021) posit that trust impacts positively and significantly on relationship commitment as a critical element of customer relationship commitment. The finding, however, suggests that when customers establish long and value-laden relationships with their service providers, the likelihood that trust would be a significant factor in customer relationship commitment or loyalty will be high. We, therefore, hypothesize that:

H5: Consumer trust is positively associated with attitudinal loyalty.
H6: Consumer trust is positively associated with behavioral loyalty.
2.4 Attitudinal Loyalty and Behavioral Loyalty

As per Jiang & Zhang (2016), consumer loyalty is perceived as a long-term and dynamic intangible asset. To retain their existing customers, firms refocus on customers’ loyalty when their target market gets saturated (Kim et al., 2016). Customer loyalty as a construct can also be measured by two dimensions thus, attitudinal loyalty and behavioral loyalty (ATTL and BHL). As a loyalty dimension, ATTL is made up of trust, emotional attachment or commitment, and satisfaction, also referred to as perceived relationship quality (Ho & Cheng, 2020). As stated above, the loyalty construct is very dicey, so one should not generalize it when dealing with it. Studies have examined the numerous definitions of loyalty (Suhartanto & Triyuni, 2016). Scholars have postulated that for true loyalty to manifest itself, it needs the backing of a strong “attitudinal commitment” to a brand (e.g., Jacoby & Chestnut, 1978; Suhartanto & Triyuni, 2016). The nature of loyalty as a concept is derived from attitudinal factors (commitment) and behavioural factors (repeat purchases) (Tao et al., 2021; Wilkins et al., 2021; Omar & Sawmong, 2007). The behavioural viewpoint of customer loyalty has to do with customer repeat purchase behaviour, which is primarily based on the customer’s purchase history. In this instance, the past behaviour is dwelled on instead of the future. However, considering organizations, attitudinal loyalty brings behavioural loyalty, impacting customer repeat purchase behaviour (Cossío-Silva et al., 2016). This, therefore, reaffirms the argument that the past customers’ intentions ultimately bring about effective behaviours (Ajzen, 1985). We, therefore, hypothesize that:

**H7:** Attitudinal loyalty will positively influence behavioural loyalty.

3. RESEARCH METHODOLOGY

3.1 Participants

A survey questionnaire was used to get the opinion of participants. The participants were recruited from ten hot pot restaurants in Dalian Liaoning province using a purposive sampling technique to collect the data, with the help of some waitresses. To entice the participants, they were promised to be given a drink after answering the survey. Participants spent approximately 15 minutes completing the survey and were bought a drink as promised. We employed the self-administered questionnaire method for its benefits, such as the respondents’ ability to answer questions posed to us and clarify

![Figure 1. Value co-creation model, adapted from Cossio-Silva et al (2016)](image-url)
International Journal of E-Business Research  
Volume 18 • Issue 1

some questions, sample control, quality control, speed, motivation, and anonymity. In all, 337 duly completed questionnaires were usable out of 400 sampled respondents.

3.2 Measures

We first developed an English questionnaire. One interpreter converted the English version of questions into Chinese and then reversed them into English to guarantee translational similarity. (Brislin, 1970). The constructs of the research are Value co-creation (Yi & Gong, 2013), customer satisfaction and trust, respectively (Ribbink et al., 2004), and loyalty (both attitudinal and behavioural) (Baloglu, 2002). All construct questions were evaluated on a 5-point Likert scale starting from strongly disagree (ranked as one) to strongly agree (ranked as five) (depicted in Table 1).

3.3 Data Analysis Technique

SmartPLS 3 was utilized for partial least squares structural equation modeling (PLS-SEM), that performs well at the causal-predictive valuation for a complicated hypothesized framework. It is also valid for the formative and reflective model (Hsu et al., 2006), where the latter is crucial for the constructs of this study. Furthermore, PLS-SEM provides wider flexibility in statistical distribution, population size, and research instrument (Hair et al., 2013). These were preceded by using the two-stepped approach by Anderson and Gerbing (1988).

4. RESULTS

4.1 Internal Consistency

Cronbach alpha (α) and composite reliability (CR) are the primary measures of internal consistency. The values of Cronbach’s alpha are under the threshold of 0.70, as posited by Nunnally and Bernstein (1994), except for trust as a variable with a Cronbach alpha of 0.620. As per Hair et al. (2016), the standard acceptable value of α is above 0.60, suggesting α is not an issue in the model. Moreover, the composite validity is also beyond 0.70 (Hair et al., 2006), acceptable in the current study. The average variance extracted (AVE) is also satisfactory. In addition, to check the multicollinearity, we used the variance inflation factor (VIF) to ascertain it prior to the structural model assessment (Hair et al., 2017). VIF more than 5.0 is controversial, depicting a multicollinearity issue (Hair et al., 2017). In this study, the VIF values for all the measurement indicators are below 5.0, showing the model as devoid of multicollinearity issues (Table 2).
4.2 Construct Validity

To analyze the model, it was evaluated using Hair et al. (2017) by ascertaining convergent validity (CV), discriminant validity, and Heterotrait-Monotrait ratio (HTMT) of correlations were all confirmed. Following Joseph et al. (2010), the construct items loading less than 0.70 were removed from the model to make the model parsimonious, whereas the factor loading of all the items above 0.70 was retained. These, therefore, depict a good CV and reliability (Table 2).

To ascertain how strong the discriminant validity (DV) is, Fornell –Larcker (1981) criterion was used (see Table 2). However, as a modern method, when examining the discriminant validity of variables, we calculated the correlations ratio of the Heterotrait-Monotrait Ratio as Henseler et al. (2015) suggested. The value of HTMT above 0.85 depicts a likely problem of discriminant validity (Hair et al., 2017) based on the rule of thumb. Still, values less than 0.9 also specify discriminant validity (Gold et al., 2001). The values of HTMT for this study in Table 2 are all below the 0.85 acceptable level. This, however, depicts that the DV result has no problem.
4.3 Structural Model Analysis

This study examines customer satisfaction (SAT) and trust (TR) between value co-creation (VCC) and loyalty, including attitudinal and behavioural (ATTL and BHL), from the Chinese customers' perspective. As shown in Table 4, the direct association between VCC and SAT was tested. The path coefficient depicts that VCC positively influences SAT depicting these values (β = 0.207, t-value = 3.465, p < 0.001). Hence, hypothesis H1 is supported. Secondly, H1a was investigated to see the relationship between VCC and ATTL. The result however portrays that VCC (β = 0.270, t-value = 5.436, p < 0.000) has a positive effect on ATTL. On the other hand, when we tested H1b to investigate the relationship between VCC and BHL, there was a direct positive relationship (β = 0.365, t-value = 6.135, p < 0.000). From the backdrop of these results, H1a and H1b are supported.

Thirdly, we tested the direct impact of SAT on TR. We then found out that satisfaction indeed has an effect on trust (β = 0.158, t-value = 2.563, p < 0.010). H2 is therefore supported. Further, the next hypotheses to be tested were H3 and H4. The result shows that satisfaction significantly impacts on ATTL (β = 0.382, t-value = 7.416, p < 0.000). Hence, H3 is supported. On the other hand, the relationship between SAT and BHL and the result depict that customer satisfaction does not significantly impact BHL (β = 0.074, t-value = 1.300, p > 0.05). We, therefore, not support H4.

Again, we tested the direct impact between TR and both ATTL and BHL. The path coefficients between TR and ATTL (β = 0.102, t-value = 3.587, p < 0.000) demonstrate that TR has a substantial impact on ATTL. H5 is therefore supported. When we tested the relationship between trust and
### Table 3. Discriminant validity

<table>
<thead>
<tr>
<th></th>
<th>ATTL</th>
<th>BHL</th>
<th>SAT</th>
<th>TR</th>
<th>VCC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fornell Larcker Method</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATTL</td>
<td>0.815</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHL</td>
<td>0.413</td>
<td>0.772</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAT</td>
<td>0.463</td>
<td>0.260</td>
<td>0.820</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR</td>
<td>0.310</td>
<td>0.375</td>
<td>0.158</td>
<td>0.754</td>
<td></td>
</tr>
<tr>
<td>VCC</td>
<td>0.402</td>
<td>0.512</td>
<td>0.27</td>
<td>0.324</td>
<td>0.820</td>
</tr>
<tr>
<td><strong>HTMT Method</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATTL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHL</td>
<td>0.519</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAT</td>
<td>0.602</td>
<td>0.321</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR</td>
<td>0.451</td>
<td>0.514</td>
<td>0.247</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCC</td>
<td>0.479</td>
<td>0.584</td>
<td>0.240</td>
<td>0.423</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** VCC = Value co-creation, SAT = Satisfaction, TR = Trust, ATTL = Attitudinal loyalty, BHL = Behavioural loyalty

### Table 4. Results of hypothesis testing

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Relationship</th>
<th>Beta (β)</th>
<th>T-values</th>
<th>P-values</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>VCC → SAT</td>
<td>0.207**</td>
<td>3.465</td>
<td>0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>H1a</td>
<td>VCC → ATTL</td>
<td>0.270***</td>
<td>5.436</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b</td>
<td>VCC → BHL</td>
<td>0.365***</td>
<td>6.135</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>SAT → TR</td>
<td>0.158*</td>
<td>2.563</td>
<td>0.010</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>SAT → ATTL</td>
<td>0.382***</td>
<td>7.416</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>SAT → BHL</td>
<td>0.074</td>
<td>1.300</td>
<td>0.194</td>
<td>Not supported</td>
</tr>
<tr>
<td>H5</td>
<td>TR → ATTL</td>
<td>0.102***</td>
<td>3.587</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H6</td>
<td>TR → BHL</td>
<td>0.191***</td>
<td>3.806</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H7</td>
<td>ATTL → BHL</td>
<td>0.173**</td>
<td>2.851</td>
<td>0.004</td>
<td>Supported</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship</th>
<th>Beta (β)</th>
<th>T-values</th>
<th>P-values</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>VCC → SAT → ATTL</td>
<td>0.079**</td>
<td>2.953</td>
<td>0.003</td>
<td>Supported</td>
</tr>
<tr>
<td>H</td>
<td>SAT → TR → ATTL</td>
<td>0.026</td>
<td>1.989</td>
<td>0.047</td>
<td>Not supported</td>
</tr>
<tr>
<td>H</td>
<td>SAT → ATTL → BHL</td>
<td>0.066*</td>
<td>2.623</td>
<td>0.009</td>
<td>Supported</td>
</tr>
<tr>
<td>H</td>
<td>TR → ATTL → BHL</td>
<td>0.028*</td>
<td>2.268</td>
<td>0.023</td>
<td>Supported</td>
</tr>
<tr>
<td>H</td>
<td>VCC → ATTL → BHL</td>
<td>0.047**</td>
<td>2.565</td>
<td>0.010</td>
<td>Supported</td>
</tr>
<tr>
<td>H</td>
<td>VCC → SAT → BHL</td>
<td>0.015</td>
<td>1.142</td>
<td>0.253</td>
<td>Not supported</td>
</tr>
<tr>
<td>H</td>
<td>SAT → TR → BHL</td>
<td>0.030*</td>
<td>2.093</td>
<td>0.036</td>
<td>Supported</td>
</tr>
<tr>
<td>H</td>
<td>VCC → SAT → TR</td>
<td>0.033*</td>
<td>1.699</td>
<td>0.089</td>
<td>Not supported</td>
</tr>
</tbody>
</table>

**Note:** VCC = Value co-creation, SAT = Satisfaction, TR = Trust, ATTL = Attitudinal loyalty, BHL = Behavioural loyalty

**Note 2:** ***p < 0.001; **p < 0.01; *p < 0.05.
BHL, the result indicates a positive association among TR and BHL ($\beta = 0.191$, t-value = 3.806, p < 0.000). Hence, H6 is supported.

Finally, we investigated H7 to see the direct effect of ATTL on BHL. The coefficient portrayed that ATTL does impact BHL ($\beta = 0.173$, t-value = 2.851, p < 0.004). H7 is therefore supported. After careful analysis, all the hypotheses were supported except H4 (Table 4).

4.4 Mediating Effects of Satisfaction (SAT), Trust (TR), and Attitudinal Loyalty (ATTL)

Mediation analysis was accomplished to assess the mediating role of SAT, TR, and ATTL on the relationships between VCC $\rightarrow$ TR, SAT $\rightarrow$ ATTL, TR $\rightarrow$ BHL, VCC $\rightarrow$ ATTL, VCC $\rightarrow$ BHL, and SAT $\rightarrow$ BHL by examining the indirect effect using SmartPLS3. As portrayed in Table 3. As SAT did not mediate the relationship between VCC and BHL. TR has a partial mediation effect in the association among SAT and ATTL and between SAT and BHL. Also, SAT has a partial mediation effect in the association among VCC and ATTL and a partial mediation effect of ATTL in the association among TR and BHL, respectively.

4.5 The Predictive Relevance and Effect Size and Importance-Performance Map Analysis (IPMA)

The effect sizes ($f^2$) were investigated in contrast to the structural model testing. Cohen’s (1988) methodologies were employed in this investigation to determine the size of an effect ($f^2$). According to Cohen’s (1988), recommends weighting impact size as follows: small = 0.02, medium = 0.15, and large = 0.35. Our model demonstrates that all pathways affected the endogenous construct (See Table 5). In addition, to assess the model’s predicted accuracy, we examined the $Q^2$ values. As per the published literature, a model possesses predictive validity if its $Q^2$ is higher than zero, while if $Q^2 >0.25$ indicates medium, and a $Q^2 > 0.50$ represents larger predictive validity (Hair et al., 2019). According to our research model results, the endogenous variable, such as satisfaction ($Q^2 = 0.226$), trust ($Q^2 = 0.101$), attitudinal loyalty ($Q^2 = 0.101$), and behavioural loyalty ($Q^2 = 0.206$), indicate that our model had predictive relevance, leading to acceptable and satisfactory outcomes (See Table 5).

Ringle and Sarstedt (2016) posit that IPMA is an important PLS-SEM tool used for analysis by depicting practical standard path coefficient estimates. Moreover, to be specific, IPMA emphasizes how the total effect of the predecessor variables shows their predictive importance on a target variable. In contrast, on the other hand, it highlights how vital the average latent variable scores are.

The IPMA in figure 4 described that “value co-creation” has the uppermost importance score (i.e., 0.217). Therefore, all things being equal (ceteris paribus), a one-point growth in value co-creation
performance will lead to a rise in the performance of the targeted construct attitudinal loyalty by the size of the total effect (thus. 0.217). This means that attitudinal loyalty would increase by 0.217. Further, the findings of the IPMA have shown that satisfaction has the lowest performance value on the target construct (i.e., attitudinal loyalty), which is 59.345.

Again, pertaining to behavioural loyalty as a targeted construct, from the IPMA, figure 4 is portrayed that “value co-creation” has the highest importance score (0.251). Therefore, all things being equal (ceteris paribus), a one-point growth in value co-creation performance will show growth in the performance of the targeted variable behavioural loyalty by the size of the total effect (thus. 0.251). This means that behavioural loyalty would increase by 0.251. Further, the findings of the IPMA have shown that satisfaction has the lowest performance value on the target construct (i.e., attitudinal loyalty), which is 59.345.

5. DISCUSSION

The model used in this study explores VCC, customer satisfaction (SAT), and trust (TR) on both ATTL and BHL, whereas ATTL also impacted BHL. For this reason, an empirical study was carried out to gather data from persons who have visited any Hot Pot restaurant to eat at least once before. The findings posit the following important conclusions. Foremost, from the perspective of Hot Pot, if a Hot Pot restaurant offers reliable service, hygienic raw food items, and a serene environment for the customers. The VCC positively impacts customers’ satisfaction, influencing customers’ trust. This study provides vital insight that VCC is a key predictor of satisfaction, whereas satisfaction, in turn, is a key predictor of trust.

Moreover, SAT mediates the association among VCC and TR. This nevertheless shows that value co-creation is an antecedent of SAT (see Vega-Vazquez et al., 2013). Hence, customers’ engagement

<table>
<thead>
<tr>
<th>Construct</th>
<th>VCC</th>
<th>SAT</th>
<th>TR</th>
<th>ATTL</th>
<th>BHL</th>
</tr>
</thead>
<tbody>
<tr>
<td>R²</td>
<td>0.043</td>
<td>0.225</td>
<td>0.335</td>
<td>0.349</td>
<td></td>
</tr>
<tr>
<td>Q²</td>
<td>0.226</td>
<td>0.101</td>
<td>0.121</td>
<td>0.206</td>
<td></td>
</tr>
<tr>
<td>F²</td>
<td>0.045</td>
<td>0.095</td>
<td>0.163</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAT</td>
<td>0.025</td>
<td>0.208</td>
<td>0.007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR</td>
<td>0.035</td>
<td>0.048</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATTL</td>
<td></td>
<td>0.030</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: VCC= Value co-creation, SAT= Satisfaction, TR= Trust, ATTL= Attitudinal loyalty, BHL= Behavioural loyalty
in the VCC process brings satisfaction to the customer. This further shows that customers’ satisfaction in preparing their meals is due to their involvement. Additionally, satisfaction directly affects trust. Although satisfaction is crucial when building trust in the self-service food industry (Hot Pot), however, the effect is minimal. It could be due to not knowing the source of the food materials being provided to them (customers) by the restaurant, irrespective of how they prepare the food themselves. Second, when customers prepare the food they eat, it impacts both their ATTL and BHL. They will continue to patronize the restaurant. The comprehensive outcomes disclose that VCC is a key predictor of ATTL and BHL. It is important to note that the former buttresses the finding of Cossío-Silva et al. (2016). The latter contradicts the finding (see Cossío-Silva et al., 2016), indicating that VCC does not directly associate with BHL.

Further, satisfaction partially mediates the relationship between VCC and ATTL and between VCC and BHL, respectively. This infers that despite the direct positive association between VCC and ATTL and between VCC and BHL, the customers become satisfied after getting involved in making their meals and therefore contributing to their ATTL and BHL. Third, as stated above, there is a direct positive association between SAT and ATTL. This shows that customers become loyal when they are satisfied with the bundle of service they receive and consequently influence their intention to repurchase. This finding contradicts the finding of (Oliver 1999), which posited that there is no direct impact between SAT and ATTL. The findings also show that SAT does not have a significant relationship with BHL. This result depicts that SAT does not necessarily mean customers will recommend the service to others since word of mouth by customers is an important aspect of behavioural loyalty. It could result from factors such as the individual’s degree of satisfaction and the level of experience with the service received. Moreover, irrespective of the fact that there is no direct relationship between SAT and BHL, TR fully mediates their relationship. It also shows that the minimal impact SAT has on TR (β=0.158, R² =0.025) could be the reason why SAT does not necessarily bring about BHL.

Again, we tested the direct impact between trust and attitudinal and behavioural loyalty. The path coefficients between trust and attitudinal loyalty (β=0.102, t-value=3.587, p < 0.000) show that trust significantly affects attitudinal loyalty. It reaffirms the findings of other studies that postulated that trust leads to loyalty but contradicts the finding of Kassim and Abdullah (2010), which suggested that
trust didn’t impact with intent, an aspect of attitudinal loyalty. H5 is therefore supported. When we tested the association between trust and behavioural loyalty, the result indicated a positive relationship between trust and behavioural loyalty (β=0.191, t-value=3.806, p < 0.000). Hence, H6 is supported.

Finally, we investigated H7 to see the direct effect of ATTL on BHL. The coefficient portrayed that ATTL does impact BHL (β=0.173, t-value=2.851, p < 0.004). This finding reaffirms our hypothesis that attitudinal loyalty does lead to behavioural loyalty. H7 is therefore supported. After careful analysis, all the hypotheses were supported except H4.

6. IMPLICATIONS OF THE STUDY

6.1 Theoretical Implications

Theoretically, the study made some interesting findings to add to the existing literature on the VCC and loyalty. In the current results, some of the results are buttressed and contradicted by previous studies. Regarding the relationship between VCC and BHL, we found a positive association among the two constructs. It contradicts Cossío-Silva et al. (2016) findings, suggesting no significant relationship between VCC and BHL. Again, some of the results highlight the roles being played by customer satisfaction and trust. Satisfaction and trust directly and significantly impact attitudinal loyalty, impacting behavioural loyalty.

Interestingly, though trust significantly influences attitudinal and behavioural loyalty, the results depict that customer satisfaction, on the other hand, significantly affects attitudinal loyalty but not behavioural loyalty. The implication is that a satisfied customer may not necessarily recommend a “Hot Pot” food joint, but they are likely to revisit it. Nevertheless, it shows how important satisfaction and trust create customer loyalty (thus, attitudinal and behavioural). Therefore, although trust on its own can influence loyalty (both attitudinal and behavioural), customer satisfaction cannot work in isolation to achieve customer loyalty without trust.

Moreover, the findings of the study reaffirm the association among satisfaction and trust. The satisfied customers in the VCC process will be motivated to trust the self-service food restaurant due to their participation in the creation of value than dissatisfied customers. When examining the impact of satisfaction on ATTL, the study found a significant direct impact of satisfaction on ATTL. This contradicts the suggestion by Oliver (1999) that satisfaction does not directly impact attitudinal loyalty unless through trust. This finding nevertheless suggests that satisfaction indeed influences attitudinal loyalty, which leads to repurchase intentions. Interestingly, despite the fact that satisfaction has a significant and direct effect on ATTL, there is no significant impact on BHL.

6.2 Managerial Implications and Limitations

Our findings breed the ground for marketers, customers, and brand managers. For instance, managers of self-service food ought to enhance their relationship with their customers to increase their loyalty by creating an environment for trust since it directly impacts both ATTL and BHL. This will aid in the firms’ efforts to win new customers and retain existing customers. Firms ought to encourage customers to create values since that will make the customers feel suitable for being part of the process. Again, firms from different industries that are not into co-creation ought to introduce the concept in their business model since it creates customer satisfaction, builds trust, and sustains customer loyalty. From the findings, value co-creation posits a direct and substantial relationship with both attitudinal and behavioural loyalty. Therefore, this will encourage repeat purchases from the firm’s loyal customers and consequently make them recommend the firm to friends and family. More so, to win the loyalty of customers, self-service food firms ought to create the grounds for trust to prevail and not only focus on satisfying the customer because satisfaction does not work in isolation.
6.3 Conclusion

The highlight of the study is the addition of consumer satisfaction and trust as mediators among customer value co-creation and loyalty (attitudinal and behavioural loyalty) and their involvement in the value co-creation process to bring attitudinal and behavioural loyalty. Moreover, the significant effect of co-creation on behavioural loyalty is important to this research since it contradicts the finding from the previous study (see Cossio-Silva et al., 2016). Another vital contribution of this framework is the straight impact of customer satisfaction on attitudinal loyalty, which disconfirms the finding of Oliver (1999).

6.4 Limitations and Direction for Future Research

Aside from the empirical discoveries of the current framework, it also has its limitations. The highlight of the limitation has to do with the items in the value co-creation construct. Out of the 29 items under eight dimensions which were posited by Yi and Gong (2013), only eight items were used in this study to measure VCC. One item was picked from each of the eight dimensions. Again, the scope of the research added to the limitation of the study. Though the study was carried out in China, Sichuan Province, the “home of Hot Pot,” was not included.

Regarding directions for the upcoming study, the limitations in this research pave the way for future investigation to be done in this area. Additional research would be needed to examine the validity of the conceptual framework used in this study using all the dimensions of VCC behaviour posited by Yi and Gong (2013). Further, switching costs can be used to moderate between co-creation and repurchase intention. Finally, other cities in China, especially Sichuan province, can be involved in the future studies; subsequently, it will be the hub of Hot Pot.

ACKNOWLEDGMENT

The authors thank the chief editor, associate editors, and anonymous reviewers for their constructive feedback and provide helpful comments on this manuscript. We are very thankful to the volunteers and research participants for their help in collecting the data.

CONFLICT OF INTEREST

The authors of this publication declare there is no conflict of interest.

FUNDING AGENCY

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.
REFERENCES


ENDNOTE

The video about Chinese HOT POT at Hai Di Lao on Nanjing Road Shanghai, China, was created by a YouTuber called Davidsbeenhere, showing him and another female having dinner and depicting how Hot Pot is prepared. Here is the link to the video https://youtu.be/SieFuhajKg4. Since we could not find a video about Hot Pot at Hai Di Lao in Dalian, we used Nanjing Road Shanghai since they have the same business model.
Hamza Kaka Abdul Wahab holds a Ph.D. in Marketing Management from Dongbei University of Finance and Economics, PR China, serving as Lecturer at the Accra Institute of Technology Business, Ghana. He is passionate about academic research and published several papers in international journals. His research areas include but are not limited to Social Media, Social Media Celebrities, Firm Celebrities, Value co-creation, Branding, E-commerce and Corporate Social Responsibility.

Meng Tao is a Dean of International business college and a professor department of marketing at Dongbei University of Finance and Economics, Dalian, China. His primary research interest is in sharing economy, digital platform, network organization, marketing strategy, innovation strategy. His work was published in organizational changes, digital media, sharing economy, and consumer behaviors. He published various books and qualitative research papers in multiple journals. His work appears Sage Open, International Journal of Online Marketing, Business Perspectives and Research, European Journal of Business and Management, Strategic Innovative Marketing and Tourism, Information Technology & Tourism, Tourism Tribune, International Journal of Business and Economics Research, RMC Journal of Social Science and Humanities. Currently, he is supervising various Chinese and internationals MS and Ph.D. scholars around the globe.

Faizan Alam is a Lecturer in Marketing Management at the Dongbei University of Finance and Economics - GIME, Dalian. He obtained his Ph.D. degree from Dongbei University of Finance and Economics in Dalian, China. He also obtained his B.Sc. (Hons.) Statistics from Aligarh Muslim University, India, received Master of Business Administration in marketing from Maulana Azad National Urdu University, Hyderabad, India. His primary research interests are social media platforms, sharing economy, and consumer behavior. He is an emerging research scholar in marketing management. His work appears in international Journals such as Sage Open, Frontiers in psychology, International Journal of Online Marketing, and International Journal of Islamic Marketing and Branding. Faizan Alam is the corresponding author and can be contacted at: faizanalam333@ibc.dufe-edu.cn.

Elikem Chosnial Ocloo holds a Ph.D. in Management Science and Engineering from Jiangsu University, China and a Senior Lecturer at the Faculty of Business, Accra Technical University, Ghana. He has special interest in current business trends in Digitalization and 4th Industrial Revolution concepts. His research areas include E-commerce, Digital Strategy and Marketing, SMEs Development, B2B Marketing and Marketing Management.