Article
Measuring Customer Service Experience in Offline and Online Retail Environments

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Abstract: Spectacular shifts have been led to by the COVID-19 crisis in consumer behavior. Retailers will have to work hard to meet ever-evolving customer service experience with respect to the ways in which it may be differently affected by offline or online transactions in order to win and stay relevant. We suggest an integrative framework and construct customer service experience hypotheses, based on its antecedents and consequences that will contribute to academic study as well as managerial implications. The hypotheses are tested by a simultaneous equation model employing two data sets of the retail industry's offline and online customers. In this study, 571 samples of these businesses, 319 and 252 respondents from offline and online retail channels, respectively, were collected by means of an online web survey of consumers. The results show that the impact of consequences and antecedents of CSX differs based on the media utilized. The integrative framework of CSX in its online medium is far more effective than its explanatory power offline. The outcomes are reasonably counterintuitive in so far as they demonstrate that while most elements of CSX where a service is selected offline is the same in terms of customer loyalty and value equity, the emotional element related to the service provider is higher when the service is selected offline rather than online. These outcomes indicate that, contrary to popular fears, the online medium enables firms to develop a loyal customer foundation. These findings offer perceptivity into how an online channel could be used to better complement the offline channel, contributing towards new knowledge and understanding on CSX and how it may be utilized for managerial decision-making.

Keywords: Customer Service Experience; Multichannel Retailing; Customer Journeys; Customer Equity

1. Introduction
Enhancements in technology, however, have resulted in ecommerce's development, making it easier and safer during COVID-19 for businesses to sell retail goods online and across the globe. In view of this, customer experience must now be consistent across all touchpoints to ensure customer needs are being met wherever customers choose to interact with your products. It is essential to fully examine the consumer's viewpoint regarding this phenomenon in order to comprehend the customer's experience in an age that exploits multichannel such as mobile, e-commerce, social media, online communities and messaging apps, that target customers regarding what they should purchase, from where, and at what price. However many organizations are failing to integrate offline and online strategies. Following research by McKinsey & Company, it appears that maximizing customer experience within customer purchase intentions has the potential not only to increase customer satisfaction by 20%, but also to raise revenue by 15%, while decreasing the cost of serving customers by as much as 20%. A number of recent researches have shown that there may be systematic differences in behavior and customer attitudes for services that are chosen online versus offline (Foroudi et al., 2018; Pei et al., 2020). Customers currently interact with firms by utilizing myriad touch points in multichannel, and customer service experiences are more social in nature, particularly in the retail industry. Therefore, comprehending the nature of consumer experience during service encounters is critical for organizations to survive and compete more effectively (Voorhees et al., 2017). While most retailers now understand the significance of providing their products and service through multiple channels, many still have work to do. Whether they are selling online, offline, or a mixture of both, 87% of consumers think service and products need to be improved for the delivery of a seamless service experience; this implies two important topics: one is how novel the customer service experience focal point really is; it looks extremely relevant to prior and existing research flows within marketing, such as customer behavioral intention, service quality, customer relationship management, and customer experience. The other topic is how customer service experience may be differently influenced through these opportunities in the online...
vis-à-vis the offline retail environments, and the examination of the many opportunities that distinguishes services from that of their competitors.

Multichanneling is one of the most important retail revolutions in recent years influencing retailing, marketing, information systems and communications. The creation of a high-ranking customer experience is one of the pivotal objectives of the retailing industry, offline or online (Chang et al., 2016). But today with the advent of novel technologies, channel integration, the growth of customer communities, and research development, the orchestration and analysis of customer experience has not only become significant but also vital. Customer analytics, is defined by Gartner as the campaign of tracking and analyzing the ways customers use combinations of channels to interact with an organization, and covers all channels used in demonstrating and engaging with individual customers. Furthermore, customer service experience, as indicated by Voorhees et al. (2017), is the span throughout which all service encounters that are relevant to a core service offering may happen. In the customer's subjective reaction, CSX is highlighted and encompasses multiple service encounters with a firm. This article suggests a framework that is based on customer experience quality. An analysis over time is crucial to determine customer relationship outcomes in the retailing industry. Although previous work has been foundational for service marketing, it has been poor in offering a complete review of research outside the service encounter focus. Our framework concentrates on the various kinds of integrations during encounter periods and offers a dynamic perspective on multichannel customer service journeys. Our principal interest is in determining how the retail industry in Taiwan handles offline and online channels.

In the following part, this research analyzes retail service both to deepen CSX's conceptual framework and the hypothesized relationships among the constructs in online and offline retail environments, and to provide a tool to evaluate this customer service experience. A significant aspect of the online retail industry is that although customers may adopt a service provider online, the real service is experienced by the customer offline. Therefore, our results should be extended to many other service industries. Another differentiating aspect of our research is that we employ two independent data sets for measuring the validity of our hypotheses, allowing us to narrow down the true relationships between customer service experiences and the consequences of multichannel marketing. In the following section, we show the data we collected for examining our hypotheses. Next we formulate a measurement model together with alternative specifications. In the subsequent two sections, we summarize and discuss the outcomes, suggest managerial implications, the limitations of our research, and directions for future study.

2. Literature Review and Theoretical Development

2.1 Multichannel Retailing within Consumer Shopping Patterns

There are increasing advances in information and communication technology in the number of retailing formats by which consumers can contact a firm. Unlike traditional physical and online stores, the consumer buying process has been transformed by new mobile channels (mobile devices, branded apps, online social media, and connected objects) and touch-points (Mosquera et al., 2017). Online shopping reaches consumers through multiple marketing channels whose distribution has certainly developed. Multichannel retailing sets complicated campaigns to sell consumers services or goods over one channel; it is changing consumer habits and shopping behavior, making it the third and prevalent wave of retailing (Hole et al., 2019; Peltola et al., 2015). Today's retail scenery is dominated by multichannel retailers. There has been an awareness of an ever-increasing challenge in retailing environments offering consumer benefits whereby consumers shop by utilizing a variety of offline and online channels (Zhu et al., 2018). Therefore, in multichannel retailing, the retailer offers several channels as self-governing entities in order to align them with specific targeted customer segments (Frazer & Stiehler, 2014; Picot-Coupey et al., 2016). Today's business scenery therefore provides a scope of platforms on which the user can purchase products and services. The rationale behind multichannel retailing is backed by the everchanging levels of consumer interactions and business. Consumer preferences have shaped multichannel retailing such that the business must ensure that their requirements are adequately fulfilled. Multichannel retailing offers diverse platforms for retailers; however, years of research have shown that it is limited in its approaches. The idea was to make consumer product inquiry more convenient.

With the proliferation of social media and mobile technologies, customer experience has become more complicated; the emergence of new behaviors is being facilitated by the simultaneous enjoyment of varying communication channels, like webrooming and showrooming (Mosquera et al., 2017). Maximizing the shopping experience has traditionally been considered as more appropriate to the offline retail arena, and previous research has shown a positive influence occurring when integrating distribution channels related to the shopping experience. Consumers today have the ability to immediately acquire access and be constantly connected to the worldwide marketplace, enabling convenient comparison of prices and products. Today, customers tend to utilize
more touch points and channels throughout their purchasing experience, whether in the search, purchase, or post-purchase phase (Weinberg et al., 2007). According to Shankar et al. (2003), the relationship between loyalty and overall satisfaction is stronger online than offline, with a positive reciprocal relationship between satisfaction and loyalty online. Consumers are therefore growing ever more demanding, expecting to have a broad scope of product choice available at all times (Piotrowicz & Cuthbertson, 2014; Mosquera, et al., 2017). Retailing now means customers experiencing new challenging surroundings. Retailers of all types and in all positions interact with consumers more and more through multiple touch points in the worldwide consumer economy; creating retail multichannel is a growing norm. As a result, the way consumers search for required information has been influenced, and greatly influences the purchasing procedure. Hence, we offer the following hypothesis:

H₁: Customers adopting different marketing channels (offline and online) will show significant differences in the overall model of CSX in the retail industry.

2.2 Customer Service Experience (CSX) and Its Antecedents

Customer service (CS) and Customer Experience (CX) are two sides of the same coin, carrying a symbiotic relationship with one another. While they both are reliant on customer interaction, there is a fundamental difference between CS and CX. CS requires customer-facing groups to possess a specific set of approaches, including patience, knowledge of goods, and tenacity, so they can offer a product or service to customers as demanded. It's the human element in the customer experience; the voices of customers will influence an organization's presentation. Customer experience is the cumulative and aggregate customer learning of new processes, obtaining, practicing, reserving, and sometimes disposing or stopping the product or service (Rais et al., 2016). CX invokes a broader customer experience through its organization and suggests all the ways a firm interacts with a customer. So even if they possess a lot of experience in delivering great customer service, it doesn't mean they are delivering excellent customer service experience. Pertinently, CX is the experience customers possess across their overall lifecycle with any organization, from sales and marketing, through engagement, expansion and public relations received in many numerous distinct forms.

Customer service remains the foundation of customer experience. In the past, a customer's most significant interaction with a firm was a person-to-person exchange, either by visiting a firm or a store, or by talking with a staff of the firm on the phone to set an order, voice complaints, ask questions, etc. However, like almost everything in today's market, customer experience has changed and is now more often than person-to-person service. This research focuses on multichannel shopping, examining the integration of various channels in the consumer decision-making process. In order to meet the contemporary multi-channel marketing environment, this study integrates the characteristics and concepts of CX and CS, suggests a CSX concept and further builds a complete research structure, hoping to realize a clearer understanding of the process consumers take in making their purchasing decisions.

CSX is defined as the art of managing customers, and meeting or exceeding their wants and needs while they contact customer service. CSX is the whole experience in dealing with customer service and customer support, while CX is the amount of all interactions across all touch points with a brand (Khan, Garg, & Rahman, 2015). In summary, all the service interactions are connected through CSX. As customer perspective of CSX develops, consumption of goods or service (Bâşer et al., 2015) is defined in the common literature from a holistic perspective, including sensory, affective, cognitive, physical and social dimensions (Verhoef et al. 2009). In the light of the previous conceptualizations in the literature, Lemon & Verhoef (2016) defined CX as “a multidimensional construct concentrating on customers' cognitive, emotional, behavioral, sensorial and social reactions to offerings of firms over complete purchase journey of the customers” (p.71). This study further modifies the four elements of CX defined by De Keyser et al. (2015) and Lemon & Verhoef (2016), and builds a CSX construct and antecedents in how they have been developed and evaluated in a multichannel marketing environment.

2.2.1 Cognitive Elements of Customer Service Experience

CSX is the subjective, co-created, touchpoint and provider experienced by holistic perception (De Keyser et al., 2015, Lemon & Verhoef, 2016). Cognitive procedures are more excellent rational processes, such as perception, memory, language, problem solving, and abstract thinking (Kim & Ryu, 2014). They have been tested in relation to CX, engaging two different viewpoints: goals' attainment and (dis)confirmation of prior expectations. Following Bagozzi & Dholakia (1999), customers set objectives either consciously or unconsciously in specific situations and use consumption as an instrument to gain them. Attainment of goals consequently forms one role of customer experience and the consideration of goal attainment is crucial to evaluate cognitive element of customer experience (Novak et al., 2003). Another standpoint is based on customers’ ex-
pectations prior to selecting a service. Whether customer experiences confirm those prior expectations has been shrouded by research that investigates satisfaction (Gentil et al., 2007). While early literature operationalized the evaluation and confirmation of satisfaction as a primary cognitive force (Bitner, 1990), later research has shown that both cognitive and affective processes affect this assessment (Wirtz, 2019). To fill this gap in current academic understanding of this phenomenon, we hypothesize the following:

$$H_0$$: The positive effect of cognitive elements on CSX with a service provider is greater for customers who choose online than it is for those who choose offline.

2.2.2 Emotional Elements of Customer Service Experience

Much research points out that improving the CX can have a significant effect on customer retention, profitability, and growth. Emotion has a stronger influence especially regarding customer loyalty and repeat purchases than either achievement or effort (Laros & Steenkamp, 2005; Keiningham et al., 2017). Consumer emotions were approached by these studies in a variety of ways. Some synthesized emotion research into comprehensive consumption-related emotion sets (Ruth et al., 2002) or concentrated on individual emotions such as surprise and delight (Arnold & Thompson, 2005), pleasure (Oliver et al., 1997; Ball & Barnes, 2017), anger, rage, irritation, frustration (McColl-Kennedy et al., 2003) and regret (Tsiros & Mittal, 2000; Patterson et al., 2016) and their connection to consumer reasons like delight, gratification, disgust and outrage (Parasuraman et al., 2016). We therefore hypothesize:

$$H_0$$: The positive effect of emotional elements on CSX with that service provider is greater for customers who choose online than it is for those who choose offline.

2.2.3 Physical and Sensorial Elements of Customer Service Experience

Along the lines of Verhoef et al. (2009), this study conceives CSX interior response to, and interaction with, the physical retail environments. Physical experience is consolidated in the physiological response of the customer to a specific condition. CSX happens when a customer interacts with products (experience with the product) or with the physical environment of its staff and the retailer, policies, and practices (shopping experience). In the case of a physical retail store, CSX is inherently determined by using the straightforward interaction between customers and other actors in the service encounter (Larivière et al., 2017). The sensory component of CSX is inseparable from the physical in CSX. A variety of studies support the hypothesis that sensory incentives are physical and thus closely associated with the physical wellbeing an individual experience in a specific condition (De Looze et al., 2003; Verhoef et al., 2009). Service active is caused through the customer's social and interior reactions to the marketing incentives in the shop and, for the customer, creates a "social reality" triggering a brand's customer perceptions. In the light of its extensive acceptance in existent literature, this research adopts Bitner (1992) and Ariefin & Mohammad (2019) classification of service scape elements as functionality, ambient conditions, spatial layout, signals, symbols and artifacts. To fill this gap in the existing literature, we hypothesize:

$$H_0$$: The positive effect of physical and sensorial elements on CSX with that service provider is greater for customers who choose online than it is for those who choose offline.

2.2.4 Social Elements of Customer Service Experience

Physical retail shops are social contexts where the customer perceives, interprets, and interacts with the components of the service to engage in individual and corporate procedures. Social facets of customer experience involve staff, other customers, and more extensive social networks related to a customer's experience with a brand (Verhoef et al., 2009). Social identities are intellectual representations that can turn over into a primary function of how consumers meet themselves (Reed, 2012). The individual's relation is built by social experience with a broader social system, in which relations with strength's different degrees can be established with the members that compose the system (Ouwersloot & Odekerken-Schroder, 2008). The political aspect consists of spiritual association, as well as other lifestyle markers like occupation, familial roles, or visible interests and activities. It may consequently be assumed that congruence between salient social identities and other social impacts and elements such as product and/or service offerings and advertising will positively affect consumer choice. Considering this gap in academic literature, we would like to test the extent to which:

$$H_0$$: The positive effect of social elements on CSX with that service provider is greater for customers who choose online than it is for those who choose offline.

2.3 The Consequences of CSX

Several studies have focused on the outcomes of consumer perception of service quality. With regard to multichannel integration, conceptualization of outcomes of integration quality is rare. Most studies have concentrated on loyalty and customer satisfaction as multichannel mar-
keting's results (Koenig-Lewis & Palmer, 2008; Siqueira, 2017). Hence, a significant gap is shown by the extant research in service quality literature that considers consequences of multi-channel marketing. Further study should concentrate on directing more fresh outcomes and demonstrate their influence on consumer behavior as a result of channels’ impact on integrated marketing. Finally, the major consequences are also defined: Customer Loyalty, Customer Satisfaction, and Customer Equity.

CSX is posited by us as one of loyalty’s antecedents and an important upshot (Tartaglione et al., 2019; Kim & Choi, 2013); excellent satisfaction causes excellent repeat purchase and loyalty, increased growth and financially optimal performance. Taking into consideration that our conceptualization of CSX embraces not only perceived quality of services provided by service firms, but also customers' perception of “total experience,” we suggest that CSX results in customer loyalty (Brun et al., 2017). To fill this gap in the existing literature, we hypothesize that:

H6: Customer service experience (CSX) will have a positive influence on customer loyalty.

A significant antecedent of customer loyalty is customer satisfaction. Customer satisfaction resulting in customer loyalty has been covered extensively in the literature. Studies integrating loyalty, customer satisfaction and image are rare. Because image changes with differing negative customer experiences, experience plays a significant role. Studies dealing with online consumer behavior similarly confirm the positive impacts of CSX on customer satisfaction in online shopping (Rose et al., 2012). Customers receive a sense of consolation from service encounters and both customer satisfaction and general quality are positively impacted, leading to positive word-of-mouth praise (Luk & Lloyd, 2011; Jiang et al., 2017). We therefore refrain from specifying assumptions between these constructs. Based on literature, the following hypotheses were developed:

H7: The positive effect of customer satisfaction on CSX with that service provider is greater for customers who choose online than it is for those who choose offline.

According to Rust et al. (2000) and Ou et al. (2017), customer equity has been defined as a subtotal of “discounted lifetime values of all customers”. Customer equity is connected with value creation resulting from benefits, costs, and cash flow, customers and customer relationship. It is the concept that results from sustaining a lifetime relationship and maximizing direct marketing profits with customers while exploiting innovative marketing technologies. Further study should concentrate on dealing with more recent results and demonstrate their influence on consumer behavior. According to Hossain et al. (2017), in light of consumer behavior, three facets of customer equity are proposed by existing research: Value Equity, Brand Equity and Relationship Equity. Value equity stems from a customer's evaluation of a brand, based on the perception of what is given up for what is received. It is based on price, quality, and convenience. Brand equity is defined as a customer's intangible and subjective evaluation of the brand. It is based on image and meaning to fulfill crucial roles. Relationship equity is defined as a customer's tendency to return to a brand based on their objective and subjective evaluation of the brand. It is the type of glue that sticks the customers to the firm, the stickiness reinforcing the relationship between the firm and customer. Therefore, considering the existing marketing literature, we hypothesize as follows:

H8: The positive effect of customer equity (value equity, brand equity and relationship equity) on CSX with that service provider is greater for customers who choose online than it is for those who choose offline.

3. Research Methodology

3.1 The Conceptual Model

This research's object is to comprehend the impact of customer service and the effects it has on the retail industry, and to establish whether there are any differences based on the channel used (offline and online). Following the insights gleaned from in-depth interviews, Figure 1 illustrates the research model for this study. We proposed a conceptual framework and built hypotheses about the offline and online mediums’ influences on customer service experience and on the relationships between its consequences and customer service experience. We examined the hypotheses using a simultaneous equation model employing two data sets of the retail industry’s online and offline customers.
3.2 Data Collection Procedure

Industry with online and offline channels include: hypermarkets, fashionable boutiques, and travel agencies in Taiwan. These retail industries were selected for two principal causes: they were starters to online operations, business to consumer, and for the recent intense O2O (online to offline) marketing strategies in China and Taiwan (GFK, 2014; Gómez et al., 2017). Data collection was based on a questionnaire with four sections: the first section comprised a set of questions to measure customer service experience; the second included the items measuring customer loyalty, satisfaction and equity; the third included the items measuring online retail platforms; and finally, the fourth included demographics. For the offline subsample, data were collected face-to-face in-store; for the online sub-sample, data were collected from full and part-time MBA and executive MBA students, and undergraduate students majoring in business administration at two major universities, each located in Southern Taiwan. We took into consideration restrictions of time and cost. It has been mentioned in several studies that a student population is well suited to online commerce research. Lim & Dubinsky (2005) specifically specified that a student population is especially of interest to online retailers because they are well versed in computer technology. From a report based on a national sample, in Taiwan the largest numbers of purchases online are carried out by people aged 21 to 45 (MIC, 2018). Even though master’s students’ samples may be expected to be more upscale and educated than the general online consumer population, nevertheless, research demonstrates that the majority of online shoppers are more probably among the more excellent socioeconomic groups (Wolfinbarger & Gilly, 2003). The gathering of data from the target population samples was limited by access restrictions and by time. It is however reassuring those students from different levels and domains of research were involved in the sample because this makes for better representation. The sample scale was decided through considering the prerequisites for carrying out related statistical analyses. Though we created indistinguishable questionnaires in both data sets, the questions in online data set were applicable to hypermarkets, fashion boutiques, and travel agencies selected by the respondent in Taiwan, while the questions in the offline data set were specific to regional supermarkets, boutique department stores, travel agencies, etc. A preliminary version of the questionnaire was administered to a convenient sample of 30 individuals. The analysis of the pre-test allowed some improvements in the layout of the questionnaire but no modifications were made regarding the main variables. The statistical procedures were as follow: (1) confirmatory factor analysis was conducted in the scale used to measure the constructs and (2) the hypotheses were tested using structural equation modeling (SEM). This involves ensuring that the scales are reliable, have validity and are one-dimensional. The respondents were requested to select the response that best indicated their experiences and perceptions on each statement, using a five-point Likert scale, where 1 = strongly disagree, and 5 = strongly agree. Each question also allowed the respondents to check “not applicable” if necessary.

3.3 Measures and Sampling

In consequence responses from a total of 571 of these businesses are involved by our sample. We collected 319 usable responses from the offline survey (Data set 1) and 252 usable responses from the online survey (Data set 2), which represented a response rate of about 38.9%. As is well
recognized, the online population is younger, on average, than the general population. Considering description of the survey, 53.7% tended to conduct in-store transactions (offline) and 46.3% maintained an online relationship with their business. A more detailed description of the sample is offered further in results' discussion. Data set 1: The offline sample is made of 68.3% of female respondents. The large majority of the sample (44.3%) has between 16 and 35 years old; 27%, 36-45; 16.3%, 46-55; and 12.5%, 56 years or more. In terms of education, 58.6% has a college degree and 12.9% has a high school degree. Finally, about 69.9% had annual family income of $50,000 or under. Data set 2: The online consumers are mainly female (44.2%) and 78.5% has between 16 and 45 years old. Finally, almost 90% had annual family income is of $70,000 or under. In terms of the average frequency of Internet usage, 32.9% of the respondents had accessed the Internet from once time a week; 25.2%, two to five times a week; 34.5%, six times or more a week.

Table 1. Comparison of Online and Offline Sample Profiles

| Demographic Variable and Category | Data set 1 (offline) No. and Percent of Sample N=319 | Data set 1 (online) % of Sample N=252 |
|----------------------------------|--------------------------------------------------------|---------------------------------------|
| Gender                           |                                                        |                                       |
| Male                             | 101 (31.7%)                                            | 141 (55.8%)                           |
| Female                           | 218 (68.3%)                                            | 111 (44.2%)                           |
| Education                        |                                                        |                                       |
| High School or lower             | 41 (12.9%)                                             | 54 (21.4%)                            |
| College Graduate                 | 187 (58.6%)                                            | 69 (27.5%)                            |
| Post Graduate                    | 91 (28.5%)                                             | 129 (51.1%)                           |
| Age                              |                                                        |                                       |
| 16-25                            | 62 (19.4%)                                             | 27 (10.9%)                            |
| 26-35                            | 79 (24.8%)                                             | 72 (28.4%)                            |
| 36-45                            | 86 (27.0%)                                             | 99 (39.2%)                            |
| 46-55                            | 52 (16.3%)                                             | 52 (20.7%)                            |
| 56 or over                       | 40 (12.5%)                                             | 20 (8.0%)                             |
| Annual Family Income             |                                                        |                                       |
| Below $30,000                    | 89 (27.9%)                                             | 54 (21.3%)                            |
| $30,001-$50,000                  | 134 (42.0%)                                            | 75 (29.7%)                            |
| $50,001-$70,000                  | 69 (21.6%)                                             | 98 (38.9%)                            |
| $70,001-$90,000                  | 20 (6.3%)                                              | 21 (8.4%)                             |
| $90,001 or over                  | 19 (3.3%)                                              | 4 (1.7%)                              |
| On average, how often do you use the Internet for information search, online shopping, or other purposes? (N=571) | | |
| Never                            | 100 (17.5%)                                            |                                       |
| Once a week                      | 188 (32.9%)                                            |                                       |
| 2-5 a week                       | 144 (25.2%)                                            |                                       |
| 6-10 times a week                | 120 (21.0%)                                            |                                       |
| 11 times or above a week         | 43 (15.5%)                                             |                                       |
| Classification of the respondents based on purchase types? (N=571) | | |
| Online purchaser                 | 319 (55.9%)                                            |                                       |
| Non-online purchase              | 252 (44.1%)                                            |                                       |

3.4 Measure Development

This research instrument consisted of a total of 30 scale items used to measure level of customer service experience (CSX) and the latter on its consequences in the retail industry. Reflective items measured the four-factor antecedents of CSX shown in Figure 2. To improve accuracy of recall, respondents rated their most recent online and offline shopping experiences. Scale items for four of the antecedent constructs were adapted from existing scales used in customer service experience studies using the procedure outlined in a multichannel marketing environment by De Keyser et al. (2015) and Lemon & Verhoef (2016). New scales were developed for the remaining four antecedent constructs (cognitive, emotional, physical & sensorial and social elements) of CSX as appropriate existing scales could not be found and evaluated in service contexts. For the components of CSX, we followed measurement items used consistently in the literature. For the CSX, we used Khan, Garg, & Rahman (2015) and Voorhees et al. (2017) using a descriptive statement of Flow as the customer’s subjective response to encompasses multiple service encounters with the firm. Scale items for the three outcome constructs (customer satisfaction, customer loyalty, and customer equity) were taken from existing scales (Koenig-Lewis & Palmer,
2008; Brun et al., 2017; Rose et al., 2012; Hossain et al., 2017). See Table 2 for a list of all items and their sources.

Table 2. Measurement scales

| Constructs            | Variables                                      | Definition                                                                 | Scale Reference                                                                 | Adapted Scale                                                                 |
|-----------------------|-------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Cognitive Element     | Goal Attainment (GA)                            | Customers set up goals either consciously or unconsciously in specific contexts and use consumption as an instrument of striving to attain them. | Chitturi et al. (2008); Voss et al. (2003); Kim, Bae & Jeon (2019); Bagozzi & Dholakia (1999) | • Using offline/online retail store enables me to accomplish consumption more quickly.  
• Using offline/online retail store provides me with a lot of enjoyment.  
• Overall, the use of the offline/online retail store delivers good value to me. |
|                       | Expectation Confirmation (EC)                   | Customers have expectations prior to choosing and experiencing a service.   | Gentil et al. (2007); Homburg et al. (2006); Bhattacharjee (2001)                | • My experience with using offline/online retail store was better than what I expected.  
• The service level provided by the accommodation of offline/online retail store was better than what I expected.  
• Overall, most of my expectations from using offline/online retail store were confirmed. |
| Emotional Element     | Positive or Negative (PN)                      | Emotional elements of consumer behavior including ambiguities regarding the structure and content of emotions and their relevance to consumer behavior. | Dagger et al. (2007); Khan, Garg, & Rahman (2015)                             | After shopping my mood is improved:  
• My feelings towards offline/online retail store are very positive.  
• I feel good about using offline/online retail store for the offerings I am looking for.  
• Overall I am satisfied with offline/online retail store and the service they provide.  
• I feel satisfied that offline/online retail store the best results that can be achieved for me.  
• The extent to which offline/online retail store has produced the best possible outcome for me is satisfying. |
|                       | Types of Emotions (TE)                          | Others consumption-related emotion sets or concentrate on individual emotions and their relationship to consumer outcomes. | Edell & Burke (1987); Oliver (1997); Wong (2004)                              | Please indicate your feelings with respect to shopping at offline/online retail store:  
• Pleased/Displeased  
• Unhappy/Happy  
• Disgusted/Contented  
• Enjoyable/Frustrating |
| Physical & Sensorial | Servicescape, Ambient Conditions, Spatial Layout, Signs, Symbols & Artifacts (PSE) | Physical experience is consolidated in the customer’s physiological response to a specific environment. | Brakus et al. (2009)                                                           | The environment of this offline/online retail store, the display of its products, services, etc., make me feel:  
• My senses are involved.  
• My visual sense is stimulated.  
• My sense of hearing is stimulated. |
| Element (PSE)         | Staff, other Customers, Social Network (SE)     | The paradigm of service-dominant logic views experience as individual, subjective, event-specific, and context-specific. | Barnes & Vidgen (2002); Nasernoosadeli et al. (2013); Bruna et al. (2017)       | I live a pleasant social experience.  
• I feel that I am a part of a community.  
• I feel in control of what I am doing when I purchase from offline/online retail store.  
• I can easily control the information that is provided on offline/online retail store. |
| Social Element (SE)   | Customer Service Experience (CSX)               | CSX is the subjective, co-created, and touchpoint and provider is experienced by holistic perception of no less than one during the various purchase journeys. | Bustamante & Rubio (2017)                                                     | I advise customers who ask my opinion on this store’s products/services.  
• I ask the opinions of customers who shop at this store.  
• I share opinions with this store’s customers.  
• I interact with this store’s customers.  
• I consider myself a member of the community of customers who shop at this store.  
• It is important to me that offline/online retail store feels like my personal area when I use it. |
| Customer Service Experience (CSX) | Customer Loyalty (CL)                         | Brand loyalty is characterized as being a psychological process resulted in a biased behavioral response towards a particular brand in a consistent way among the competing alternatives | Wong (2004)                                                                   | It is likely that I will repurchase from offline/online retail store in the near future.  
• I say positive things about offline/online retail store to other people.  
• I encourage and recommend friends and relatives to shop at the same offline/online retail store.  
• I expect to repurchase from offline/online retail store in... |
Table 3. Confirmatory Factor Analysis Results

| Variables                          | Items | Standardized Factor Loads | Offline Mean (Var) | Online Mean (Var) |
|-----------------------------------|-------|---------------------------|--------------------|-------------------|
| Goal Attainment (GA)              | GA1   | 0.812                     | 3.95(0.82)         | 4.23(0.75)        |
|                                   | GA2   | 0.812                     | 4.08(0.72)         | 4.07(0.69)        |
|                                   | GA3   | 0.795                     | 3.78(0.86)         | 3.99(0.82)        |
| Expectation Confirmation (EC)     | EC1   | 0.818                     | 3.69(0.84)         | 3.79(0.68)        |
|                                   | EC2   | 0.853                     | 3.64(0.73)         | 3.70(0.61)        |
|                                   | EC3   | 0.825                     | 3.87(0.87)         | 3.91(0.56)        |

3.5 Construct Validity and Reliability

CFA was used to validate the measurement models consisting of eight constructs measured, for both models. 53 items were included in the confirmatory factor analysis after the data purification. CFA was performed so as to determine the construct validity (Anderson & Gerbing, 1988). CFA results indicated that the fit indices of the model were in adequate level: \( \chi^2/DF=2.713 \), CFI=0.910, IFI=0.913, RMSEA=0.069. CMIN is The Likelihood Ratio Chi-Square Test. Analysis indicates the conformity between the initial model and acquired model. A CMIN/DF ratio is below the threshold level of 3. Furthermore, other fit indices reached the acceptable level (Bagozzi & Yi, 1990). As shown in Table 3, standardized factor loads of each item are larger than 0.5 and significant according to the results of CFA. Additionally, average variance extracted values were calculated. Results are beyond the threshold level of 0.5 except one value (Byrne, 2010). These results indicate existence of the convergent validity of the scales. To evaluate discriminant validity, the square roots of AVE values of each variable were also calculated. The diagonals demonstrate the square root of AVE values in Table 4. Composite reliability and Cronbach \( \alpha \) values are shown in Table 4. Construct Correlation, average variance extracted values, composite reliabilities and Cronbach \( \alpha \) values of each constructs are shown in Table 4.
| Positive or Negative (PN) | PN1  | 0.803 | 3.62(0.76) | 3.65(0.48) |
|--------------------------|------|-------|------------|------------|
|                          | PN2  | 0.799 | 3.57(0.75) | 3.60(0.70) |
|                          | PN3  | 0.823 | 3.60(0.89) | 3.71(0.42) |
|                          | PN4  | 0.875 | 3.44(0.63) | 3.56(0.44) |
|                          | PN5  | 0.827 | 3.76(0.67) | 3.81(0.43) |
| Types of Emotions (TE)  | TE1  | 0.792 | 3.71(0.75) | 3.84(0.62) |
|                          | TE2  | 0.628 | 3.94(0.96) | 4.11(0.57) |
|                          | TE3  | 0.628 | 3.57(0.85) | 3.67(0.62) |
|                          | TE4  | 0.835 | 3.77(0.97) | 3.47(0.81) |
| Physical & Sensorial Element (PSE) | PSE1 | 0.857 | 3.37(0.54) | 3.54(0.68) |
|                          | PSE2 | 0.807 | 3.68(0.79) | 3.88(0.67) |
|                          | PSE3 | 0.692 | 3.61(0.95) | 3.70(0.84) |
| Social Element (SE)     | SE1  | 0.799 | 3.72(0.68) | 3.69(0.52) |
|                          | SE2  | 0.835 | 3.77(0.95) | 3.81(0.76) |
|                          | SE3  | 0.781 | 3.38(0.58) | 3.69(0.70) |
|                          | SE4  | 0.667 | 3.55(0.81) | 3.59(0.62) |
|                          | SE5  | 0.805 | 3.47(0.79) | 3.92(0.83) |
| Customer Service Experience (CSX) | CSX1 | 0.865 | 3.80(0.72) | 3.91(0.75) |
|                          | CSX2 | 0.735 | 3.72(0.57) | 4.03(0.75) |
|                          | CSX3 | 0.689 | 3.83(0.89) | 3.87(0.60) |
|                          | CSX4 | 0.762 | 3.44(0.94) | 3.52(0.51) |
|                          | CSX5 | 0.835 | 3.74(0.55) | 3.80(0.59) |
|                          | CSX6 | 0.819 | 3.83(0.67) | 3.89(0.67) |
|                          | CSX7 | 0.748 | 3.65(0.67) | 3.71(0.60) |
|                          | CSX8 | 0.779 | 3.78(0.24) | 4.11(0.67) |
| Customer Loyalty (CL)   | CL1  | 0.807 | 3.89(0.99) | 3.94(0.62) |
|                          | CL2  | 0.857 | 3.65(0.70) | 3.88(0.63) |
|                          | CL3  | 0.697 | 3.84(0.57) | 3.72(0.53) |
|                          | CL4  | 0.808 | 3.59(0.90) | 3.67(0.77) |
| Customer Satisfaction (CS) | CS1 | 0.599 | 3.59(0.76) | 3.60(0.80) |
|                          | CS2  | 0.659 | 3.64(0.61) | 3.67(0.59) |
|                          | CS3  | 0.854 | 3.59(0.80) | 3.77(0.61) |
|                          | CS4  | 0.798 | 3.92(1.04) | 3.99(0.81) |
| Brand Equity (BE)       | BE1  | 0.694 | 3.71(0.75) | 3.81(0.81) |
|                          | BE2  | 0.814 | 3.86(0.80) | 3.89(0.97) |
|                          | BE3  | 0.877 | 3.89(1.07) | 3.74(1.01) |
|                          | BE4  | 0.816 | 3.76(0.92) | 3.86(0.98) |
|                          | BE5  | 0.596 | 3.69(0.85) | 3.80(0.82) |
| Relationship Equity (RE) | RE1  | 0.698 | 3.41(0.63) | 3.66(0.76) |
|                          | RE2  | 0.894 | 3.91(0.87) | 3.88(0.78) |
|                          | RE3  | 0.638 | 3.35(0.84) | 3.69(0.85) |
|                          | RE4  | 0.727 | 3.77(0.90) | 3.83(0.87) |
|                          | RE5  | 0.874 | 4.00(0.94) | 3.89(0.96) |
|                          | RE6  | 0.798 | 3.81(0.76) | 3.87(0.90) |
| Value Equity (VE)       | VE1  | 0.826 | 3.82(0.68) | 3.85(0.70) |
|                          | VE2  | 0.693 | 3.71(0.81) | 3.75(0.87) |
|                          | VE3  | 0.766 | 3.85(0.59) | 3.95(0.77) |
|                          | VE4  | 0.797 | 3.96(0.88) | 3.83(0.78) |
|                          | VE5  | 0.901 | 3.68(0.88) | 3.60(0.75) |

* p < 0.01 for all items
Table 4. Construct Correlation, AVE and Reliability

| Variables | GA   | EC   | PN   | TE   | PSE  | SE   | CSX  | CL   | CS   | BE   | RE   | VE   |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|
| GA        | 0.75/0.72 | 0.39/** | 0.33/** | 0.31/** | 0.39/** | 0.44/** | 0.47/** | 0.49/** | 0.35/** | 0.38/** | 0.55/** | 0.49/** |
| EC        | 0.34/** | 0.79/0.71 | 0.49/** | 0.39/** | 0.50/** | 0.57/** | 0.38/** | 0.57/** | 0.44/** | 0.51/** | 0.36/** | 0.33/** |
| PN        | 0.31/** | 0.29/** | 0.68/0.78 | 0.36/** | 0.44/** | 0.60/** | 0.35/** | 0.54/** | 0.42/** | 0.37/** | 0.58/** | 0.42/** |
| TE        | 0.39/** | 0.43/** | 0.29/** | 0.70/0.69 | 0.37/** | 0.43/** | 0.46/** | 0.36/** | 0.39/** | 0.32/** | 0.29/** | 0.37/** |
| PSE       | 0.30/** | 0.34/** | 0.25/** | 0.35/** | 0.70/0.63 | 0.39/** | 0.53/** | 0.40/** | 0.52/** | 0.42/** | 0.34/** | 0.32/** |
| SE        | 0.38/** | 0.35/** | 0.38/** | 0.31/** | 0.46/** | 0.77/0.71 | 0.32/** | 0.35/** | 0.47/** | 0.48/** | 0.33/** | 0.48/** |
| CSX       | 0.36/** | 0.30/** | 0.37/** | 0.42/** | 0.47/** | 0.35/** | 0.85/0.83 | 0.47/** | 0.36/** | 0.35/** | 0.41/** | 0.56/** |
| CL        | 0.39/** | 0.37/** | 0.29/** | 0.35/** | 0.39/** | 0.47/** | 0.36/** | 0.79/0.75 | 0.30/** | 0.44/** | 0.39/** | 0.31/** |
| CS        | 0.40/** | 0.37/** | 0.38/** | 0.38/** | 0.37/** | 0.30/** | 0.24/** | 0.39/** | 0.73/0.64 | 0.36/** | 0.30/** | 0.47/** |
| BE        | 0.39/** | 0.32/** | 0.39/** | 0.46/** | 0.29/** | 0.29/** | 0.36/** | 0.35/** | 0.42/** | 0.80/0.71 | 0.51/** | 0.35/** |
| RE        | 0.35/** | 0.28/** | 0.33/** | 0.37/** | 0.33/** | 0.38/** | 0.30/** | 0.53/** | 0.30/** | 0.43/** | 0.77/0.74 | 0.38/** |
| VE        | 0.31/** | 0.34/** | 0.41/** | 0.52/** | 0.41/** | 0.50/** | 0.42/** | 0.28/** | 0.29/** | 0.39/** | 0.31/** | 0.80/0.73 |

Composite Reliability

| Composite Reliability | 0.902 | 0.869 | 0.791 | 0.778 | 0.837 | 0.855 | 0.904 | 0.794 | 0.915 | 0.874 | 0.822 | 0.807 |

Average Variance Ext.

| Average Variance Ext. | 0.654 | 0.527 | 0.623 | 0.518 | 0.667 | 0.657 | 0.561 | 0.678 | 0.649 | 0.720 | 0.509 | 0.754 |

Cronbach α

| Cronbach α | 0.912 | 0.896 | 0.902 | 0.866 | 0.798 | 0.855 | 0.798 | 0.835 | 0.815 | 0.877 | 0.793 | 0.857 |

Note:
1. **p < 0.01; p < 0.05
2. Diagonals show the square root of AVEs of all samples.
3. The shaded-part represents the correlation coefficient of offline sample, the corresponding part represents online samples.

4. Results and Analysis

4.1 Multinomial Logit Model

In this section, we explain these differences by using the results from the pooled models described in the previous section. We also identify the differential effects of the offline and online medium on the relationship between satisfaction and loyalty. The results are summarized in Tables 4, 5 and 6.

4.1.1 Antecedents of Customer Service Experience

Table 5 shows the results for antecedents of customer service experience. An analysis of cognitive element (offline vs. online) revealed that goal attainment (coefficient = 0.529, Z = 3.296, p < 0.01) and expectation confirmation (coefficient = 0.674, Z = 4.885, p < 0.01) significantly influence consumers to goal achievement and expectation confirmation online. A second analysis of customer synthesized emotional element (offline vs. online) revealed that types of emotions (coefficient = -1.647, Z = -2.854, p < 0.05) significantly influences consumer to search using mobile devices like delight, satisfaction, disgust and outrage. A third analysis of physical and sensorial element (online vs. mobile) revealed that servicescape elements as ambient conditions, spatial layout and functionality, and signs, symbols and artifacts (coefficient = 0.481, Z = 2.998, p < 0.01) significantly influence consumers service experience occurs online. A fourth analysis of social element (online vs. mobile) revealed that social experience (coefficient = 1.178, Z = 8.958, p < 0.00) significantly influence consumers service experience occurs online.
Table 5. Results of Logit Model of Antecedents of CSX for Online and Offline Customers

| Data set | Construct | Variables                          | Coefficient | Z value | p-value |
|----------|-----------|------------------------------------|-------------|---------|---------|
| Offline vs. Online | Cognitive Element | Constant | 1.197** | 2.095 | 0.028 |
| | | Goal Attainment | 0.529** | 3.296 | 0.001 |
| | | Expectation Confirmation | 0.674** | 4.885 | 0.000 |
| | Emotional Element | Constant | -0.401 | -0.517 | 0.537 |
| | | Positive or Negative | 0.124 | 0.826 | 0.419 |
| | | Types of Emotions | -1.647* | -2.854 | 0.034 |
| | Physical & Sensorial Element | Constant | 1.069** | 5.419 | 0.000 |
| | | Physical & Sensorial Element | 0.481** | 2.998 | 0.002 |
| | Social Element | Constant | 1.702** | 2.377 | 0.000 |
| | | Social Element | 1.178** | 8.958 | 0.000 |

4.1.2 Consequences of Customer Service Experience

Table 6 shows the results for consequences of customer service experience. An analysis of customer service experience (offline vs. online) revealed that customer service experience (coefficient = 0.676, Z = 4.795, p < 0.00) significantly influence consumers to customer satisfaction online. A second analysis of customer loyalty (offline vs. mobile) revealed that no factor significantly influenced consumers to purchase using any specific channel (coefficient = 0.039, Z = 0.254, p > 0.05). A third analysis of customer equity (online vs. mobile) revealed that relationship equity (coefficient = 0.493, Z = 3.501, p < 0.01) and value equity (coefficient = 0.157, Z = 2.261, p < 0.05) significantly influence consumers service experience occurs online.

Table 5. Results of Logit Model of Consequences of CSX for Online and Offline Customers

| Data set | Construct | Variables | Coefficient | Z value | p-value |
|----------|-----------|-----------|-------------|---------|---------|
| Offline vs. Online | Customer Service Experience | Constant | 1.257* | 2.196 | 0.025 |
| | | Customer Satisfaction | 0.676** | 4.795 | 0.000 |
| | Customer Loyalty | Constant | -0.334 | -0.471 | 0.605 |
| | | Customer Loyalty | 0.039 | 0.254 | 0.798 |
| | Customer Equity | Constant | -1.669* | -2.368 | 0.021 |
| | | Brand Equity | 0.032 | 0.220 | 0.803 |
| | | Relationship Equity | 0.493** | 3.501 | 0.002 |
| | | Value Equity | 0.157* | 2.261 | 0.019 |

4.2 Structural Model Analysis

The causal model was assessed using latent variable structural equation modeling in AMOS 22.0. However, past researchers (e.g., Hair et al., 1998) recommended that the χ² measure should be complemented with other goodness of fit measures. The fitness of Model from this analysis was χ² = 135.34/138.97 (offline/online medium), df = 75, p < 0.001. Further, CMIN/df = 1.80/1.85, RMR = 0.01/0.02, CFI = 0.96/0.95, NFI = 0.93/0.92, PNFI = 0.67/0.62, GFI = 0.92/0.91, and RMSEA = 0.03/0.04. Fit indices varied greatly in their reliability of estimation and sensitivity to sample size. In all, then, acceptable support was provided for the models as proposed (see Table 7).

Table 7. Model Comparisons and Fit Measures

| Model    | χ² | df | Δχ² | RMR | RMSEA | CFI | NFI | PNFI | GFI | PGFI | CMIN/df | R² |
|----------|----|----|-----|-----|-------|-----|-----|------|-----|------|---------|----|
| Offline  | Null model | 137.26 | 76  |     |      |     |     |      |     |      |         |    |
|          | Model of CSX | 135.34 | 75  | 10.54** | 0.01 | 0.03 | 0.96 | 0.93 | 0.67 | 0.92 | 0.69 | 1.80   | 0.68 |
| Online   | Null model | 150.52 | 76  |     |      |     |     |      |     |      |         |    |
|          | Model of CSX | 138.97 | 75  | 9.48*** | 0.02 | 0.04 | 0.95 | 0.92 | 0.62 | 0.91 | 0.64 | 1.85   | 0.59 |

Notes: 1. R² show the proportion of the variations of the variable that can be explained by its causing components; 2. ***significant at 0.1%.
As shown in Figures 2 and Table 8, the $\chi^2$ value difference ($p < 0.001$) between the null model and the restricted model is used to test the equality of the path coefficient. The results of the equality constraint model also showed that $\gamma$ coefficients depicting the relationship between customer service experience and its antecedents and consequences were significantly different between the two groups ($p < 0.05$) (Table 8). Also, Figure 2 tested the validity of the CSX model in predicting customer service experience and its antecedents and consequences; it explained 47%, 44% and 37% of the variation in the antecedents and consequences of CSX (i.e., $R^2$) in offline media, and it explained 52%, 53% and 39% of the variation in the antecedents and consequences of CSX in online media, which was better than its explanatory power in online media. Thus, Figure 2 fit the intention to complain toward offline retailers well, so $H_1$ was supported.

Table 8 and Figure 2 show the result of testing the hypotheses establishing the relations among factors of customer service experience and its subsequent result. Cognitive element exhibits a significant positive effect on customer service experience in the offline and online mediums ($\gamma=0.43/0.51$, $p<0.05$), and service provider is greater for customers who choose online than it is for those who choose offline ($\Delta\chi^2=0.08$, $p=0.04$). Hence, $H_2$ is supported. Emotional element exhibits a significant positive effect on customer service experience in the offline and online mediums ($\gamma=0.39/0.42$, $p<0.01$), and service provider is greater for customers who choose online than it is for those who choose offline ($\Delta\chi^2=0.07$, $p=0.05$). Thus, $H_3$ is supported. Physical & Sensorial element exhibits a significant positive effect on customer service experience in the offline and online model ($\gamma=0.38/0.27$, $p<0.01$), and service provider is not greater for customers who choose online than it is for those who choose offline ($\Delta\chi^2=0.22$, $p=0.00$). Therefore, $H_4$ is rejected. Social element exhibits a significant positive effect on customer service experience in the offline and online model ($\gamma=0.43/0.52$, $p<0.00$), and service provider is greater for customers who choose online than it is for those who choose offline ($\Delta\chi^2=0.13$, $p=0.02$), and thus $H_5$ is supported.

![Diagram](image_url)

**Figure 2.** Path coefficients of the CSX Model (offline/online medium)

1. $R^2$ show the proportion of the variations of the variable that can be explained by its causing components.
2. CSX: Customer Service Experience
3. *significant at 5%; **significant at 1%; ***significant at 0.1%.
Table 8. The Results of the Online and Offline Media in CSX

| Paths                                | \( \gamma \) Coefficient offline | \( \gamma \) Coefficient online | \( \Delta \chi^2 \) | p value |
|--------------------------------------|----------------------------------|---------------------------------|-----------------|--------|
| Goal Attainment→Cognitive Element    | 0.29                             | 0.42                            | 0.19            | 0.01** |
| Expectation Confirmation→Cognitive Element | 0.34                           | 0.35                            | 0.06            | 0.09*  |
| Cognitive Element→Customer Service Experience | 0.43                           | 0.51                            | 0.08            | 0.04*  |
| Positive/ Negative→Emotional Element | 0.45                             | 0.36                            | 0.20            | 0.00***|
| Types of Emotions→Emotional Element | 0.31                             | 0.29                            | 0.12            | 0.03*  |
| Emotional Element→Customer Service Experience | 0.39                           | 0.42                            | 0.07            | 0.05*  |
| Physical & Sensorial Element→Physical & Sensorial Element | 0.45                           | 0.32                            | 0.26            | 0.00***|
| Physical & Sensorial Element→Customer Service Experience | 0.38                           | 0.27                            | 0.22            | 0.00***|
| Social Element→Social Element       | 0.40                             | 0.49                            | 0.16            | 0.01** |
| Social Element→Customer Service Experience | 0.43                           | 0.52                            | 0.13            | 0.02*  |
| Customer Service Experience→Consequences of CSX | 0.61                           | 0.65                            | 0.07            | 0.08   |
| Consequences of CSX→Customer Loyalty | 0.49                             | 0.32                            | 0.28            | 0.00** |
| Consequences of CSX→Customer Satisfaction | 0.55                           | 0.59                            | 0.05            | 0.10   |
| Consequences of CSX→Customer Equity | 0.29                             | 0.27                            | 0.04            | 0.12   |
| Brand Equity→Customer Equity        | 0.31                             | 0.28                            | 0.05            | 0.10   |
| Relationship Equity→Customer Equity | 0.38                             | 0.41                            | 0.05            | 0.10   |
| Value Equity→Customer Equity        | 0.49                             | 0.37                            | 0.21            | 0.00** |

Notes: \( \Delta \chi^2 \) = the difference of \( \chi^2 \) value between the restricted model and the base model; *significant at 5%; **significant at 1%; ***significant at 0.1%.

These results confirm that the impact of customer service experience’s consequences on customer loyalty and satisfaction differs based on the medium used (offline/online). Customer loyalty exerts a significant positive impact in the offline (\( \gamma=0.49, p<0.00 \)) and online data (\( \gamma=0.32, p<0.01 \)), and service provider is not greater for customers who choose online than it is for those who choose offline (\( \Delta \chi^2=0.28, p=0.00 \)). Therefore, \( H_6 \) is rejected. Customer satisfaction exhibits a significant positive effect on the consequences of customer service experience in the offline and online model (\( \gamma=0.55/0.59, p<0.00 \)), and service provider is not greater for customers who choose online than it is for those who choose offline (\( \Delta \chi^2=0.05, p=0.10 \)). Therefore, \( H_7 \) is rejected. Finally, positive emotions significantly foster customer equity in the offline (\( \gamma=0.29, p<0.05 \)) and the online model (\( \gamma=0.27, p<0.05 \)). Subsequently, customer equity with that service provider is not greater for customers who choose online than it is for those who choose offline (\( \Delta \chi^2=0.04, p=0.12 \)). Therefore, \( H_8 \) is rejected. Regarding the importance of the impact of the various dimensions on customer equity, we observe that it is value equity dimension which exerts the greatest impact (\( \gamma=0.49, p<0.00 \)), followed by relationship equity (\( \gamma=0.38, p<0.01 \)) and brand equity (\( \gamma=0.31, p<0.01 \)) dimension in offline medium, that is relationship equity dimension which exerts the greatest impact (\( \gamma=0.41, p<0.00 \)), followed by value equity (\( \gamma=0.37, p<0.01 \)) and brand equity (\( \gamma=0.28, p<0.05 \)) dimension in online medium. Results substantiate that there are differences between offline and online environments in this case, especially for the value equity dimension (\( \Delta \chi^2=0.21, p=0.00 \)) is greater for customers who choose offline than it is for those who choose online.

5. Discussion

5.1 Findings and Managerial Implications

This is and will continue to be the biggest trend for retailers trying to improve customer experience and equity during COVID-19 and throughout 2021. The customer experience is made up of every single cross-channel touchpoint your customer has with your brand. A more proactive approach to customer experience management can be a differentiator for your business and win your customers’ loyalty. Therefore, the aim of this research was to analyze retail service both to strengthen the conceptual framework of the hypothesized relationships of CSX among the consequences and antecedents of CSX in online and offline retail media, and to offer a tool to evaluate this customer service experience. This study’s findings indicate that CSX, by conquering the limitations of service quality’s existing measurements, could develop a new approach by exploring and structuring the important relationship between subsequent purchase behavior and customer service...
experience, and incorporating a required holistic approach through defining and developing customer's full phenomenon of the service experience. Customer service experience could subsequently deliver a solution to strategic issues such as measuring, understanding, operationalizing and as a result handle customer service experiences in a way that managers currently lack (Khan et al., 2015; Lemon & Verhoef, 2016). Customer service experience could help managers better understand their customers and the significance of the underlying 'triggers' of their customers' purchasing decision and customer equity, permitting them to allocate resources in a more efficient approach and to design more effective services.

Additionally, we pay attention to three antecedents of CSX, specific issues that are worthy of further consideration. First, each of the five senses has highlighted relationships with cognitive and emotional reactions empirically. It consequently appears there is a contribution from the sensorial and the physical to the emotional, cognitive and social elements of the customer experience. Second, the effect of physical and sensorial dimensions is the holistic and whole evaluation of the physical environment. Consequently, producing information for the CSX is typically multi-sensory with associations between sensory features. Third, customer responses to associated and physical sensory stimuli are moderated through various kinds of individual characteristics, further emphasizing the multi-dimensional nature of the prerequisites and of CSX to capture individual customer characteristics while assessing its cognitive, emotional, physical, sensorial and social elements (Keiningham et al., 2017). Furthermore, these findings provide new research direction for the need of strong inquiry into CSX and several fields of research into these concepts as crucially significant. In the online channel, the results regarding cognitive, emotional, and social element supported our theoretical derivation (Larivière et al., 2017; Gentil et al., 2007; Ouwersloot & Odekerken-Schröder, 2008).

Presently, there are precious few studies measuring channel-specific customer service experience's effect on satisfaction, equity and customer loyalty. The quality of interpersonal relationships reflect customer satisfaction with the service firm that seeks customer loyalty and word-of-mouth recommendations. Customers become loyal because of their service experience enhanced by relationship management initiatives and quality control processes. CSX strategy helps garner greater customer loyalty, equity and satisfaction, thus increasing financial performance and growth. Experience plays a significant role since customers may receive both positive and negative treatment. However, when customer service experience with service or product results in customer satisfaction, this results in equity and loyalty.

Lastly, this study indicates that customer service experience affects brand attitudes, the tendency to stick with the product/service and perceived value. Value equity's concepts are well realised offline, but very much moreso online with reference to the customer's objective evaluation of the utility of a brand, based on perceptions of what is given up for what is received in offline channels. Relationship equity is kind of glue sticking customers to a firm, the stickiness strengthening the online relationship between the customer and firm. Relationship equity is based on the belief that value equity and brand equity may not be enough to hold a customer to the brand. Thus, this study points out multichannel customer service experience as a value that is created through acquisition, retention, and evolution. Hence, it is evident that brand, relationship or value equity within customer equity is a significant aspect of multichannel marketing. The three concepts can have a synergistic effect in a way that marketing activities can enhance customer equity and also improve the relationship between value equity and brand, and vice versa.

The remaining sections emphasize further managerial implications and noteworthy findings. The results highlight several managerial implications needing to be addressed in detail. First of all, the complexity of its antecedents and the CSX help to clarify why firms often fail to deliver exceptional experiences for their customers in the offline and online context. Notwithstanding, by continually boosting our understanding, service researchers can provide managers with important insights not only into the challenges, but also potential solutions for holistically managing the CSX in various channels. We are hopeful that this research will catalyze these questions through further examination in a variety of channel contexts and service. Second, considering the consumer markets' new dynamics, our study's results confirmed that positive customer experience is the precedent and starting point of a strong and loyal customer base, since it directly and indirectly improves the loyalty level and satisfaction of customers. In order to continually create a unique, superior customer service experience to possess a sustainable competitive advantage in the market, firms need to implement a strategic approach that is supported by the tactical level actions. Hence, O2O retailers ought to intelligently enhance their products' sales, facilitate e-consumers to search and purchase convenience, give out detailed product information, and enhance services in online channels. Finally, some business implications can be deduced from these results since it is necessary to design actions to improve relationships with customers working online, with the objective of providing benefits as perceived by consumers.
5.2 Limitations and future research

This study is not free of limitations, but leads to future lines of research. First, the sample was selected using the service industry in Taiwan, which could lead to a limitation if one hopes to generalize the results for all types of the businesses. Thus, one proposal could be to gather data based on a specific sampling using the offline or online channels in different businesses, as well as increasing the size of the sample, and even differentiating between rural and urban areas. Second, an analysis could be proposed regarding the perception of relational benefits based on the number of years in a relationship with a company and the role of the length of time as users of either type of channel. Additionally, this study may be complemented by including other concepts such as active or passive loyalty and the costs of change, such as risks related to changing businesses or the degree of knowledge of the competition’s products, among other aspects. Finally, a relational benefit scale for the online channel could be considered. Furthermore, another interesting proposition for future research is to study how the customer service experience differs in online environments when the consumers under observation belong to different demographic groups. In conclusion, given the growing theoretical and practical importance of service experiential marketing for fostering customer loyalty, value and other behavioural constructs in the service sector, we believe the field to be ripe with potential for future research.

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