



ORIGINAL CONTRIBUTION

The Role of Channel Integration in Customers' Perceptions Transfer from Offline Channel to Online Channel Service Quality

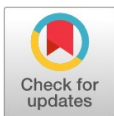
Muhammad Rizwan^{1,*}, Waseem Ahmad Khan², Muhammad Salman Azhar³, Shakeel Sarwar⁴

^{1,2,3,4} Institute of Business Management & Administrative Sciences, The Islamia University of Bahawalpur, Pakistan

Abstract— The advancement of internet technology revolutionized the online shopping environment and offered more options to customers in their purchase process, providing them with better products and services and providing opportunities for business firms to open an additional channel to grow. Based on previous inconsistent results regarding the construct of the different channels, the current study proposes Channel Integration as a moderator. Some authors also attribute these insignificant results to a lack of channel integration. While the number of channels increases, the issue of synergies and coordination among channels also increases. The current study investigates the connection between offline service quality and Online Service Quality (ONSQ). Additionally, the moderation of channel integration between offline service quality and ONSQ justifies inconsistent results in multichannel literature. Data was collected from 358 customers of various online fashion industry firms in Pakistan. The study results indicate the significant association between offline service quality and ONSQ. The construct of channel integration moderates the relationship between offline service quality and ONSQ. Hence, the higher the perceived integration between the multiple channels of the firm, the better is the transfer of customer perceptions from one channel to another. Therefore, multichannel firms should acknowledge the role of channel integration in shaping behavioral intentions in multiple channel interaction. Several other variables can be tested to check their moderating effect on customer's perception transfer.

Index Terms— Channel Integration, Multichannel Environment, Offline Service Quality, ONSQ, Pakistan

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Introduction & Background

The advancement of internet technology revolutionized the online shopping environment. It offered more options to customers in their purchase process, providing them with better products and services (Pappas, 2018), at the same time providing opportunities for business firms to open an additional channel to grow (Beckers, Cárdenas, & Verhetsel, 2018). Online shopping is an activity of purchasing goods and services from a firm's online channel using the internet, and it involves the activities like accessing a firm's online store, searching for desired products, selecting them, purchasing them, payments, and use of selected items to satisfy personal needs and wants (Lee, Ariff, Zakuan, Sulaiman, & Saman, 2016).

The global e-commerce sales are expected to grow by nearly US\$ 4206 billion in 2020, surpassing the sales of US\$ 3535 billion in the year 2019, and it is estimated to increase US\$ 6542 billion in 2023. Online sales have been increasing globally at an explosive rate during the past decade (Changchit, Cutshall, Lonkani, Pholwan, & Pongwirithon, 2019), and Fashion-related products ranked the most popular global online shopping categories (Nguyen et al., 2019).

*Email: rizwan.arshad@iub.edu.pk

Despite the increase in online sales around the world, the process of buying online is at the initial stage in Pakistan [Ahmad and Khan \(2017\)](#); [Bashir, Mehboob, and Bhatti \(2015\)](#). The progress of ecommerce sales in Pakistan has been low compared with the country's regional neighbors. The online sales in Pakistan were US\$ 622 million in 2017, where the figures for online sales in other regional countries like China were US\$ 1.2 trillion, India was US\$ 20.05 billion, and Saudi Arabia was US\$ 6.13 billion ([Iqbal, Raza, Ahmed, Faraz, & Bhutta, 2021](#)). Additionally, the online sales of these countries were also high in the relative term. The online sales of China were 21.19% of its total retail sales, and in India, it was 18.5%, while in Pakistan, the percentage was 0.34%. Online sales in other Asian countries were also higher, US\$ 6 billion in Malaysia and US\$ 1.313 billion in Bangladesh ([Ayodeji & Kumar, 2019](#); [Cui, Zhou, Xu, Zhang, & Li, 2018](#)).

The important gap in the previous literature is the inconsistent finding of different studies. These inconsistent findings are regarding the relationship between the various constructs of different channels. Many studies confirm the significant relationship between the constructs of different channels. However, other studies failed to hold these relationships valid in their empirical findings. A study by [Tong, Pan, Lu, and Tang \(2018\)](#) confirmed the significant association between offline and online satisfaction; however, it failed to confirm the connection between offline and online loyalty, while contrary to this study, [Pauwels, Leeflang, Teerling, and Huizingh \(2011\)](#) found an insignificant relationship between offline satisfaction and online satisfaction and significant relationship between offline and online loyalty. The results of another study did not support offline loyalty influencing online loyalty ([Frasquet & Miquel, 2017](#)). In another study by ([Aguilar-Escobar, Garrido-Vega, & Godino-Gallego, 2013](#)), the relationship between offline satisfaction and online loyalty was significant for one model, while offline satisfaction and online loyalty were not significant in the second model. In another study, the relationship between offline brand attachment is insignificant for online loyalty in both samples (the UK and Spain) ([Frasquet, Descals, & Ruiz-Molina, 2017](#)). The relationship between offline loyalty and online loyalty was significant; however, the direct influence of online loyalty on offline purchase was insignificant in a study by ([Xuan, 2007](#)). The results of a study by ([Kim, Lee, & Ryu, 2018](#)) proved the significant relationships between offline attitude and online attitude and offline purchase intention and online purchase intention. ONSQ does not influence channel-related behaviors ([Sousa & Voss, 2012](#); [F. Yang et al., 2019](#)). Online trust has a positive and significant impact on trust in online banking services. Many studies have failed to find a significant relationship between trust in different channels. The current study proposes Channel Integration as a moderator to boost customer experience across channels ([Montaguti, Neslin, & Valentini, 2016](#)).

Research Objectives

Based on the background of the study and the problem statement, the current study answers the following research objectives.

1. To examine significant relationships between offline service quality and ONSQ.
2. To examine channel integration moderate the relationship between offline service quality and ONSQ.

Research Questions

Based on the background of the study and the problem statement, the current study answers the following research questions.

1. Are there significant relationships between offline service quality and ONSQ?
2. Does channel integration moderate the relationship between offline service quality and ONSQ?

Literature Review

The previous literature has suggested that the firms that extend their offline channel with an internet-based online channel are more successful in their operations than the firms maintaining a single offline channel ([Sousa & Voss, 2012](#)). Therefore, with the rapid advancement of the internet, many traditional firms have started considering extending their channel portfolio to add multiple channels to enhance their business activities and long-term growth ([Kollmann, Kuckertz, & Kayser, 2012](#); [Wu et al., 2016](#)). Multichannel customer behavior creates both opportunities and drawbacks for the firms. Customers are using multiple channels to satisfy their needs for purchasing various products. It is important to understand customer behavior from a multichannel perspective to comprehend new channel development. The literature has discovered that multichannel customers are more beneficial than single-channel. Customers may prefer the online channel due to their convenience of getting information about product variety and price comparison. A firm can gain more sales by availing these available opportunities than a single channel strategy ([Neslin et al., 2006](#); [Wu et al., 2016](#)).

Many studies provide evidence that customers' overall experience has been formed by contacting multiple channels rather than from a single channel. When these customers use multiple channels of a firm, they tend to develop their service quality perceptions and satisfaction. These firms are putting extra effort into building multichannel strategies to connect and retain customers. These firms are putting extra effort into building multichannel strategies to connect and retain the customers during their shopping journey ([Verhoef, Kannan, & Inman, 2015](#)). These efforts support their traditional channel to enhance the sale volume, but additional sales can also be

generated through the extended channel (Dennis, Falah-Hassani, & Shiri, 2017). Hence, extending the channel portfolio enhances the overall performance of the firm.

The primary benefit of adding a new channel is to increase the firm's sales volume. Adding new channels will help acquire new customers (widening customer base) and maintain the relationships with previous customers by retaining these customers. However, adding multiple channels would also increase the customers' trust and familiarity. The complementary effect generated through the addition of channels provides significant benefits and complements each other to better satisfy customer needs (Avery, Steenburgh, Deighton, & Caravella, 2012; Wallace, Giese, & Johnson, 2004). In this way, these channels create synergies to help the firm serve the customers better.

Adding new channels may create a migration effect, where customers switch these channels based on their preference rather than using multiple channels in a complementary way. This cannibalization phenomenon creates profitability problems for the firms as the incremental cost of operating an additional channel is not compensated by incremental revenues. However, many recent studies provided empirical evidence supporting the complementary effect and suggested the creation of synergies in the long run (Avery et al., 2012; Beritelli & Schegg, 2016; Herhausen, Kleinlercher, Verhoef, Emrich, & Rudolph, 2019; Pauwels et al., 2011). Currently, the literature has much empirical evidence suggesting a complementary effect rather than a cannibalization effect and these complementary effects depend upon the cross-channel integration efforts (Kollmann et al., 2012; Nguyen et al., 2019; Pappas, 2018; Xuan, 2007).

Offline Service Quality

The previous literature refers to service quality as situation-based and depends on the type of service context (Parasuraman, Zeithaml, & Malhotra, 2005). Therefore, various studies tried to understand the role of service quality in different contexts like offline/online or channel-specific (Jun & Palacios, 2016). Hence, Offline Service Quality (OFSQ) signifies service quality in a traditional/physical/offline environment.

A firm's loyal customers are its biggest source of profits and a constant source of revenues, and additionally an informal firm's ambassador while recommending others regarding its product and services. This superior segment of the customers enables a firm to save additional operating and marketing expenditures, enhance referrals, earn a nonstop stream of profits, and be especially resistant to competitors' marketing efforts (Hamari, Hanner, & Koivisto, 2017; Ladhari, 2009).

Though several previous researchers verified the significant contribution of satisfaction and service quality for predicting loyalty or/and customer repurchase intention, many others tried to maintain the difference between these two constructs. According to these scholars, satisfaction can be considered an instant response after consumption; however, service quality represents the global impression of the customer regarding the service provided during the process of consumption (Famiyeh, Asante-Darko, & Kwarteng, 2018). Therefore, establishing the parameters for better service quality poses numerous challenges for the interested firms and the scholars who are motivated to look into this area (Parasuraman et al., 2005; Sousa & Voss, 2012).

To measure the customers' perceptions of service quality, the pioneer and surely the most frequently used instrument is the SERVQUAL scale, originally developed by Parasuraman et al. (2005). These service quality dimensions were access, security, credibility, reliability, tangibles, responsiveness, courtesy, knowing the customer, competence, and communication (Parasuraman et al., 2005). Although the output of the services is a significant factor for the customer, the quality evaluation should also include the impact of the process and place where these services are delivered (Parasuraman et al., 2005). The further refinement and fine-tuning process reduced the previous 10 dimensions into 5 to measure the perception of service quality (Parasuraman et al., 2005). These final dimensions include reliability, assurance, empathy, tangibles, and responsiveness. The conceptual definition of these SERVQUAL attributes is given in Table IV.

The originally established scale "SERVQUAL" suffered some potential drawbacks regarding the dual measurement structure of expectation and performance attributes. Therefore, the scale required the dual observations of the respondents regarding their expectations of the service quality and its real performance. In reality, these dual measurements help identify the potential problems in the service process for the firms (Parasuraman et al., 2005).

Table I
SERVQUAL Attributes

Dimension	Description/Conceptual Definition
Tangibility	The physical appearance, quality of equipment, communication skills, and employee appearance.
Reliability	The competence of the firm in providing the required service with accuracy and consistency.
Responsiveness	A firm's motivation to provide timely services and assist them when needed.
Assurance	The experience and knowledge of the firm's employees to develop confidence and inculcate trust.
Empathy	The kind and compassionate attitude of the firm to provide customized attention to its customers.

Source: (Parasuraman et al., 2005)

A study examines the links between service quality and other determinants for establishing brand loyalty in Dubai-based airlines. A modified SERVQUAL scale has been used to fit an airline context better. Service quality impacts perceived value and brand loyalty as well as customer satisfaction (Hussain, Al Nasser, & Hussain, 2015). One study examines the relationship between customer satisfaction and repurchase intentions in Chinese tourists' lodging context. Data collected from 451 Chinese hotel guests confirm the mediation of customer satisfaction between service quality and repurchase intentions and subjective well-being. The study utilizes a modified SERVQUAL scale that tested the impact of service quality on two constructs. While, partial mediation was confirmed between service quality and repurchase intention through customer-company identification. Another study measured the impact of different SERVQUAL dimensions on playing intention and purchase intention in a free-to-play (freemium) gaming context (Hamari et al., 2017).

ONSQ

ONSQ signifies service quality as perceived by the customers/online users in an online environment. During the past two decades, ONSQ gained considerable attention and interest among practitioners and scholars (Ali & Raza, 2017). With the rapid development of online channels, many scholars have started focusing on research regarding the service quality in the online channel. These practitioners and scholars believe that ONSQ can increase the performance of an online company (Al-Hawari & Ward, 2006; Njeru, Cheruiyot, & Maru, 2019).

The importance of ONSQ has been emphasized by several researchers in producing the desired results for the firms (Shankar, Datta, & Jebarajakirthy, 2019; Yu et al., 2020). Different studies confirm the significant importance of ONSQ for gaining customer loyalty (Bashir et al., 2015; Cui et al., 2018; Fadhel et al., 2020), retaining customers (Lopes, de Lamônica Freire, & Lopes, 2019), enhancing online perceived value (Song et al., 2020), service enjoyment and commitment in the online channel (F. Yang et al., 2019), online satisfaction (Dennis et al., 2017; Neslin et al., 2006; Yu et al., 2020), customer attitude toward the website (Herhausen et al., 2019) and good behavioral intentions (Ali & Raza, 2017).

Giao (2020) suggested that ONSQ encompass from starting to end of the online activities, covering the search stage, knowing privacy policies, navigations quality of a website, ordering process, delivery process, return policy, and overall satisfaction with the purchased item. ONSQ can be defined as "comprised the pre-purchase, purchase, and post-purchase activities involved in the evaluation, selection, purchase, and fulfillment of goods and services where the purchase transaction is performed through a website interface" (S. Yang, Lu, & Chau, 2013). ONSQ has become a fundamental strategy for online firms in gaining new customers and retaining older ones. Service quality has been considered a significant determinant for customer retention and influencing repurchases. Many drawbacks due to poor service quality have been documented in the online business context (Ardiansah, Chariri, Rahardja, & Udin, 2020).

There is abundant marketing literature with studies that try to measure or incorporate different determinants of ONSQ. However, SERVQUAL is regarded as the most frequently used scale for measuring ONSQ (Aguilar-Escobar et al., 2013; Beckers et al., 2018). Hence, Wu et al. (2016) established a scale consisting of seven dimensions to measure the ONSQ and named it e-SERVQUAL. They used seven dimensions to judge the ONSQ: compensation, fulfillment, efficiency, contact, privacy, contact, and reliability. Four dimensions in the scale represent the core of ONSQ, and the other three represent the e-recovery service quality. Another scale was developed by Parasuraman et al. (2005), including five dimensions such as reliability or fulfillment, ease of use or usability, information availability, privacy or security, and graphic style. A five-dimensional scale was developed by Xuan (2007) to measure the ONSQ in an online information service context. The scale includes responsiveness, information and graphics, fulfillment, efficiency, privacy, system availability, contact, and compensation. In the online banking environment, a scale including six dimensions was used (Joewono, Rizki, Belgiawan, & Irawan, 2020). Website design, responsiveness, personalization, reliability, ease of use, and security determine the ONSQ. Many studies in the previous literature have developed several other scales. e-S-QUAL, e-SERVPERF, E-merquAL, and modified etailQ are some of them (Ahmad, Rahman, & Khan, 2016; Njeru et al., 2019; Parasuraman et al., 2005; Sousa & Voss, 2012).

Relationship between Offline Service Quality and ONSQ

The customer perceptions of a firm can assist in firm evaluation that creates several responses and future behavior. However, the existing structures frequently neglect the possible interactions between different kinds of customer appraisals. The direct impact of service quality in various channels has been well examined in the previous literature, but these studies often overlook the potential interactions between online and offline appraisals (Aguilar-Escobar et al., 2013). These firms and customers have a different understanding of service quality; hence, they can judge the service quality after their consumption. Therefore, their experience in the offline channel becomes a reference point in evaluating experience in the online channel. Prior experience in any channel act as a reference to forecast the quality of other extended channels (Avery et al., 2012; Cui et al., 2018).

Some previous studies empirically confirmed the positive influence of offline perceptions on the firm's extended channel (Bashir et al., 2015; Fadhel et al., 2020). Another study reported that the customer attitude about a firm drives their assessment of its online

channel. (Beckers et al., 2018) examined the influence of customer experience in one domain on customer evaluation regarding the new domain with the help of an expectation transfer model. The result of the study confirmed that customers service experience in the offline environment/channel strongly influences their perceptions of ONSQ. Hence, it is rational to assume that the positive evaluation in one channel can be transferred to any new channel.

In this scenario, the user's quality perceptions are built on offline and complementary online services. Hence, the quality of offline services affects the user's trust and understanding of online services that are helpful in the successful working of both channels. Therefore, user ONSQ perceptions have significantly influenced ONSQ perceptions, providing complete satisfaction with the service quality of e-government services (Changchit et al., 2019).

Better offline services significantly improve the public perception of ONSQ in government services (Fadhel et al., 2020). A study investigates the connection between ONSQ and mobile service quality. The data for the study was collected through 317 respondents from an online retailing firm in China. According to the results, both types of service quality interact and significantly impact repurchase intention (Yu et al., 2020).

Channel Integration as a Moderator

In the context of multichannel marketing, the new online channel has been considered a new object for evaluation that shares various attributes similar to and associated with the original offline channel of the same firm. Customers intuitively classify the target (new online channel) and the source (offline channel) in the same category based upon their assessment of the association between the source and target. The process is coherent with the fundamental premise of categorization theory. The study by Xuan (2007) was made a significant contribution to existing multichannel literature by drawing attention to the role of categorization theory. They suggested that increasing the congruity (similarity) between a firm's offline channel and online channel reduces the importance customer placed on evaluating the online channel attributes (piecemeal processing) and enhance the transfer of their previous attitude towards the firm new online channel (category-based processing) (Carlson, Rahman, Voola, & De Vries, 2018).

According to Hult, Sharma, Morgeson III, and Zhang (2019), the synergy between multiple channels represents the goodness of fit, and that can be achieved when customers believe that the performance of these multiple channels is similar to each other. Achieving these synergies across channels in the multichannel environment results in the enhanced value of multiple channels greater than the sum of the individual channel value. Therefore, the collective satisfaction of multichannel customers is normally reflected by the combination of satisfaction gained through multiple channels and based on their collective experiences with multiple channels. To generate complementary effects, these channels should be integrated to facilitate the customer needs so that these customers can perform their buying decisions from multiple channels. Additionally, several studies supported the assumption that adding multiple channels in channel mix complement rather than substitute other channels (Abdullah, Suhaimi, Saban, & Hamali, 2011; Avery et al., 2012).

Brand Extension Theory

The basic notion for using Brand extension theory is that during the brand extension process, a firm benefits from customers' positive experience with the parent brand for the success of the new product. Similarly, in the channel extension process, the firm benefits from the positive experience of customers with offline channels for the success of the new online channel. A brand extension is typically focused on another part of the broader market for the overall brand. The Brand Extension Theory (BET) represents a firm's use of a recognized brand name to enable them to enter into a new segment of the market or a new product class (Ke & Wagner, 2020). BET is acknowledged as the most commonly used business firm's strategy to lower the risk and cost associated with introducing a new product or entering into a new market segment (Al-Hawari & Ward, 2006).

Brand extensions are frequently used to launch new products supposedly associated with some previously established firm's brand name to minimize the underlying risk using prior customer experience to impact the appraisal of the extended product (Ke & Wagner, 2020). Many fashion-related firms launch extra lines of products based on their parent brand name by using the brand extension mechanism. Hence, careful planning and brand extension techniques enable the business firms to enter entirely new product segments. Further asserted that if all the procedure is implemented steadily and with due care, brand extensions are supposed to help bridge the gap between two entirely different product segments.

A brand extension price premium is possible when a recognized brand name decreases the customer perception of risk during the purchase process. Another financial benefit of brand extension is that it allows the business firms to leverage the current brand recognition to become more competitive in a new segment and save the additional costs of entering a new market.

These attributes symbolize "fit" attributes, representing the effect of substitutability, complementarity, transferability, and difficulty. The impact of original brand quality on an extended product is moderated by these given attributes (Ke & Wagner, 2020).

Although several initial studies, including a study on brand extension, exhibited sufficiently high internal validity, many scholars have questioned the issue of generalizability. Many other studies replicated brand extension work; however, they produced different results. A meta-analysis has been conducted by Ke and Wagner (2020) to examine the generalizability of the brand extension model.

Brand extension assessment has been considered a cognitive process that involves the customer attitude of affective and cognitive attributes regarding the parent brand and degree of knowledge about the extended product category (Giao, 2020). The favorable attitude of the customer regarding the parent brand can lead towards a more favorable assessment of the extension. Hence, the awareness and knowledge about the parent brand successfully transferred to the extension during the assessment process. The categorization theory is frequently used in studying the cognitive processing of brand extension. Customers' assessment of new information is linked with the already established mental categories; try to link new information with established mental categories and check the association between the new information of product categories with prior knowledge of brands. Hence, the product category that is perceived to be more compatible with existing categories is processed easily, and the information stored in the existing categories is shifted to extension assessment comfortably (Anderson, Eshima, & Hornsby, 2019).

Hypotheses

H1: There is a positive relationship between Offline Service Quality and ONSQ.

H2: Channel integration moderates the relationship between Offline Service Quality and ONSQ.

Methodology

The study's main purpose was to explore the relationships between the offline channel and constructs of the online channel. The study utilizes a quantitative approach to collect data through a structured survey and empirical testing of the data collected. It aims to develop inferences about the general population that lacks in qualitative approach (Borsboom, van der Maas, Dalege, Kievit, & Haig, 2021). A cross-sectional method was used to collect data from the targeted population regarding the various constructs of the current study.

Self-administered questionnaires are more effective since they acquire the required information in less period, high response rate, and are low-cost to researchers. Different methods for personal interviews have been time-consuming, expensive, and difficult.

The Population of the Current Study

A research population comprises data and information whose properties are analyzed in given research (Anderson et al., 2019). Additionally, the population consists of the complete range of subjects needed to study in a given research. A sample could be defined as part of the target population of interest to be studied; it can be statistically referred to as a sub-collection selected from a population of interest (Borsboom et al., 2021).

The target population of the current research is constrained to customers who purchase at least once from the online channel. Online shoppers have been proposed to examine in the current study for their repurchase behavior similar to the rest of the online shoppers' population. The reason for selecting online shoppers as respondents in online shopping research is because they have a high probability of purchasing again and are most likely to employ online shopping in the future (Famiyeh et al., 2018).

Sample Size

The resource limitation often limits good research performance; however, reasonable sample size and better sampling procedure could increase research efficiency (Babulal et al., 2019). Therefore, a reasonable sample size is very important in research.

The 50/50 split is an approach that considers the highest possible conservative situation in which the entire population is fully divided. For studies in human dimensions or behavior, a sample size of around 400 is considered appropriate for the generalizability of the results. Babulal et al. (2019) also suggested the given formula for calculating the desired sample sizes:

$$N_s = \frac{(N_p)^{(P)(1-P)}}{(N_p-1)\left(\left(\frac{P}{C}\right)^2 + (P)(1-P)\right)}$$

The current study population is online shoppers who at least once purchase a product over the internet. According to the 2017 Annual Report released by the Pakistan Telecommunication Authority, there were 5 million online shoppers in the country in 2017. Hence, the total number of possible respondents for the current study was estimated to 5 million. By solving the above formula for the current study:

$$N_s = \frac{(5000000)(0.5)(1-0.5)}{(11500000-1)\left(\left(\frac{0.05}{1.96}\right)^2 + (0.5)(1-0.5)\right)}$$
$$N_s = 384$$

As per the sample size formula provided above, the number of samples required for the population of 100000 is 384 and this is the maximum number of samples required for any population above 100000. A sample of 384 respondents is supposed to be appropriate for testing the study hypotheses at a 95% confidence level and a 5% margin of error (Borsboom et al., 2021). Hence, a minimum number of 384 participants of online shoppers are required to participate in the current study.

Sampling Design

The sampling design provides relevant information regarding the current study population, sample size determination, sampling technique, and procedure for data collection. Two main sampling techniques can be used for data collection: probability sampling and non-probability sampling. Probability sampling allows the possibility of every individual of the population to be selected in the sample. In the current study, the non-availability of a sampling frame restricts to use of probability sampling. As the current study set some parameters for selecting sample members (Pakistani and experienced online customers), the current study used purposive sampling for data collection.

The respondents of the study were restricted based on two characteristics. The respondents should be Pakistani, and non-Pakistani respondents were eliminated from the final data analysis. A structured questionnaire was developed to acquire necessary information from the prospective survey suspect. The respondents of the current study were experienced, online shoppers. Four main cities of Pakistan were selected to approach these respondents. Various big malls were selected, having outlets of these selected fashion industry firms. The participating malls were chosen to provide a divergent clientele for each city. Due to the diversity and locations of these outlets, each mall targeted a different socioeconomic group, and every tenth shopping mall customer was selected as a sample to reduce the amount of bias in the collected data (Hair, Risher, Sarstedt, & Ringle, 2019). The respondent of the study were the customers who buy fashion products from the offline channel and online channel. The malls were selected where the customers are approaching to buy various fashion products. Respondents from each city were selected based on the total population of the province/state. The top ten fashion brands of Pakistan have been selected for the data collection. All these brands were selling various fashion products through their offline and online stores. They include unstitched and stitched women and men garments, makeup collection and accessories, jewelry, shoes, kids wear, bags, clutches, fragrance/perfumes, and other fashion accessories. The list of these top ten fashion brands is given in Table II.

Table II
Top ten fashion brands in Pakistan

Sr. No	Brand Name	Products	Online Store
1	Gul Ahmed	Stitched, Unstitched, and Western wear for women, Men clothing and Jack-ets, Bedding and Home accessories, Bags, Kidswear	https://www.gulahmedshop.com
2	Alkaram	Men, Women and Kids Clothing, Shoes and Scarfs	https://www.alkaramstudio.com/
3	Junaid Jamshed	Fashion clothing for men, women, and kids, makeup and fragrance collection	https://www.junaidjamshed.com/
4	Masarrat Misbah	Makeup collection	http://www.masarratmakeup.com/
5	Sapphire	Women and men Clothing, Bedding and towels	https://pk.sapphireonline.pk/
6	Stylo	Footwear, handbags, clutches, and other fashion accessories	https://stylo.pk/
7	Maria B	Women Clothing and perfumes	http://www.mariab.pk/
8	Sana Safinaz	Women Clothing, Footwear, and Bags	https://www.sanasafinaz.com/
9	Khaadi	Women and Kidswear, footwear, Hair accessories, fragrance, and jewelry	https://www.khaadi.com/
10	Pareesa	Women and men Clothing, Shoes	https://www.chenone.com

The current study used a purposive sampling method to collect data through a self-administered questionnaire in several areas. In this case, the distribution of the questionnaires determines three times a day; morning, lunchtime, and afternoon. This way helps to reduce the respondents' bias on the data. The purposive sampling method has been used and adapted in various studies related to technology and customer behavior Wu et al. (2016).

Research Instrument

ONSQ was measured through the scale adapted from Wu et al. (2016), and the scale has been comprised of 5 items. These items were slightly modified to better fit in the context of a multichannel shopping environment. A seven-point Likert scale was used, having values from 1 to 7 where 1 represents strongly disagree, and 7 represents strongly agree. The reliability coefficient/Cronbach alpha value for the given scale obtained from the study was 0.85. The offline service quality scale has been taken from the study of (Wu et al., 2016). The scale has been adapted and slightly reworded to apply to the current study. A seven-point Likert scale ranging from (1) "strongly disagree" to (7) "strongly agree" was used. The reliability coefficient value for the scale from the previous study was 0.85. The current study aimed to examine the role of Channel Integration as a moderator between the offline determinants and online determinants. The

scale was adapted from the study of (Li, Tang, & Hu, 2018). The scale items have been modified to suit the context of the current study. The scale of perceived channel integration consists of 10 items. A seven-point Likert scale ranging from (1) "strongly disagree" to (7) "strongly agree" was used. The Cronbach value for the scale from the previous study was 0.89 (Li et al., 2018).

Results and Analysis

Demographic Profile of the Participants

Table ?? describes the profile of the participants of the current study. Results were presented in frequency and percentage numbers to demonstrate demographical data. The total frequency is 358 respondents in this study. The majority of the participants were female (57%) compared with males (43%). More females in the sample were due to the selected brands for the current research. All of the selected brands are mostly female-focused and sell fashion products related to females. The majority of the participants fell within the age of 26-30 years (31%) and 31-35 years (31.6%), about 1% fell within the age of 21-25 years, 22.1% were between 36-40 years, and the remaining 14.5% were above 40 years old. Regarding the income, about 1% fell in the category of less than 15000, 3.1% were earning 15000 to 30000, 12.3% were earning 30000 to 45000, 21.2% were earning 45000 to 60000, 31% were earning 60000 to 75000 and 31.3% were earning more than 75000. More than 43% of the participants were master's degree holders, 28.5% had a bachelor's degree, 20.1% had an MS/MPhil degree, 5% had an intermediate degree, and 3.1% had a Ph.D. degree. Most of the participants (35.5%) were employed, 31% were housewives, about 22% were business owners, 8.7% were students, and 3.1% were unemployed. On the frequency of internet use, 1.4% were using the internet less than 1 hour, 27.7% were using the internet 1 hour daily, 28.5% were using 2 hours daily, 25.4% were using 3 hours daily, and 17% were using 4 hours daily. The next variable was the main reason for internet use, 36.9% were using the internet for purchasing various products from online stores, 18.4% were using the internet for study purposes, 13.7% of the participants were using the internet for banking purposes, 13.1% were used for entertainment, 9.2% were using it for social communication, 6.4% were used for information search, and 2.2% were using the internet for their work. All of these participants were experienced online shoppers, and they purchased at least one product from online stores. 48.3% of these participants belong to Lahore, 28.2% were from Karachi, 16.5% were from Peshawar, and 7% were from Quetta.

Table III
Summary of respondents' background

Demographic Variable	Category	Frequency	%age
Gender	Male	154	43%
	Female	204	57%
Age	21-25 Years	3	0.8%
	26-30 Years	111	31%
	31-35 Years	113	31.6%
	36-40 Years	79	22.1%
	Above 40 Years	52	14.5%
Income (Rs)	Below 15000	4	1.1%
	15000-30000	11	3.1%
	30000-45000	44	12.3%
	45000-60000	76	21.2%
	60000-75000	111	31%
	Above 75000	112	31.3%
Education	Intermediate	18	5%
	Bachelor	102	28.5%
	Master	155	43.3%
	MS/MPhil	72	20.1%
	PhD	11	3.1%
Occupation	Student	31	8.7%
	Unemployed	11	3.1%
	Employed	127	35.5%
	Business owner	78	21.8%
	Housewife	111	31%
Frequency of Internet use	Less than 1 hour	5	1.4%
	1 hour	99	27.7%
	2 hours	102	28.5%

Table IV
Summary of respondents' background

Demographic Variable	Category	Frequency	%age
	3 hours	91	25.4%
	4 hours	61	17%
	More than 4 hours	0	0%
The main reason for internet use	Information search	23	6.4%
	Work	8	2.2%
	Entertainment	47	13.1%
	Study	66	18.4%
	Purchasing	132	36.9%
Previous purchase	Banking	49	13.7%
	Social Communication	33	9.2%
	Yes	358	100%
Location/City	No	0	0%
	Lahore	173	48.3%
	Karachi	101	28.2%
	Peshawar	59	16.5%
	Quetta	25	7%

Reliability

Reliability is to check the internal consistency and stability of the instrument used. The inter-item consistency of all factors under study was examined for the study. The reliability coefficient of Cronbach's alpha was used in this study, specifically to assess the consistency of the scale.

Table V
Constructs' cronbach's alpha values

Constructs	Total Items in Construct	Cronbach Alpha
Offline Service Quality	5	0.873
ONSQ	5	0.842
Channel Integration	10	0.876

Direct Relationship between Latent Constructs

H1: Offline service quality is positively related to ONSQ.

A significant and positive relationship was found between offline service quality and ONSQ ($\beta = 0.162, t = 3.134$). Hence, H1 was supported.

Table VI
Results of hypothesis testing: Direct relationship

Hyp	Structural Path	Beta (β)	S.E	t-Value	p-Value	Decision
H1	OFSQ -> ONSQ	0.162	0.052	3.134	0.002	Supported

Test of Moderation

Based on Hair et al. (2019) analysis of the moderation effect, the result suggests that the relationship between offline and online constructs would be strengthened by channel integration.

Table VII
Results of the moderating effect model

Hyp	Structural Path	Beta (β)	S.E	t-Value	p-Value	Decision
H2	ChINT*OFSQ-> ONSQ	0.199	0.059	3.378	0.001	Supported

Regarding H2, the result signifies that channel integration moderates the relationship between offline service quality and ONSQ. This result implies that the relationship between offline service quality and ONSQ would increase by the size of the interaction term, which means that offline service quality strongly affects the ONSQ in case of the high level of channel integration.

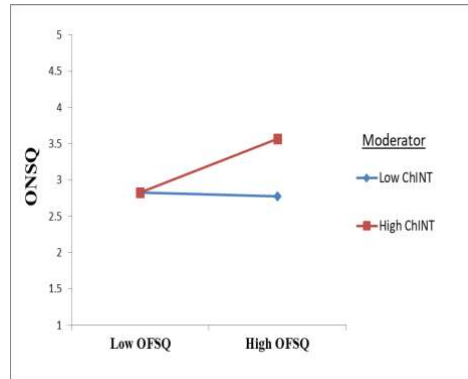


Fig. 1. ChINT-OFSQ Interaction Effect on ONSQ

Discussion

The current study refers to service quality as customers' global appraisal of the offline and online channels. That explains the quality of services received from these channels during their purchase process, including exchange-refund policy for returns, helpfulness, flexible delivery options, and payment convenience. Hence, these channel-related services develop a better appraisal of the customers regarding the firm's multiple channels. This study revealed the significant relationship between offline service quality and ONSQ. For this study, offline service quality appears to be significant for developing a positive perception of ONSQ, which indicates that the customer's favorable perceptions of the firm's offline channel service quality significantly affect their perception of the firm's online channel service quality. In a multichannel environment, the customers possibly experience multiple channels of firms, and these customers can rotate their channel usage in different available channels. Therefore, as the number of available channels increases, the probability of channel switching also increases depending upon the particular value provided by each channel and ultimately affects customer favorable purchasing decisions.

As indicated by [Dennis et al. \(2017\)](#), the previous customer interaction with the firm offline channel contains more importance than the online attributes itself because it is riskier to purchase from an online channel. These customers may consider the offline experience a risk-reducing strategy before going online. Therefore, positive offline service quality experiences tend to enhance customers' confidence about the firm's capability in providing superior quality in their online operations. Previous literature regarding the customers' choices of online and offline channels suggested that customers' past perception of offline service quality affects their favorable online attitude. Hence, the customers who experienced a superior quality of services in a firm's offline channel tend to develop a positive perception of the firm's online channel as well. Indeed, by developing cross-channel synergies, the online firms who manage a high degree of service quality in their conventional offline channel would find easy acceptance of their extended online channels ([F. Yang et al., 2019](#)).

In the current study context, channel integration refers to a system trait that influences the user evaluations of multiple channels and later channels adoption decisions. Channel integration can provide both opportunity and threat to multichannel firms and can enhance the channel performance or destroy it. The cross-channel strategy is related to the possible integration of multiple channels, and that cross-channel strategy signifies the opportunity for a customer to switch between different available channels conveniently. The favorable perceptions developed in one channel can be transferred to another channel through the halo effect, and a higher degree of channel integration facilitates these perceptions transfer. Hence, the multichannel firms benefit from investments in the alternative channel, and favorable customer perceptions in one channel may enhance the positive evaluation of alternate channels.

For this reason, channel integration can optimize channel performance and the customer experience in different channels and create cross-channel synergies. The effects of cross-channel synergy can be increased if the marketing efforts of multiple channels are accomplished in an integrated and complementary way. To generate complementary effects, multiple channels should be integrated to satisfy customer needs better and use multiple channels of the same firm. A recent study also suggested that it is important to build an integrated view of the customers to better deal with their problems and complaints in multiple channels ([Tong et al., 2018](#); [Wallace et al., 2004](#)).

Specifically, in the online environment, the customers are worried about the product quality they are purchasing from an online channel because they cannot physically examine the product before the product is finally delivered to them ([Wu et al., 2016](#)). Hence, customers are highly likely to develop trust and satisfaction for the online channel of a firm supported by its offline counterpart, and the level of cooperation between multiple channels creates superior value for the customers ([Wu et al., 2016](#)).

The current study discovered that customers' perception of channel integration between offline and online channels positively influences their perception transfer from offline to online channels. These findings are consistent with prior assumptions that a higher degree of similarity and fit between the source and target positively affects the transfer of perceptions from one channel to an extended

channel (Sousa & Voss, 2012). These results confirmed the assumption provided by Kim et al. (2018) that channel integration may be a moderating factor that can influence one channel's initial perceptions of customers towards a firm's new extended channel.

Many multichannel firms start their integration efforts for multiple channels, realizing the importance of channel integration. Many firms introduced several online attributes in their offline channels, such as multiple assisted online terminals and self-service counters have been provided in their offline channel by J.C. Penney and Louis Vuitton provide self-service to facilitate the customers. Research on examining the role of channel integration discovers that these online terminals and self-service counters providing information for their online channel may decrease the negative effect created by the non-availability of their products in the offline channel, generate a complementary effect for multiple channels, and becomes a valuable thing for offline customers when online banking assistance is provided at bank's offline channel. Similarly, IKEA and John Lewis publish different information about their offline channel like product categories, open hours, and location on their online channels to integrate the offline features into their online channel (Tong et al., 2018).

Managerial Contributions

Based on the study results, the current study provides several important recommendations for multichannel firms. The current study found empirical support for the connection between offline construct (offline service quality) and online constructs (ONSQ). Therefore, it would be important for a multichannel firm to improve the customer perceptions of their offline channel that act as a benchmark to use its online channel. In this regard, the customer's perception of the online channel is not only the success factor for the online channel; however, the perceptions developed from the firm offline channel also play an important role. The study's findings suggest a cross-channel effect of service quality from offline to online.

One important contribution of the current study is to confirm the moderating role of channel integration in developing favorable online perceptions based on offline customer experiences. Therefore, multichannel firms should acknowledge that channel integration shapes behavioral intentions in multiple channel interaction. By maintaining a well-integrated multichannel system, firms can enhance customers' appraisal of their marketing channels and subsequently increase satisfaction and repurchase behavior in another channel. More specifically, to achieve better channel integration, firms can offer consistent marketing policies, merchandise, price, and other information, delivery options in the cross channel, and customer service across their different marketing channels.

Limitations and Recommendations for Future Research

The study has several limitations that warrant future investigations to develop further insights into the multichannel environment. First, the hypothesized relationships in the developed model have been validated based on the data collected from Pakistan-based multichannel fashion industry firms' customers that limit the results' generalizability. Future studies should explore the relationships studied here from other firms comprising different retail contexts like electronics firms, mobile phone industry, tourism and hospitality industry, banking and insurance firms, retail stores, and sports firms to overcome this limitation. Further, the findings may be verified in other cultural settings to assess their generalizability. Future research is necessary to replicate the current study in different sectors, countries, and cultures.

Second, channel integration emerges as a moderator in the transfer of channel-related perceptions. Several other variables can be tested to check their moderating effect on customer perception transfer. In this regard, technology readiness, locus of control, and self-efficacy can be potential moderators. Additionally, the role of channel integration and transference effects needs to be examined across different types of product categories (low vs. high involvement products), customer contexts (business to business vs. customer to customer), and multichannel retailers (hedonic vs. functional) to examine whether certain relationships are unique to each context.

Conclusion

This study established an evaluation approach that incorporates the important elements of Channel integration in customers' perceptions transfer from offline to online channel Service Quality. The researchers compared and analyzed the current role of customers' service quality of online fashion industry firms in Pakistan, and then found several difficulties requiring future research and improvement. Channel integration is used as a moderator, and most customers are females. The study results indicate the significant association between offline service quality and ONSQ. The construct of channel integration moderates the relationship between offline service quality and ONSQ. Therefore, multichannel firms should acknowledge the role of channel integration in shaping behavioral intentions in multiple channel interaction.

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