Online Retail Stores Service Quality and Its Impact on Behaviors of Customers with Mediating Role of Attitude

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Abstract

Online retail stores is an emerging market in Pakistan and all the managers of such online retail stores are struggling to win the trust and positive attitude of the customer while offering quality services. Such online retail stores are its embryonic stage thus the awareness of web presence and customer perception regarding service quality is important to offer better value. Many studies have been conducted in recently to measure the service quality dimension of online retail stores but such studies have been so far less observed in Pakistani context where it is still a new culture. The aim of this article is to measure the online retail store service quality, attitude and behavior of customers who are buying online and extract the leading dimension. A survey of 295 customers shows that ease of use, privacy, order condition and procedural fairness are leading dimensions impacting positively the behavior of customer while mearing service quality. It is also interpreted that positive attitude towards online retail store buying can enforce the positive and consistent behavior towards online shopping.

Keywords: Ease of Use, Information Accuracy, Functionality, Order Condition, Interactive Fairness, Outcome Fairness, Procedural Fairness, Attitude, Theory of Planned Behavior, Technology Acceptance Model, SERVQUAL

1. Introduction

The web based shopping culture is getting quick pace day by day. The advent of the internet and hasty expansion of online shopping have offered retailers to offer customers a broader variety of products while expanding their business prospects.(Loureiro & Breazeale, 2016). Generally till today, individuals and families visit shopping centers or particular outlets to shop items extending from grocery, fashion clothing, apparels to electronic items but the advent of World Wide Web has created a dynamic cyber space with endless opportunities and possibilities for online markets. Especially the people who spend more time on internet browsing websites and social media lover, they are the main driving force behind the rising trend of ecommerce(Khare & Rakesh, 2011; Singh, Chaudhuri, & Verma, 2017). Presently, an ever increasing number of companies are opening their online outlets in digital markets to catch a bigger market segment. In the technological advanced countries, the trend of online shopping has already made a great deal of business like internet penetration in Europe is reported around 77.4% and 88.1% in North America thus world leading online stores like Amazon.com, Ebay.com, Alibaba.com and many more have won the confidence of customers who shop online. On contrary, the emerging countries are in the phase of technological transit and where the internet penetration is still around to 45.2 %in Asia to 56.7 % in Middle East("Internet Usage Stats," 2017). Due to slow pace of technological advancement in such countries, the penetration of online stores and the changing the culture of individual buying at digit market is challenging(Rajamma & Neeley, 2010).

According to Economic Survey of Pakistan (2015-16), the broad band subscribers have reached 30.99 million from 2.10 million in (2011-12) though the internet penetration is 17.5% according to Internet Usage Stats, 2017. This growth has triggered the online retail industry and culture of online shopping like Daraz.pk, Kaymu, Shophive.com, Symbos.pk, Yayvo.com and many more. Along with these prominent online retail stores, many small online retailers also have made their entry into cyber markets. In spite of the fact that, there are many assessments coasting around with reference to how enormous the web based business market is in Pakistan, first the division of online markets needs to be understood. There are few stores which are dealing with multi-retailers with multi-categories e.g. Daraz, Kaymu & Yayvo, HomeShopping, Shophive, Symbios and Telemart. Few retailers have opened their Facebook

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Stores/page/Group. Then, there are Brand Stores but mainly deal in fashion clothing. Travelling industry has also made a deep leap into the online markets along with ride sharing industry like Uber and Careem. Even for job hunting, Rozee has created a sizable buzz long side PakWheels and ApniGari in auto selling and Zameen.com in real estate industry are prominent players. In spite of quick growth of online retails stores, Pakistan's ecommerce isn't even close to 0.1% of total retail sales as yet(Dawood, 2017). On contrary, India, the neighboring country of Pakistan has showed 0.1% online retile store share in total retail volume, however, projected the growth rate up to 7-8% of the total Indian retail market by 2020 (Tandon, Kiran, & Sah, 2015). The mashroom growth of online retails stores on WWW and social media provides some ground from exceptional growth within few years in Pakistan too. E-commerce Conversion Rate in defined as the percentage of website visitors that actually buy online. According to an online research report by Kaymu.pk (online retail store), the E-commerce Conversion Rate of Pakistan for new visitors on online retails store is 1.2 to 1.6% whereas for returning visitors it is 2.6% - 3% irrespective of gender which is quite low(kaymu, 2015). It shows that customers are browsing more and buying far less. Although the ethos of online buying in quite new and still at its very early stage, it is very important to investigate the service quality of online retail store as a significant antecedent towards online buying attitude and behavior.

There are multiple factors that affect the online buying behavior including characteristics of information presentation, order fulfillment, visual appeal, trust and security(Akroush & Al-Debei, 2015). Shopping at an online store resembles shopping through a paper catalogue with time and space conveyance of the buyers who can't touch or smell the item (Park & Kim, 2003). For a better understanding of what influences the attitude and behavior of customer in online buying, it is important to first investigate the dimension of online store's service quality measures and it relationship between attitude and behavior especially in country like Pakistan where online retail store is an evolving phenomenon and yet needs scholarly attention. Many studies has been conducted in Asian countries but less are observed with reference to Pakistan and this study gap need to be filled with more empirical studies. This research study provides empirical validation of online store's quality dimensions in the Web-based online shopping context and its impact on attitude that later influence the behavior towards online buying in three urban cities of Punjab, Pakistan. To anchor the theoretical discussion, the researcher has adopted theory of Technology Acceptance Model (TAM), Theory of Planned behavior, Unified Theory of Acceptance and Use of Technology (UTAUT) along with SERVQAUL extended version for online store services for empirical validation and explanation. This study will answer following questions.

RQ1: Does service quality dimension of online store influence the attitude of customers?
RQ2: Does service quality dimension of online store influence the behavior of customers?
RQ3: Does attitude mediates the relationship between service quality of online store and behavior of customers?

Online retailing is basically Internet-based business which delivers products and services over the Web or smart phone app(s) or described as a retail store in cyber space, where customers can shop online rather than visiting physical stores (Ahn, Ryu, & Han, 2007). In past few years, online retailing business has attracted a great deal of consideration as it offers multifaceted benefits to buyers and sellers. From buyer's perspective, it has made time and space unconcerned and from seller's perspective it has expanded the geographical boundaries of markets (Akhlaq & Ahmed, 2015; Lee & Lin, 2005). To attract the customers towards online retail websites, the retailers focus more on their websites and its functionality but the service quality measures for online stores are quite diverse and vibrant as compared to website functionality and conventional retail stores. For growth, expansion and survival in an inevitable competition, the academicians and practitioners are now focusing more on how to improve the online shopping experience and quality to attract and retain prospective customers(Jun, Yang, & Kim, 2004) . It has been stressed that retailers should focus on such dimension that encompasses all encounters that occur before, during, and after the online transaction(Zeithaml, 2002). Offering variety of products online while offering benefits such as ease of shopping any time, convenience and checking the availability of products and price comparisons are very significant in developing positive attitude and behavior towards online buying. Zeithaml (2002) explained that online presence is not a key determinant of success or failure with competitive price rather the electronic service quality (e-SQ) is a real apprehension. In his article he mentioned four dimensions of e-SQ which are efficiency, reliability, fulfillment, and privacy. Efficiency is referred as ability to find the desired product and information and check out effortlessly. Fulfillment is defined as fulfillment of promised

service, products availability in stock and on time delivery whereas reliability is defined as technical functioning of the site. Privacy is associated with assurance of information security to minimize the risk of cybercrime. These dimensions for online service are dissimilar to service quality model (SERVQUAL) proposed by Parasuraman, Zeithaml, and Berry in 1985. Thus, it is crucial to investigate the electronic service quality of retail stores operating in Pakistan to expand the understanding about the phenomenon as so far less is explored in the context of electronic service quality. Unlike physical visits to retail stores, the online shopping is exhibits different characteristics. In online retail store, there is lack of live human interaction, tends to be more anonymous, automated and impersonal. Adding sociability, interactivity, emotions and joy of shopping in online buying experience is a real challenge for retail store to win a positive attitude (Hassanein & Head, 2007). Customer's attitude, if positive, can shape a consistent behavior towards online shopping. Theory of Planned Behavior (TPB) explained attitude as degree to which a person has a favorable or unfavorable appraisal against the object in question whereas behavior is an outcome that can be observed(Madden, Ellen, & Ajzen, 1992; Netemeyer, Ryn, & Ajzen, 1991).

2. Literature Review

An online or e-retail store profoundly depends upon non-human interactions between retailers' information systems and its customers. The service encounters between customers retailer is either via either internet-based communication tools (e-mail, chat room) or it is through retail store website (Jun, Yang, & Kim, 2004). Since its first publication, SERVQUAL is providing a measuring tool to for service quality. SERVQUAL has been adopted by many industrial, commercial and not-for-profit settings(Goswami, 2013; Olimpia, Darío, Adriana, Verónica, & Yolanda, 2016). However, offline services have distinctive features as compared to online services thus the five dimensions of SERVQUAL model casing tangibles, responsiveness, reliability, assurance, and empathy can be directly applied in the context of online services. It also covers the contracts of competence, access, courtesy, communication, credibility, security and understanding/knowing the customer s(Anantharanthan Parasuraman, Berry, & Zeithaml, 1991; Anantharanthan Parasuraman, Zeithaml, & Berry, 1985, 1988). Different scholars has given diverse descriptions of eSERVQUAL but in broader sense, it is describe as an internet service quality as an extent to which a web site enables the efficiency and effectiveness while purchasing and delivery of products and services(A Parasuraman, Zeithaml, & Malhotra, 2005). The scholars like Yoo and Donthu (2001) developed SITEQUAL with 4-dimension to measure online website quality, Madu and Madu (2002) proposed 15 dimensions of online service quality, 2002, Lociacono, Watson, and Goodhue developed WEBQUAL which comprised of 12 dimensions, Parasuraman, Zeithaml, & Malhotra (2005) offered eSQ with 6 dimensions and Wolfinbarger and Gilly (2003) developed eTailQ with 4 dimensions(Alanezi & Ahmed Kamil, 2010; Collier & Bienstock, 2006). The summary of noteworthy scales and their dimensions is exhibited in table no.1 for anchoring literature support.

Table No.1. Scales and Dimensions of Online Service Quality

Dimensions	Scale Title	Proposed by
Ease of use, Aesthetic design, processing speed, Interactive responsiveness	4 dimension SITEQUAL to measure online website quality	(Yoo & Donthu, 2001)
Performance, Features, Structure, Aesthetics, Reliability, Storage Capacity, Serviceability, Security, System integrity, Trust, Responsiveness, Product/service, Differentiation, Customization, Web store policies, Reputation, Assurance, and Empathy.	15 dimensions of online service quality	(Madu & Madu, 2002)
Informational fit to task, interaction, trust, response time, design, intuitiveness, visual appeal, innovativeness, flow (emotional appeal), integrated communication, business processes, and substitutability.	12 dimensions (WEBQUAL) to measure online retailing service quality	(Loiacono, Watson, & Goodhue, 2002)
Information availability, content, ease of use or usability, privacy/ security, graphic style, fulfillment.	6 dimensions (eSQ)	(A Parasuraman et al., 2005)
Web site design, reliability/fulfillment, privacy/security, and customer service	4 dimension (eTailQ)	(Wolfinbarger and Gilly, 2003)

The marketing scholars have also conceptualize the service quality on process dimensions and outcome dimensions. The research on logistics service quality explains process (order placement) and

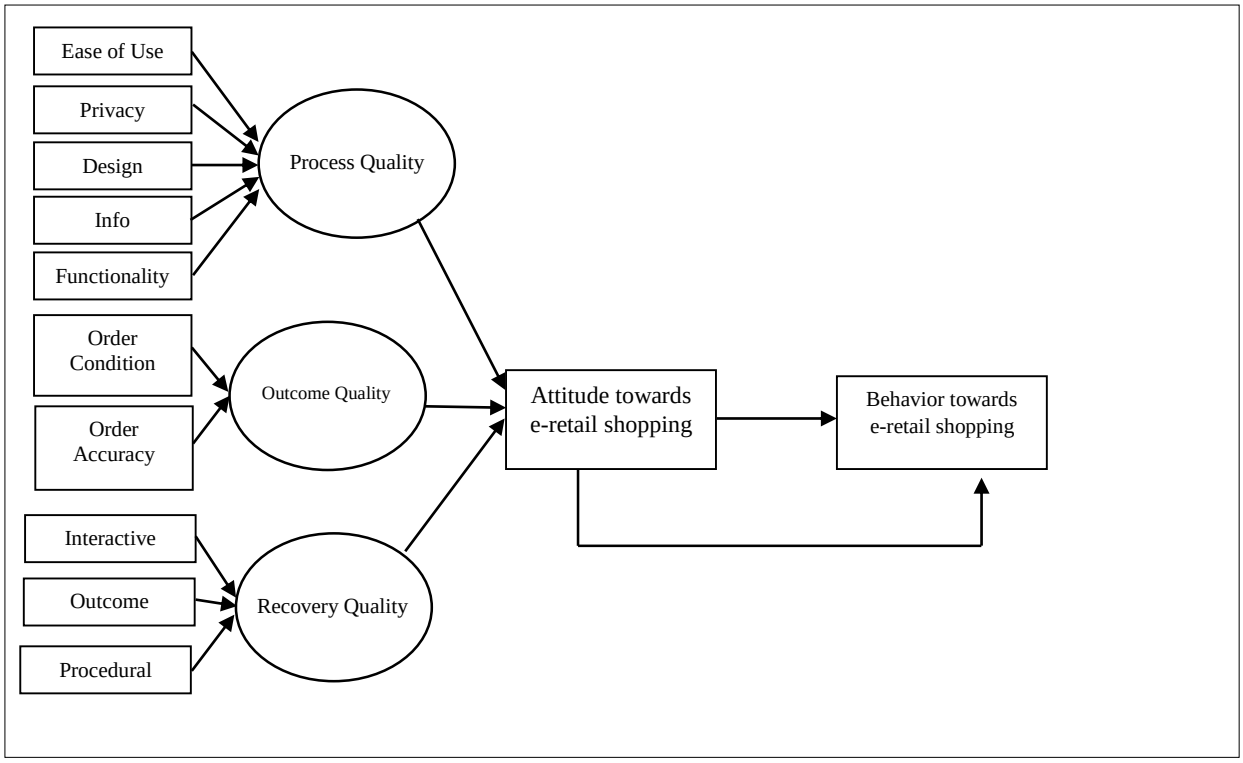
outcome (order receipt) provides literature support. The process dimension contains personal interaction, order release, ordering procedures, and information quality whereas the order receipt dimensions comprised of order accuracy, order condition, and order quality(Mentzer, Flint, & Hult, 2001). The importance of service recovery in e-service quality is also highlighted as an important matter. The recovery is elucidated as an ability to handle service failure frustrations and handling queries because it may win/destroy the trust and purchase intension of customers buying online effecting positive or negative word of mouth (Holloway & Beatty, 2003).

The theoretical underpinning of service quality is extracted from Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB). Predicting human behavior is the most challenging task as intensions and behaviors are complex. It can be studied from psychological perspective or from social science perspective. The Theory of Reasoned Action (TRA) states that behavior of an individual can be predicted from his/her intentions and intensions can be predicted by his/her attitudes towards object(Ajzen & Fishbein, 1970; Maartin Fishbein, 1979; M. Fishbein, 1979; Sheppard, Hartwick, & Warshaw, 1988).TRA came out of anomaly where weak association between intension and voluntary behavior was observed whereas intension assumed to be a good indicator of a certain behavior. TRA assumes that most human social behavior is under volitional control and, hence, can be predicted from intentions alone. TRA pinned the discussion around intension of an individual as core assumption while extending the debate that intension towards a certain behavior which is influenced by two associated factors; the attitude and subjective normative. The component of attitude is built on the foundation of behavioral beliefs and assessment of behavioral beliefs whereas the subjective normative is constituted by normative beliefs and motivation to comply. The attitude is defined as mental state that holds values, beliefs and feelings. Subjective norms are prescribed as an individual's perception about the social norms or his/her peers' beliefs and motivation to comply with those beliefs.TRA limits itself to volitional behaviors and over looked the significance of skills, resources, or opportunities and their impact on behavioral intensions leading to behavior. Thus, TPB expanded the boundary of assumptions while incorporating the value of possession of skills, resources and opportunities organized in the component of perceived behavioral control(Madden et al., 1992). TPB elucidates the perceived behavioral control with argument that an individual who possesses more skill, recourses or has better access to opportunities, he/she will exhibit greater control over behavioral intensions(Ajzen & Fishbein, 1973; Netemeyer et al., 1991).Since its inception, Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB) is extensively applied to explaining and predicting intension-behavior interactions for online services (Hansena, Jensenb, & Solgaarda, 2004)

Research on individual-level technology acceptance and adoption is at maturity of conceptualization in today's digital world. Technology acceptance model proposed by Davis (1989) was found more reliable and valid in empirical validation of technology acceptance and adoption. This model was first proposed this model in the lieu of his doctoral thesis and later this model became the more cited model in studying the attitude and behavior towards accepting the technology (Venkatesh, Davis, & Morris, 2007).TPB is found difficult to apply in all context thus Technology Acceptance Model (TAM) found more useful in digital context. Many studies have been conducted to study the adoption of information technology along with theory of planned behavior as information technology, unless or until not used, cannot serve the customers. Various empirical studies have proved that technology acceptance model is a well-developed tool for information technology related field(Mathieson, 1991). There have been a many theoretical models applied to consider user acceptance and usage behavior towards information technologies and Technology Acceptance Model (TAM) is of the most applied model. Technology Acceptance Model (TAM) is originated from theory of reasoned action that explains behavior is result directed from behavioral intentions. TAM elucidates that variables like perceived usefulness and perceived ease of use are the key drivers that influence the attitude of the user and attitude in turn, actually determine the actual acceptance or rejection of information technology. Perceived ease of use is defined as the degree to which a customer believes that using a particular technology requires no effort whereas perceived usefulness is defined as the degree to which customer believe that a specific technology will enable a smooth transaction process. (Fred D. Davis, 1985; Fred D Davis, 1989; Venkatesh & Davis, 2000). So far TAM has been extensively implied in the field of ecommerce and online services in different industries. Since 1985 till today, the TAM has provided ample theoretical justification for adoption, acceptance, attitude and intension towards acceptance and behavior (actual usage) towards information and digital services(Klopping & McKinney, 2004; Pavlou,

2003; Wang, 2008; Wu & Wang, 2005; Yadav, Sharma, & Tarhini, 2016; Yaghoubi & Bahmani, 2010). The literature review provides literature support for the theoretical model for underlying study.

Figure No.1: Theoretical Model of e-retail Store Service Quality, Attitude and Behavior



2.1 Hypothesis Development

H_1: Ease of use positively impact the behavior of consumer in the context on online retail store buying
Behav= B_0+B_1easeuse - *e*
H_2: Privacy positively impact the behavior of consumer in the context on online retail store buying
Behav= B_0+B_1privacy - *e*
H_3: Design positively impact the behavior of consumer in the context on online retail store buying
Behav= B_0+B_1Design–*e*
H_4: Information accuracy positively impact the behavior of consumer in the context on online retail store buying
Behav= B_0+B_1infoaccuracy – *e*
H_5: Functionality positively impact the behavior of consumer in the context on online retail store buying
Behav= B_0+B_1Functionality – *e*
H_6: Order condition positively impact the behavior of consumer in the context on online retail store buying
Behav= B_0+B_1ordercond – *e*
H_7: Order accuracy positively impact the behavior of consumer in the context on online retail store buying
Behav= B_0+B_1orderaccuracy - *e*
H_8: Interactive fairness positively impact the behavior of consumer in the context on online retail store buying
Behav= B_0+B_1interacfair–*e*
H_9: Outcome fairness positively impact the behavior of consumer in the context on online retail store buying
Behav= B_0+B_1outfair – *e*
H_{10}: Procedural fairness positively impact the behavior of consumer in the context on online retail store buying
Behav= B_0+B_1procfair - *e*

H_{11}: ease of use, privacy, design, information accuracy, functionality, order condition, order accuracy, interactive fairness, outcome fairness and procedural fairness positively impact the behavior mediated by attitude in the context on online retail store buying

Behav= B_0+B_1easeuse +B_2privacy+B_3Design +B_4infoaccuracy +B_5Functionality +B_6ordercond + B_7orderaccuracy+B_8interacfair+B_9outfair+B_{10}procfair+B_{11}*attitude– e*

3. Methods and Methodology

It is an explanatory study with positivist stance while using survey method for data collection(Sekaran & Bougie, 2016). As mentioned earlier, all dimension of online service quality are taken are an independent variables whereas attitude is introduced as a mediating variable. Behavior is introduced as a dependent variable in the model. The operationalization of variables is adopted from literature already mentioned in the literature section. The questionnaire was consisted of 63 items where 5 items were related to ease of use, 4 were related to privacy, 5 were related to design, 6 were related to accuracy of information and 4 were related to functionality. All these 24 items measured the process dimension of online service quality. With reference to 7 items measuring outcome dimension, 3 items were related to order condition and 4 were related to order accuracy. 19 items were measuring recovery dimension where 9 items were related to interactive fairness, 4 were related to outcome fairness and 6 were procedural fairness. Attitude was measured with 5 items and behavior was measured with 5 items. All items were based on 5Point-Likert Scale ranging from strongly disagree to strongly agree. The items of online retail store service quality are adapted from a study conducted by Collier and Bienstock (2006) whereas the items of attitude and behavior are adopted from a study conducted by Ahn, Ryu and Han (2007).The reliability was verified through Coefficient Alpha and all values were found within the acceptable range(Field, 2013). Table2 shows the details of coefficient alpha against each sub dimensions of process, outcome and recovery constructs.

Table No. 2. Reliability for Online Retails Store Quality Dimensions

		Items	Coefficient Alpha
Process dimension	Ease of Use	5	.674
	Privacy	4	.659
	Design	5	.717
	Information Accuracy	6	.844
	Functionality	4	.740
Outcome Dimension	Order Condition	3	.756
	Order accuracy	4	.785
Recovery Dimension	Interactive Fairness	9	.917
	Outcome Fairness	4	.729
	Procedural Fairness	6	.857
Attitude towards online store	Attitude	5	.887
Behavior toward online store	Behavior	5	.844
	Total Items	63	

SPSS output

Due to non-availability of sampling frame, non-probability sampling technique was applied to collect the data from respondents. The author applied convenience and snow ball sampling technique where the questionnaire was built online(Saunders, Lewis, & Thornhill, 2015; Sekaran & Bougie, 2016; Zikmund & Babin, 2013). The survey link was shared with respondents and sample size was determined as 315. The complete received responses were 295 thus constitute 94% of response rate(Anglim, 2011). The respondents were selected from all walks of life with precondition that they have experienced online buying. They were students, professionals and housewives residing in Lahore, Islamabad and Rawalpindi, Punjab, Pakistan. For conforming the dimensions of online service quality as questionnaire was adapted from a study conducted in 2006 (Collier & Bienstock), conformity factor analysis (CFA) was applied to ensure the factor structure of a set of observed variables. For attitudinal mediation among process, outcome and recovery dimension with behavior, hierarchical regression is applied.

4. Data Analysis and Discussion

The demographic profiles of respondents are exhibited in table 3 where the gender, age, income status and online buying frequency are mentioned in terms of frequency and percentage analysis. The acquaintance with respondent's demographic profile always facilitates in elaborating the discussion around statistical results. It may also identify the future direction of empirical research. Table.3 shows that out of 295, 103 respondents were male and 192 were females that constitute 34.9% and 65.1% of total responses respectively. Thus concluded, that most of the respondents were females. In the age bracket, 60 (20.3%) respondents were below the age of 20 years, 151 (51.2%) were within the age bracket of 20 to 30 years, 76 (25.8%) were in the age bracket of 31 to 40 years and only 8 (2.7%) respondents were above 40 years of age. This percentage analysis show most of the respondents were fall in age bracket of 20 to 40 years and only few were found above 40 years. 116 (39.3%) respondent reported their income status as lower income group where per month income is below 40,000 PKR whereas 111 (37.6%) respondents declared their income status as middle income group where the per month income is 40,000 to 80,000 PKR per month. 68 (23.1%) respondents showed their income level above 80,000 PKR per month. The most imperative information was regarding their online buying frequency as the buying frequency is meticulously linked with online retail store's service quality. The larger proportion of respondents (50.6%) was rarely buying from online retail stores whereas 39.3% were buying moderately. Only 10.5% respondents were buying very frequently. this tendency might be observed due to lack of trust on online retail stores or might be due to lack online buying culture.

Table No. 3: Demographic Profile of Respondents

		Frequency	Percentage (%)
Gender	Male	103	34.9
	Female	192	65.1
Age	Below 20 years	60	20.3
	20 to 30 years	151	51.2
	31 to 40 years	76	25.8
	Above 40 years	8	2.7
Income Status	Lower Income Group (below 40,000/per month PKR)	116	39.3
	Middle Income Group (40,000 to 80,0000/per month PKR)	111	37.6
	Upper Income Group (Above 80,000/per month PKR)	68	23.1
Online Buying Frequency	Rarely	148	50.2
	Sometimes	116	39.3
	Quite often	31	10.5

SPSS Output(*n=295*)

The results reveal many findings regarding online retail store service quality in three major cities of Punjab, Lahore. The results are regarding demographic profile of respondent's shows that most of the customers buying from online retail stores are in the middle age, belong to middle income group and buying frequency is not frequent. In such cities, like other part of the country, still customers prefer to buy from markets where they can visit from with their friends and families. The online retails stores, expect few, are yet to win the market reputation and presence. The online retail store are in it very embryonic stage this customer from lower income group prefer less due to price sensitivity. Similarly, most of the professionals might prefer buying from online retail stores because of their busy life but house wives and students still prefer to buy from traditional markets due to entertainment factor. The buying frequency reveals that most of the customers in these cities are either buying rarely or sometime from online retail stores and frequent buyers are still few. Due to convenience sampling, it cannot be generalize that most of the customer from middle income group with middle age. Likewise, the tendency of buying from online retail store is observed more among females as compared to male.

The mean and standard analysis facilitate in understanding the respondent's responses against items. The elements of process dimension of the quality were ease of use, privacy, design, information

accuracy and functionality. Against all 25 statements covering the process dimension of online retail store service quality the mean was ranging from 2.87 to 3.79 exhibiting that most of the respondents were agree with the items statements. Ease of use with 5 items shows mean range 3.32 to 3.66 exhibiting that most of the respondents were agree with the statements regarding website access, price display, site map and page view. Likewise, privacy was measured four items and mean was ranging from 3.29 to 3.61 exhibiting that most of the respondents were agree with the statements regarding trust onweb site administrators, online transaction and information. The design aspect of online retail store service quality is measured with 5 items with mean ranging from 2.87 to 3.79 while demonstrating the same results. Information accuracy covering information display on webpage, inventory availability, information accuracy, bill and price information is measured with six items and mean was ranging from 3.32 to 3.97 showing agree status with most of the statements. The last element of process dimension of online retail store service quality is functionality which is measured though 5 items with mean ranging from 3. 29 to 3.76 demonstrating agree status with most of the statement. Mean analysis of process dimension of online retail store service quality reveals that most of the respondents with either neutral or agree with the statement and the tendency of strongly agree is not observed or vice versa. The detail reporting of mean and Std.D of process dimension is given in Table 4.

Table No. 4. Mean and Standard Deviation Analysis of Process Dimension of Online Retail Store Service Quality

Sr	Item Statement of process dimension of online retail store service quality		
	Ease of Use	Mean	Std. D
1	Prices are shown with the items on the screen.		
2	It is easy to access my favorite online store's Web site	3.66	.994
3	I don't get lost on my favorite online retail store.	3.53	.922
4	My favorite online retail store contains a site map with links to everything on the site	3.61	.855
5	My favorite online retail store allows me to find a page previously viewed.	3.32	1.165
	Privacy		
6	My favorite online retail store allows me to go back when I make a mistake.	3.61	.887
7	I trust the Web site administrators will not misuse my personal information.	3.53	.830
8	Symbols and messages that signal the site is secure are present on online retail store.	3.47	.725
9	My favorite online retail store doesn't give other sites or companies access to my information.	3.29	.802
	Design		
10	My favorite online retail store doesn't give my information away to other companies.	3.42	.758
11	My favorite online retail store is visually pleasing.	3.76	.751
12	My favorite online retail store's site design is innovative.	3.50	.862
13	I am able to see the graphics clearly on my preferred online retail store(s)	3.79	.777
14	The online retail store site does not have fine print that is difficult to read.	2.87	1.095
	Information Accuracy		
15	I don't have to scroll from side to side to adequately see online retail store Web page.	3.32	1.016
16	The online retail store advertised items are available in inventory.	3.66	.878
17	The online retail store provides information on how much an item costs with shipping costs included.	3.61	1.198
18	The online retail store provides accurate information about when orders will be received.	3.50	1.059
19	The online retail store Web site has a running total of purchases as the order progresses.	3.53	1.006
20	Prices are shown with the items on the screen.	3.97	1.000

	Functionality		
21	The online retail store Web site has information that is objective (i.e., product reviews are free from bias).	3.29	.835
22	When I use an online retail store there is very little waiting time between my actions and the Web site's response.	3.76	.883
23	My favorite online retail store Web site does not crash.	3.53	.951
24	My favorite online retail store gives the customer numerous payment options.	3.63	1.076
25	My favorite online retail store Web site loads quickly.	3.63	.998

SPSS Output (*n= 295*)

The respondents were asked to recall their previous interaction with online retail stores and their shopping experiences for evaluation of service quality. The results regarding price display, access on website or on mobile app, website easy operation, site map and product display shows customers are not yet satisfied with the service as means are closer to 4. It empirically validated that all online retail stores need to improve their price display, website easiness of use and website page operations. Likewise, the privacy covering trust on administration and information secrecy also shows that online retail stores need to pay serious attention towards winning the confidence of customers. Secrecy plays very vital role in online buying. How retail stores ensure privacy is also not clearly communicated to customer. This is possibility that lack of clarity, hidden terms and conditions and lack of understanding from customer's side is crafting lack of trust. The good option so far is cash payment on delivery due to which customers are supposed to share their credit card information online. Design is also related with website display and ease of use and results are depicting the same picture. Design of online retail stores are reported to be innovative but mean of 3.50 shows room for improvement. As online buying is based on information given in the catalogue thus online retail stores needs to improve the information accuracy. Respondent's responses shows are customers are not very confident with information accuracy thus the chances of unsatisfactory transaction is expected. Functionality is no exception, where the online load, payment options and product picture and information loading shows low mean scores. The overall process dimension of online retail store service quality dimensions results shows that still the online retail stores need to improve the processes to win the confidence of customers for a favorable behavior.

The elements of outcome dimension of online retail store service quality are order condition and order accuracy. Order condition was measured through three items and their means were ranging from 3.76 to 3.89 showing that most of the respondents were agree with the statement. Similarly, the oder condition was measured though three items and its means were ranging from 3.50 to 4.00. The detail reporting for means and Std.D of each item is given in Table 5. The order condition and accuracy is also one of the most important elements of online service quality. The order packaging, transportation, online delivery and undamaged item also positively impact behavior of customers. To bring the whole culture of online buying, winning customers trust and accurate billing without damaged delivery is expected and responses show that all online retail stores need to improve the outcome dimensions. Most of the customers show more satisfaction with billing accuracy which is a good sign.

Table No. 5: Mean and Standard Deviation Analysis of Outcome Dimension of Online Retail Store Service Quality

Sr.	Item statements of outcome dimension of online retail store service quality	Mean	Std. D
	Order Condition		
1	My favorite online retail store orders are protectively packaged when shipped.	3.89	.924
2	All orders by my favorite online retail store are delivered undamaged.	3.84	.855
3	Damage rarely occurs during transportation of my order.	3.76	.998
	Order Accuracy		
4	My orders rarely contain the wrong items.	3.61	.790
5	My orders rarely contain incorrect quantities.	3.50	1.133
6	My favorite online retail store billing is accurate.	4.00	.569

SPSS Output (*n= 295*)

The recovery dimension contains three elements i.e. interactive fairness, outcome fairness and procedural fairness. Interactive fairness is measured with 9 items covering communication honesty, response against complaints, guidance and complaint handling. The means of nine items ranging from 3.53 to 3.76 shows that most of the respondents were agree with the statements but the propensity of strongly agree is observed low. Likewise the outcome fairness covering compensation offer against complaint shows the means ranging from 3.13 to 3.92 showing that most of the respondents were agree with the statement but values are more inclined towards neutral responses in case of few items. The procedural fairness covering quickness in complaint handling, flexibility in procedures to accommodate customers and overall procedures of online retail store are measured through six statements with mean ranging from 3.53 to 3.71. It shows the similar results as observed in process and outcome dimension that most of the respondents were agree with the statements and the propensity of strongly agree is observed low. The detail reporting of means along with their Std.D is given Table 6. Online retail stores needs to add the customer touch points regarding complaint handling, customer care and fair complaint handling in case of service failure. Customers again, do not show their definitive trust and performance evaluation of complaint handing of online retail stores. The customer's responses are requiring more attention as all means are less than 4 in 5 points Likert scale. The overall results in all dimension i.e. process, recovery and outcome demand for improving all dimensions. The customers who evaluate online retail store buying experience do not show excessive inclination towards online buying, thus it might be linked with low frequency of online buying.

Table No. 6: Mean and Standard Deviation Analysis of Recovery Dimension of Online Retail Store Service Quality

Sr.	Item statements of outcome dimension of online retail store service quality	Mean	Std. D
	Interactive Fairness		
1	The online store communicated honestly with me about my problem.	3.63	0.751
2	I was given a reasonable explanation as to why the original problem occurred.	3.55	0.724
3	The online store's staff was courteous to me when trying to resolve my problem.	3.66	0.781
4	I believed what the online store told me about how my problem occurred.	3.53	0.951
5	The online store gives the customer the ability to talk to a "live" person using a telephone number.	3.58	0.948
6	The online store's staff was sympathetic and caring.	3.61	0.79
7	The online retail store put a lot of positive energy into handling my problem.	3.53	0.862
8	The online retail store's staff told me why the service had failed in the first place.	3.58	0.826
9	The online retail store was quite pleasant to deal with.	3.76	0.82
	Outcome Fairness		
10	Compensation was offered for problems online store created itself.	3.13	1.044
11	The outcome (product) I received was fair.	3.92	0.673
12	In resolving my complaint the online store gave me what I needed.	3.68	0.842
13	I got what I deserved.	3.68	0.904
	Procedural Fairness		
14	The online store's staff responded quickly to my complaint.	3.63	0.852
15	The online store adapted their complaint handling procedures to satisfy my needs.	3.53	0.979
16	I got a chance to tell the online store the details of my problem.	3.71	0.802
17	The online store's staff showed flexibility in responding to my complaint.	3.66	1.021
18	The online store made it easy for me to voice my complaint.	3.61	0.946
19	Overall, the online store had a good procedure for dealing with complaints.	3.66	0.994

SPSS Output (*n= 295*)

The attitude and behavior of the customers who are buying products from online retail stores are measured with five items each. The mean analysis of attitude shows means ranging from 3.55 to 3.76. It is inferred that most of the respondents were agree with the statements and shows the positive attitude towards online retail stores service quality. Likewise, the statements for measuring behavior show the means ranging from 3.39 to 3.71 and it is inferred that customers have positive attitude towards online buying. The details of means and Std.D against each item measuring attitude and behavior are given in Table no. 7. The attitude and behavior are so far positive but in its embryonic stage.

Table No.7: Mean and Standard Deviation Analysis of Recovery Dimension of Online Retail Store Service Quality

Sr.	Item statements of attitude and behavior towards online retail store service quality	Mean	Std. D
	Attitude toward use		
1	Using online store(s) for buying is a good idea.	3.76	0.852
2	Using online store(s) for buying is a wise idea.	3.55	0.921
3	Using online store(s) for buying is satisfactory idea.	3.87	0.844
4	Using online store(s) for buying is a positive idea.	3.76	0.943
5	Using online store(s) for buying is an appealing idea.	3.76	0.943
	Behavioural intention to use		
6	I will keep using online store(s) in the future for buying.	3.66	0.966
7	I will use online store(s) on a regular basis in the future for buying.	3.50	0.952
8	I will frequently use online store(s) in the future for buying.	3.39	0.974
9	I will use my preferred site rather than other Websites for purchasing product(s)	3.47	0.979
10	I will recommend others to use this Website.	3.71	0.835

Spss Output (*n= 295*)

Before applying the hierarchical regression for mediation it is important to apply correlational analysis to test the relation between dimensions of quality of online retail store service, attitude and behavior. The detailed reporting of correlational analysis is given Table 8 given below. All correlational values range from weak to moderate positive significant correlation even at .01 significance level, thus is qualifies for the hierarchical regression for mediation model.

Table No.8: Correlation between Business Autonomy, Personal Autonomy and Income Contribution

Variables	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
Ease of use	--											
Privacy	.322**											
Design	.467**	.337**										
Info Accuracy	.513**	.367**	.534**									
Functionality	.290**	.328**	.156**	.335**								
Order Condition	.481**	.316**	.629**	.616**	.186**							
Order Outcome	.485**	.437	.276**	.353**	.187**	.406**						
Interactive Fairness	.564**	.315**	.217**	.342**	.441**	.248**	.270**					
Outcome Fairness	.419**	.245**	.187**	.443**	.407**	.434**	.382**	.633**				
Procedural Fairness	.541**	.338**	.244**	.421**	.381**	.318**	.356**	.861**	.544**			
Attitude	.629**	.371**	.220**	.351**	.346**	.454**	.232**	.566**	.582**	.524**		
Behavior	.609**	.525**	.368**	.520**	.347**	.566**	.341**	.574**	.589**	.631**	.805**	--

*Note. *p<.05, **p<.01, n=295*

Hierarchical regression analysis was used to test model 1 where the online retail store service dimension has been tested on behavior and Model 2 test the mediated role of attitude between online retail store service quality and behavior. The results of the regression indicated that the ease of use explained 25% of the variance, privacy explained 26% of variance, design only explained 8.3% of variance, information accuracy explained 10% of variance, functionality explained 8% of variance, order condition explained 25.7% of variance, order outcome explained 5% of variance, interactive fairness explained 13.4% of variance, outcome fairness explained 24.2% of variance and procedural outcome explained 35.2% of variance in behavior towards online retail service quality(R2=.670, F (10, 284) = 57.784, p<.000). In model

2 where attitude is introduced as mediator, the results of the regression indicated that the ease of use explained 3.5% of the variance, privacy explained 19.8% of variance, design only explained 2.7% of variance, information accuracy explained 8.4% of variance, functionality explained 4.1% of variance, order condition explained 9% of variance, order outcome explained 6.1% of variance, interactive fairness explained 13.7% of variance, outcome fairness explained 6.7% of variance and procedural outcome explained 29.3% of variance and attitude explained 56.2% of variance in behavior towards online retail service quality (R2=.793, F (1, 283) = 167.063, p<.000). In model no.02, income contribution was added and ∆R2 was found .184. The results of the regression model no.02 indicated the personal autonomy supplemented with income contribution explained 74.2% of the variance (R2=.742, F (1, 73) = 103.639, p<.000). The R change indicated the change of 12.2% where attitude is introduced as mediator conforming partial mediation.

Table No. 9: Hierarchical Regression of Online Retail Store Service Quality, Attitude and Behavior

Independent Variables	*B*	SE (*B*)	*β*	Δ*R*
Model.1				
Ease of Use	.320	.064	.256	.670
Privacy	.405	.062	.261	
Design	.105	.061	.083	
Information Accuracy	.009	.048	.010	
Functionality	.010	.051	.080	
Order Condition	.251	.052	.257	
Order Outcome	.063	.054	.050	
Interactive Fairness	.144	.088	.134	
Outcome Fairness	.297	.063	.242	
Procedural Outcome	.389	.080	.352	
Model.2				
Ease of Use	.043	.058	.035	.122
Privacy	.306	.050	.198	
Design	.035	.050	.027	
Information Accuracy	.082	.039	.084	
Functionality	.053	.041	.041	
Order Condition	.088	.043	.090	
Order Outcome	.077	.044	.061	
Interactive Fairness	.147	.070	.137	
Outcome Fairness	.082	.053	.067	
Procedural Outcome	.324	.064	.293	
Attitude	.519	.040	.562	

Notes

Model 1Adjusted R= .659, R^2=.670. Model 2 Adjusted R= .785, R^2=.793, F value=98.434, p<.000, Durban Watson=2.212

The model 1 and model 2 shows that all dimensions are positively affecting attitude and behavior of customers, thus it is concluded that all dimensions of online retail store service quality are vital. The leading dimensions in determining online retail store service quality are ease of use, privacy, order condition and procedural fairness impacting positively the behavior of customer while measuring service quality. All these leading dimensions also support the Technology Accepting Model (TAM) that states that customers adopt and show a positive attitude and behavior towards that technological advancement which offer ease of use including external variables that could be privacy, order condition and procedural fairness in this case coming from SERVQUAL literature support. In case of attitude as mediator, the leading dimension become attitude thus concluded that all service quality dimension if correlated with attitude they can become the most prominent variable to positively impact positive behavior towards online retail store in case of customers residing in three major cities of Punjab, Pakistan. Leading online retail stores must only ensure the ease of use, privacy, order condition and procedural fairness to affect the behavior of customers but also pay devoted attention towards attitude of customers as well.

5. Future Direction

This study measures the overall attitude and behavior of customers, whereas the components of subjective norms and perceived behavior control are not added in the model. In future, further study can be conducted while adding subjective norms and perceived behavior control for more comprehensive understanding of Theory of Planned Behavior (TPB). The gender perspectives can also be studied while measuring service quality of online retail stores, attitude and behavior towards online retail stores. Furthermore, the mentioned dimensions of online retails stores for service quality and its impact of customer loyalty can also be studied and that mat helpful for branded online stores.

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