Sustainable Service Quality and Customer Loyalty: The Role of Customer Satisfaction and Switching Costs in the Pakistan Cellphone Industry

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Abstract: Generally, the current scenario in the hyperactive corporate world, and specifically in the telecom sector, renders companies to compete concurrently on two fronts: Expansion of their customer base and the retention of their current customers. In order to explore and examine the latter concept, the current study hypothesizes the effects of sustainable service quality on customer loyalty with a mediating role of customer satisfaction conceptualized through the reciprocity theory. The study also considers the suggested moderating role of switching cost by theorizing the Apostle model. Pertinently, the satisfied customer may not be loyal if the switching cost is low, since the dynamics of the switching cost provide a useful insight into the phenomenon of retaining the customers through customer satisfaction. The research opts for explanatory study where data were conveniently collected. The study has used the PROCESS macro model 4 and 14 to analyze the data. Findings reveal that the role of customer satisfaction is significant but the effect of the switching cost was considered to be insignificant, elucidating that a satisfied customer will remain loyal even if the switching cost is low. It means that sustaining service quality longitudinally did not affect customer loyalty in the presence of a low switching cost. With a view to complement the study, managerial implications of a switching cost have also been discussed.

Keywords: sustainable service quality; customer satisfaction; customer loyalty; switching cost; Apostle model; Pakistan telecom sector

1. Introduction and Background

Under the current scenario of the booming mobile phone service industry of Pakistan, service providers are becoming ever-vigilant to pursue a strategy to sustain their market share by retaining existing customers. In this context, Yankee Group (2001) [1] has pointed out the mobile operators’ estimation to win over a fresh client costs seven times more than the yearly cost of keeping an existing client. In line with this estimation, the cellular phone service providers in Pakistan also find it quite fitting and opportune to focus more on their existing clients than budgeting an extra amount to devise a new game-plan for winning over new clients. Similarly, a link has been identified by Heejin et al. (2006) [2] between the satisfaction as a result of the quality of service and loyalty to that service, where customer satisfaction (CS) can help to maintain an existing client base which results in a long-term customer loyalty [3].

Zeithamal and Bitner (1996) [4] were able to find determinants which could affect consumer satisfaction, such as price package, quality of call, general repute of the company and its values, network coverage, and availability of the network. To achieve the desired results, the service providers in the cellular phone sector generally remain focused either on certain standard and time-tested...
strategies or resort to some innovative mechanics to target existing customers to retain them as loyal customers. Their emphasis is on the provision of sustainable quality services for the satisfaction of their customers, for which they strive consistently by adopting the approach of improvising their processes and procedures.

The telecom industry of Pakistan has been growing very rapidly for almost the last 16 years. Pakistan, despite being a country of diverse demographics, has achieved a very fast telecommunication development and remains as one of the fastest growing telecom markets in Asia [5]. This pertinent boom in the telecom sector of Pakistan and its erratic market dynamics showing a large potential to grow further has not only attracted the attention of the business community, but also foreign investors and academic researchers. In the context of research however, there is still a need to study the unexplored link between customer satisfaction and customer loyalty with a moderating effect of a switching cost, particularly with reference to the cellular phone service provider industry of Pakistan, as proposed by Irfan et al. (2016) [6]. Their findings are conclusive, however, they suggested that the interactive effect of a switching cost still provides an avenue for future research, which needs to be further explored in the presence of sustainable service quality. Logically, their suggestion motivated and provided us stimuli to analyze the impact of a switching cost as a moderator in the suggested relationship of customer satisfaction and customer loyalty in the hyper-competitive cellular market of Pakistan.

2. Literature Review

2.1. Theoretical Foundations

2.1.1. Theory of Reciprocity

Reciprocity theory implies a behavioral response wherein benevolent actions get rewarded while hostile ones are castigated. In such a relationship, an act of benevolence is judged not only by its outcomes but also by its intentions. The theory provides an explanation of how parties concerned are obliged to reciprocate the action mutually—an action of one party obliges the other party to reciprocate that action as a compensating movement [7]. Such shared expectations put the parties in a relationship of sure rewards that set the tone not only for current behavior but also provide the indication for future possibilities [8]. As a consequence, a basis is established for a future strong relationship between the two parties [7,8].

The above explanation leads us to a very safe assumption that provision of sustainable service quality can win customer loyalty while shared expectations and rewards are the determinants of customer satisfaction, which is responsible for earning customer loyalty on a long-term basis. In this context, the findings of Schneider et al. (1998) [9] are very relevant regarding their conclusion that, generally, customers’ perceptions of service quality and the global climate for service pointed to a strong reciprocity in the mutual relationship of sustainable service quality and customer loyalty.

Given this empirical evidence from the literature, our study considers its first research question: What role does satisfaction play in the context of sustainable service quality and customer loyalty?

2.1.2. Apostle Model

Jones et al. (1995) [10] presented the Apostle model, which hypothesized an arrangement of a link between customer satisfaction and customer loyalty. Under this arrangement, clients have been placed in four sets of categories, i.e.:

- “Loyalist/apostle (high satisfaction ± high loyalty)”;
- “Defector/terrorist (low satisfaction ± low loyalty)”;
- “Mercenary (high satisfaction ± low loyalty)”;
- “Hostage (low satisfaction ± high loyalty)”.

Customer satisfaction under this arrangement was used as a driver of customer loyalty. Pertinently, the link among quality of service, customer satisfaction, and customer loyalty is neither
linear nor straightforward. Similarly, enhanced client satisfaction is not necessarily bound to produce customer loyalty or some sort of positive outlook in the clientele as there are other multiple factors involved in defining customer loyalty, such as convenience, expectations, customer service, personal relationships, rewards, reputation, community outreach, and switching cost.

Conversely, the high switching costs can prove to be the prohibiting factor to abandon the loyalty, despite being dissatisfied with the service. Siddiqui et al. (2016) [11] found that loyalists and hostages appeared to fall into more profitable segments as their inclination to switch over was found to be low both in the highly competitive and less competitive markets. Prima facie, the switching cost appears to moderate the link between satisfaction and customer loyalty. On the basis of existing literature and the Apostle model, our study leads us to the second research question:

To what extent does switching cost play its moderating role between customer satisfaction and customer loyalty?

Switching cost has been introduced as an external variable in the linkage between customer satisfaction and customer loyalty since the concept of switching cost does not appear to fall within the ambit of reciprocity theory. Such a scenario justifies the use of the Apostle model to determine the moderating role of the switching cost in the link between customer satisfaction and customer loyalty.

This study remains focused specifically on the switching cost and its moderating effects on the relationship between customer satisfaction and customer loyalty. On the other hand, the study also envisages investigating the mediating effect of customer satisfaction on the link between sustainable service quality and customer loyalty. However, as per various market structures, the degree of a client’s satisfaction can be different [12,13]. Hence, it is all the more pertinent to prove whether some sort of competitiveness in a specific business field results in a change in the link between the constructs. For the sake of evaluating the hypothesis, a satisfaction–loyalty model has been developed and simulated in the mobile services sector of Pakistan.

2.2. Customer Loyalty

The concept of customer loyalty refers to a client’s commitment based on a very positive outlook to a brand, a service provider, or a particular sales outlet [14] which is revealed as a result of regular and recurring buying of a product or service. Kotler and Keller (2006) [15] have set the pattern by elaborating the major indicators of customer loyalty: Repeat purchase—denotes that customer displays preference to the purchase of a particular service; retention—signifies sticking to the brand and resistance to change despite negative influence or perception of the product or service; and referrals—implies recommending and providing reference to others for the purchase of specific products and services. With this background, customer loyalty has been pronounced as “a deeply held commitment” to recurrent buying or endorsing a preferred product or service regularly in the future, notwithstanding the favorable circumstances such as situational influences and marketing efforts having the outright potential to impact customer choice, resulting in switching behavior [16].

Conceptually, the marketing literature attributes customer loyalty either to behavior or to attitude [16,17]. It was Day (1969) [18] who, for the first time, introduced these two pertinent dimensions of loyalty. In this context, he acknowledged that the purchase patterns (behavioral loyalty) cannot make a distinction between the two types of loyalty, i.e., true loyalty or fake loyalty, since these can be attributed to, or may be the result of, lack of choice or mere convenience on behalf of the customer.

Based on such discussion, it appears that the evaluation of loyalty with regard to both the behavior and attitude are aptly relevant. Researchers in their recent studies have used both behavioral and attitudinal measures to achieve a consensus on some effective and apposite indicators which comprehensively explain customer loyalty [19–21]. Similarly, based on numerous experimental studies, a positive link appears to exist between customer satisfaction and loyalty [22–24]. There is yet another study where the inference has been drawn to the effect that in developed economies, customer satisfaction is clearly manifested in the cost-effective customer loyalty as against the emerging economic systems [25].
2.3. Service Quality

In this rapidly growing technological and competitive environment, provision of quality service is considered to be an essential policy for the success and survival of service providers [26–29]. For both academics and managers, the main concern has been to determine what service quality means to clients and how better policies can be worked out to meet client expectations [27,30]. Pertinently for the consumer, the quality of service represents a focused evaluation of the acknowledged fundamentals of service, such as comparative quality, physical surroundings quality, and the consequent quality [31]. The first, among others, to define service quality were Lewis and Booms (1983) [32] who defined it as a “measure of how well the service level delivered matches the customer expectations”. With this background, service quality is an outlook of overall conclusion about the service superiority, though the exact nature of this outlook remains a bit unclear.

Parasuraman et al. (1988) [30] introduced the SERVQUAL model and its five dimensions—reliability, responsiveness, assurance, empathy, and tangibles. Earlier research has confirmed that the service quality positively affects client satisfaction, e.g., Minh and Huu, 2016; Babin et al., 2005; Ekinci et al., 2008; Kristensen et al., 2000 [33–36]. Likewise, it has been found that the quality service has a direct impact on customer loyalty [37]. Interestingly, Kristensen et al. (2000) [36] and Irfan et al. (2016) [6] found that loyalty is affected by the service quality both directly and indirectly through satisfaction. According to Kaisiri et al. (2017) [38], it is quite pertinent to apply diverse approaches to enhance service quality and therefore it is imminent to assess the effect of each strategy on various aspects of service quality. Taking the literature review as the basis of the current study, we highlighted the importance of sustainable service quality. According to Stamenkov and Dika (2015) [39], sustainable service quality is the capacity to provide uninterrupted services with exceptional sustainable quality over a long period of time. Thus, in the context of the Pakistani telecommunication sector, it is assumed that sustaining service quality over a longer period of time will positively influence customer satisfaction and sustained customer loyalty even in the presence of a low switching cost.

2.4. Customer Satisfaction

Practically, customer satisfaction follows when the purchasers in a buying situation feel convinced of being fully compensated for the cost being paid by them [40]. This satisfaction is gained from comparing actual past purchases and the customers’ experiences of the potential benefits the brand offers for its foreseen possibilities to appease the customer intents and purposes [41]. Satisfaction has been defined by Oliver (1997) [16] as the fulfillment of the customer’s desire arising out of the customer’s aspiration to own or utilize a service. With regard to consumption-related fulfillment, satisfaction is considered to be the resulting feeling or the judgment that the customer makes when they get a specific level of enjoyment and pleasure from the features of a product or the service itself.

The definition of satisfaction as provided by Oliver was interpreted by Zeithaml and Bitner (2003) [42] who implied that satisfaction results because of a customer’s appraisal of a service vis-à-vis clients’ needs and expectations so as to judge whether that service has fulfilled their needs and expectations. In order of priority, the literature regarding customer satisfaction describes expectancy as the first and the foremost factor of satisfaction succeeded by ostensible or duly acknowledged performance [34]. Literature on customer loyalty and the allied sense of satisfaction or fulfillment has concluded that quality of service is the most prominent factor of satisfaction [43,44].

Customer Satisfaction and Customer Loyalty

The researchers have investigated, in different sectors, the relationship between customer loyalty and customer satisfaction and found a positive link between customer loyalty and customer satisfaction, e.g., a proven relationship between satisfaction and word of motion (WOM) was discovered by Hallowell (1996) [45]; likewise, a positive affiliation was found to be present between satisfaction and retention [46], while a positive relationship between behavioral intentions and satisfaction was also
established by Methlie and Nysveen (1999) [47] and Veloutsou et al. (2004) [48], in the context of the mediating role of satisfaction between service quality dimensions and customer loyalty. Kasiri et al. (2017) [38] found the mediating role to be quite significant; they further suggested that the strength of the relationship between functional quality and loyalty through satisfaction between the two dimensions was the strongest.

Recently, a study has discovered a non-linear affiliation between customer satisfaction and client fidelity. In such an affiliation, it was established that a discontented client’s loyalty was disproportionately quite low and, consequently, the enhanced satisfaction did not materialize into a higher level of loyalty [33,37].

Considering customer satisfaction as a factor of client fidelity, there is a possibility to replicate the customer loyalty model to ascertain some sensitive factors. Switching cost can also be used as an external factor to accomplish customer loyalty while investigating customer loyalty with regard to finding other credible drivers.

2.5. Switching Cost

In terms of marketing terminology, particularly from the customer loyalty perspective, switching cost is considered to be the cost which customers will have to incur on their decision to switch to another product or service provider and would not have been accrued to them had they remained loyal to their existing product or service provider [49]. With reference to shifting barriers, shifting cost is categorized as one of the barriers which results from the investigation [50] within the framework of a customer’s experience of consuming a product or service. For a continued and sustained link between the clients and the service providers, shifting cost has been acknowledged as a crucial causative factor [50,51]. Switching cost has also been termed as the loss of value of investment coupled with other financial costs comprising the costs for fresh search of the products or services and their evaluation and the extra costs of the services for using other providers [52]. Generally, the market structure and its mechanics play a critical role vis-à-vis the link between customer satisfaction and customer loyalty as it affects the overall impact of shifting costs on the link between customer satisfaction and client fidelity.

In case of the market being monopolistic in structure and having a single or a major market share holder as the cellular service provider, switching cost will have little effect on the relationship between satisfaction and brand fidelity. Having no competitive alternative to fall back upon, neither a customer dissatisfied with the service will shift to a new provider, albeit the switching costs are low, nor will a customer dissatisfied with the high shifting costs attempt to shift to the new service provider, as no reasonable alternative is available. The literature about the switching costs unequivocally supports this position, as these costs become relevant and important only when genuinely viable alternative service providers are available in the market.

Based on this criterion, the Jones and Sasser (1995) [10] matrix provides a clue to the issue that switching cost will affect the existence of the off-diagonal groups. Thus, if the switching costs are on the lower side, very few loyal customers who can be declared erratic and false customers (hostages) will be found sticking to the brand of a product or service and the dissatisfaction would result in shifting to other providers.

On the other hand, there is another possible scenario; moneygrubbing customers who are otherwise satisfied but at heart are not loyal could switch to a new provider as the low switching costs will make switching to a new provider quite easy for such customers. On the contrary, in case the switching costs are on the higher side, there is every possibility that many false loyal customers, despite being dissatisfied with the service, will not shift to a new provider, as obviously the higher switching costs become a prohibiting factor for them to resort to change. However, we are unlikely to see moneygrubbing customers, though satisfied, make a shift in their service provider, as the high shifting costs restrain them to shift. Lee et al. (2001) [49] illustrates the relationship between satisfaction and loyalty linkage. In crux, the switching cost appears to be an important factor for a customer’s
decision not to shift to another service provider. In light of the literature review, the focus of our study is to find how the shifting costs influence the link between customer satisfaction and client fidelity.

2.6. Hypotheses of the Study

**Hypothesis 1 (H1)**. Sustainable quality (SSQ) is positively related to customer loyalty (CL).

**Hypothesis 2 (H2)**. Sustainable service quality (SSQ) is positively related to customer satisfaction (CS).

**Hypothesis 3 (H3)**. Customer satisfaction (CS) is positively related to customer loyalty (CL).

**Hypothesis 4 (H4)**. Customer satisfaction (CS) mediates the relationship between sustainable service quality (SSQ) and customer loyalty (CL).

**Hypothesis 5 (H5)**. Switching cost (SC) moderates the link between customer satisfaction (CS) and customer loyalty (CL).

3. Research Methodology

The convenience sampling method has been used to collect data from 250 cellular users, which has been the basis for their selection within the twin cities of Rawalpindi and Islamabad. 213 valid responses were analyzed via statistical package of social sciences (SPSS) (version 21) to test the hypothesized relationships. In this research, customer loyalty was measured by the six-item scale of Dimitriades (2006) [53]. Customer satisfaction was adapted from Walsh et al. (2006) [54]. The SERVQUAL scale was adapted from Parasuraman et al. (1988) [30] and Irfan et al. (2016) [6], with some modification. Switching cost was adapted from the operationalized definition by Burnham et al. (2003) [55].

**Methodology of Analysis**

The phenomenon understudy was tested through structural equation modeling by many earlier researchers, such as Irfan et al. 2016 [6], Ringle et al. 2017 [56], and Rami et al. 2017 [57]. To bridge the methodological gap, the current study analyzed the phenomena with the process regression method, a widely used method of ascertaining the impact of an independent variable on an observed variable. This technique helps to determine which factor matters most, which can be overlooked, and how variables influence one another. Traditionally, the simple regression approach has been used to analyze the mediation and moderation in a stepwise approach. However, the process regression method allows us to conduct both mediation and moderation in to one single analysis [58]. With a view to develop the research framework, various research journals and articles were consulted as the secondary source for the present study undertaken in the study was survey-based, for which a questionnaire was adopted as a primary source of collecting the relevant data. The tests were carried out after data collection, which were scrutinized for valid responses on the basis of which the reliability of the scale was tested. The spirit of the ethics committee to conduct the study was upheld by the researchers themselves through keeping the responses of the respondents confidential. The research tool for the present study was adopted through various sources: Customer loyalty was measured by the six-item scale of Dimitriades (2006) [53]; customer satisfaction was adapted from Walsh et al. (2006) [54]; the SERVQUAL scale was adapted from Parasuraman et al. (1988) [30] and Irfan et al. (2016) [6] with some modification; and switching cost was adapted from the operationalized definition by Burnham et al. (2003) [55]. The adopted scales were contextualized in the context of the population understudy. The statements have been adopted, with a little adjustment of vocabulary, in order to make them more decipherable for the respondents, such as “customer service staff have enough information to answer customer queries”. The questionnaire was comprised of two parts: Questions related to demographic data and the section that measured observed variables. A five-point Likert scale was applied for the variables, with responses as follows: Strongly agree = 5, agree = 4, neutral = 3, disagree = 2, and strongly
disagree = 1. The questionnaires were distributed and collected from users of Pakistan cellular phone services from the twin cities of Islamabad and Rawalpindi. The sample of the study represents the entire population, since at the time of collecting data, the market share of Jazz was reported to be 34%, whereas on the basis of the survey conducted, 33.8% respondents were Jazz subscribers. The structure of age between 14 to 60 was adopted in the survey in view of the demographic indicators of Pakistan, where people beyond 60 years of age found cellphones to be less user-friendly.

4. Results

4.1. Data Analysis Technique

The study undertaken was quantitative in nature. Accordingly, several tests were applied to test the hypotheses. A survey based on a 28-item questionnaire was conducted to gather the data. The sample characteristics were made explicit through frequency tables and Cronbach coefficient alpha was used to check the reliability of all the variables. Findings suggest that all the values are greater than 0.70 [59]. As far as construct validity is concerned, all of the understudied items converged on their underlying factors, ensuring construct validity [6]. The Andrew F. Hayes process was applied to undertake the mediation–moderation analysis to ascertain the role of the mediator and the moderator between the independent and dependent variables.

In the Table 1 sampling characteristics represent gender, age, educational qualification, current network, and occupation and they embody specifically the cellphone users of the twin cities of Islamabad and Rawalpindi. As shown in the (Table 1) 65.7% of the respondents were male, whereas 140 participants were within the age bracket of 21–35 years. Many participants were holders of Master’s degrees (48.8%). Mostly, the respondents were employed (71.4%). The most preferred network of the respondents was Jazz (33.8%).

Table 1. Sampling characteristics.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>140</td>
<td>65.7%</td>
</tr>
<tr>
<td>Female</td>
<td>73</td>
<td>34.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>14–20</td>
<td>14</td>
<td>6.6%</td>
</tr>
<tr>
<td>21–35</td>
<td>140</td>
<td>65.7%</td>
</tr>
<tr>
<td>36–49</td>
<td>31</td>
<td>14.6%</td>
</tr>
<tr>
<td>50–60</td>
<td>28</td>
<td>13.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>9</td>
<td>4.2%</td>
</tr>
<tr>
<td>Bachelors</td>
<td>82</td>
<td>38.5%</td>
</tr>
<tr>
<td>Masters</td>
<td>104</td>
<td>48.8%</td>
</tr>
<tr>
<td>Doctorate</td>
<td>18</td>
<td>8.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jazz</td>
<td>72</td>
<td>33.8%</td>
</tr>
<tr>
<td>Ufone</td>
<td>30</td>
<td>14.1%</td>
</tr>
<tr>
<td>Zong</td>
<td>44</td>
<td>20.7%</td>
</tr>
<tr>
<td>Telenor</td>
<td>67</td>
<td>31.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Profession</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>61</td>
<td>28.6%</td>
</tr>
<tr>
<td>Employee</td>
<td>152</td>
<td>71.4%</td>
</tr>
</tbody>
</table>

In the Table 2 the reliability of the 10-item scale of service quality was 0. The 7-item scale of customer satisfaction was 0.865, whereas the 6-item scale of customer satisfaction was 0. The 5-item
scale of switching cost had a comparatively low reliability coefficient of 0. However, according to Camble (1976) [60], the values of Cronbach’s Alpha should be >0.6.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Cronbach’s Alpha</th>
<th>No of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Service Quality</td>
<td>0.844</td>
<td>10</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>0.865</td>
<td>7</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>0.849</td>
<td>6</td>
</tr>
<tr>
<td>Switching Cost</td>
<td>0.656</td>
<td>5</td>
</tr>
</tbody>
</table>

### 4.1.1. Assumptions of Regression

Various assumptions of regression were ensured. For details see Table 3 below.

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>Threshold Point</th>
<th>References</th>
<th>Values of Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durbin Watson</td>
<td>1.5–2.5</td>
<td>Hutcheson and Nick 1999 [61]</td>
<td>2.021</td>
</tr>
<tr>
<td>Tolerance Value</td>
<td>Tolerance &gt; 0.2</td>
<td>Vasu 1979 [62]</td>
<td>SSQ</td>
</tr>
<tr>
<td>Variance Inflation</td>
<td>VIF &lt; 4</td>
<td>Vasu 1979 [62]</td>
<td>SSQ</td>
</tr>
<tr>
<td>Mahal Distance</td>
<td>Cases with Higher</td>
<td>Steenkamp et al. 1991 [63]</td>
<td>Min</td>
</tr>
<tr>
<td>Cook’s Distance</td>
<td>4/(n-k-1)</td>
<td>Steenkamp et al. 1991 [63]</td>
<td>0.032</td>
</tr>
</tbody>
</table>

VIF: Variance inflation factor is a tool to calibrate collinearity among predictor variables within a multiple regression. SSQ: Sustainable Service Quality. CS: Customer Satisfaction. SC: Switching Cost.

Our data supported all the preliminary requirements of regression assumptions, so we further carried out process regression to test our proposed hypotheses.

### 4.1.2. Mediation Analysis

Customer satisfaction was used as a mediator variable to analyze how much it mediates the link between quality of sustainable service and customer loyalty. In the Table 4 the results without mediation proves our first hypothesis, where the path beta was 0.587 and the p-value was significant. The results reinforced the bond between sustainable service quality and customer loyalty. Empirical evidence from the study of Schneider et al. (1998) [9] also proved the positive relationship between service quality and customer loyalty. Interestingly, Kristensen et al. (2000) [36] and Irfan et al. (2016) [6] found that the service quality had an impact on the loyalty both directly and indirectly through satisfaction. The results also supported a second hypothesis, i.e., sustainable service quality is positively related to customer satisfaction, where the path beta was 0.831 with a significant p-value. This result is not surprising, since according to Kaisri et al. (2017) [38] service quality (functional and technical) has a higher impact on customer satisfaction which, in turn, has a significant effect on customer loyalty.

The hypothesis H3 that poses the positive relationship between customer satisfaction and customer loyalty was also substantiated when the path beta was 0.642 with the p-value significant shown in the Table 4. Hadi et al [6] also concluded that the loyalty of customers strongly depended upon customer satisfaction. The results of mediation that we have obtained is through “process” by the process regression and here we applied the model number 4 and have bootstrapped at 5000.
Table 4. Mediation.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Path</th>
<th>Path Beta</th>
<th>Indirect Effect</th>
<th>S.E</th>
<th>Total Effect</th>
<th>Variance Accounted</th>
<th>T-Value</th>
<th>P-Value</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effect, Without Mediation</td>
<td>SSQ → CL</td>
<td>0.587</td>
<td>0.066</td>
<td></td>
<td>8.84</td>
<td>0.000</td>
<td>Accepted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mediation Effect</td>
<td>SSQ → CL</td>
<td>0.06</td>
<td>0.07</td>
<td></td>
<td>0.910</td>
<td>0.363</td>
<td>Rejected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effect</td>
<td>SSQ → CS</td>
<td>0.831</td>
<td>0.523</td>
<td>0.057</td>
<td>0.5874</td>
<td>89.5%</td>
<td>12.9</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>CS → CL</td>
<td>0.642</td>
<td></td>
<td>0.057</td>
<td>0.5874</td>
<td></td>
<td>11.1</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

SSQ: Sustainable Service Quality. CL: Customer Loyalty.

Table 5 explains that the moderation model had an $R^2$ of 0.556 and a $p$-value of <0.05 which reflects the significance of the model. The inference reached highlights that full mediation had occurred, since the mediating variable had an indirect effect of 0.523, i.e., making the relationship insignificant between quality of service and client fidelity, whereas the total effect of the mediation was 0.587, meaning that 58.7% change occurred in the full model and, as a result, H4 stands accepted. The H4 hypothesis, i.e., customer satisfaction mediates the relationship between service quality and customer loyalty, was also substantiated while making the first hypothesis insignificant due to full mediation of customer satisfaction. The results proved that customer satisfaction had a strong mediating role in establishing the direct relationship between sustainable service quality and customer loyalty. In case the mediation occurs, the direct relationship between the predictor and outcome variable becomes insignificant [6].

Customers are satisfied when they are compensated by the firm in any event of service failure whether in monetary terms or non-monetary terms such as customer loyalty cards, bonus points, and discounts. This compensation generates satisfaction among customers that leads towards customer loyalty. In line with the results, it is proved that if a customer is highly satisfied, they will be highly loyal; this portrays the true loyalist situation defined by the Apostle Model.

Table 5. Mediation moderation.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Path</th>
<th>Path Beta</th>
<th>Indirect Effect</th>
<th>S.E</th>
<th>Total Effect</th>
<th>Variance Accounted</th>
<th>T-Value</th>
<th>P-Value</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effect, Without Mediation</td>
<td>SSQ → CL</td>
<td>0.587</td>
<td>0.066</td>
<td></td>
<td>8.84</td>
<td>0.000</td>
<td>Accepted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mediation Effect</td>
<td>SSQ → CL</td>
<td>0.06</td>
<td>0.07</td>
<td></td>
<td>0.910</td>
<td>0.363</td>
<td>Rejected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effect</td>
<td>SSQ → CS</td>
<td>0.831</td>
<td>0.523</td>
<td>0.057</td>
<td>0.5874</td>
<td>89.5%</td>
<td>12.9</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>CS → CL</td>
<td>0.642</td>
<td></td>
<td>0.057</td>
<td>0.5874</td>
<td></td>
<td>11.1</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>Model R²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderation Effect</td>
<td>SSQ → CS</td>
<td>0.831</td>
<td>0.063</td>
<td></td>
<td>12.9</td>
<td>0.000</td>
<td>Accepted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effect</td>
<td>CS → CL</td>
<td>0.693</td>
<td></td>
<td>0.307</td>
<td>2.25</td>
<td></td>
<td>2.25</td>
<td>0.025</td>
<td>Accepted</td>
</tr>
<tr>
<td>Model R²</td>
<td></td>
<td>55.6%</td>
<td></td>
<td>2</td>
<td>65.34</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Int_1: Intructive value (Product of Iv x Moderator).

4.1.3. Moderation Analysis

For the moderation analysis, we followed the “process” defined by Andrew F. Hayes (2013) [64] to calculate the moderating effect of switching cost. Using the process, we assigned CL as outcome (Y), took SQ as an independent variable (X), customer satisfaction as a mediator (M), and switching cost as a moderator (V).
Table 5 explains that the moderation model had an $R^2$ of 55.6% and a $p$-value of <0.05 which indicates the significance of the model. Customer satisfaction and the switching cost have been taken as product terms, a result of which we got an $\text{Int}_1$ value of $-0.0343$, a $p$-value of 0.730, and a $t$ value of $-0.345$, which explains the poor moderating effect. Consequently, H5 stands rejected. This surprising result might be due to sustainable service quality longitudinally.

The study was based upon the reciprocity theory (1962) and the Apostle Model\textsuperscript{10}. According to the reciprocity theory generally, it was established that the quality of service results in client fidelity. The results of this research have validated this concept. Customer satisfaction is the result of sustainable service quality and is an imperative determinant of customer loyalty. Reciprocity is also considered to be a social norm, which puts the parties concerned under an obligation to reciprocate the action mutually, i.e., an action of one party obliges the other party to reciprocate that action as a compensating movement\textsuperscript{7}. Such shared expectations put the parties in a relationship of sure rewards that set the tone not only for current behavior, but also provide the indication for future possibilities\textsuperscript{8}. As a consequence, a basis is established for a future strong relationship between the two parties (e.g., Cropanzano and Mitchell 2005; Griffith et al. 2006; Jap and Ganesan 2000, and Leonidou and Kaleka 1998\textsuperscript{11,65–69}). Our study also evidently reinforced the theory of reciprocity which displayed the positive results to prove hypothesis 1 and 2.

However, working of the dynamics of customer loyalty cannot be over-simplified, since it is quite difficult for the companies to understand the concept of customer loyalty which, in turn, has two levels—pure versus spurious. For a certain level of satisfaction, the switching cost may be an important and relevant factor for the customers as their loyalty may be placed into two separate sub-levels, low customer loyalty and high customer loyalty, which remain dependent on the level of switching cost.

The contrast between the moneygrubbers/mercenaries and the hostages is the result of the controlling effect the switching cost has on the satisfaction–loyalty relationship. These are the two situations described by the Apostle model, where customers either become mercenaries due to low switching costs or they have to remain as hostages in case of high switching costs.

For a continued and sustained link between the clients and the service providers, shifting cost has been acknowledged as a very crucial causative factor\textsuperscript{50,51}. Switching cost has also been termed as the loss of value of investment coupled with other financial costs comprising the costs for fresh search of the products or services and their evaluation and the extra costs of the services for using other providers\textsuperscript{52}.

Based on statistical findings, we reached the conclusion that switching cost in the monetary terms does not control the relationship between customer satisfaction and client fidelity. Quite pertinently, as per the results generated by the process regression method, a 100% increase in the value of the product term ($\text{Int}_1$) moderating effect will bring about a 3% decrease in customer loyalty.

From our findings, it is clear that switching cost is not a key moderation in the link between customer satisfaction and customer loyalty in the backdrop of the Pakistan telecom sector. Putting it differently, it can be said that shifting expense is not the key moderation for the link between customer satisfaction and customer loyalty, leading to the conclusion that satisfied customers will remain loyal even if the switching cost is low. This unpredicted finding of the study can only be defended keeping in view the aberrant dynamics of the unusually booming cellular phone services sector of Pakistan.

5. Discussion

Conceptually, customer loyalty is either behavioral or positional vested in the outlook\textsuperscript{17,70}. It was acknowledged by Day (1969)\textsuperscript{18} that buying patterns covered under behavioral loyalty do not distinguish between the two types of loyalty (true loyalty or fake loyalty), since these can be attributed to, or may be the result of, lack of choice, or merely a matter of convenience on the part of the customer. Therefore, it can be safely stated that both the measures of loyalty with regard to behavioral and positional outlook are relevant. Likewise, a positive association was found to be present between satisfaction and retention\textsuperscript{46} while Methlie and Nysveen (1999)\textsuperscript{47} and Veloutsou et al. (2004)\textsuperscript{48}
discovered an effective link between behavioral intentions and satisfaction. Based on numerous empirical studies, a positive link appears to exist between customer satisfaction and loyalty, e.g., Aksoy et al., 2013 [24], Grabner-Kräuter and Faullant, 2008 [22], and Türkyılmaz and Özkan, 2007 [23].

Our research also reinforced this relationship by providing statistical evidence. We theorized this relationship through the Apostle model that provides a natural grouping of an individual’s relationship between satisfaction and loyalty, resulting in a classification of customers [10]. Those have been categorized into four groups: Loyalist/apostle, defector/terrorist, mercenary/moneygrubbers, and hostage. We found out that if a customer is highly satisfied, they are more likely to remain loyal to a particular firm or brand. The statistical value of path beta between CS and CL is 0.642 which indicates the positive link between the suggested relationships of customer satisfaction and customer loyalty.

Satisfaction is impacted directly by sustainable service quality; therefore, customers with the insight and perception of sustainable service quality are generally found to be in a state of high satisfaction. Tactically, the firms featuring a higher level of service value and excellence through polite and courteous staff and highly skilled workers make an impact in the physical environment, such as inflight comforts and facilities, and the outcome excellence values such as the provision of security and personal care make it a point to ensure that the companies’ resources get the desired results; i.e., their customers have the ultimate feeling of high satisfaction.

The relationship between sustainable service quality and customer satisfaction has been substantiated through our recent study which manifested the strong statistical evidences (0.831 beta path) to prove this relationship. From these inferences, we may conclude that customers tend to be more satisfied if they are being provided with quality service longitudinally. Numerous competing quality–satisfaction–behavioral intention models were evaluated by Dabholkar et al. (2000) [70] and Lee (2013) [71], who confirmed the mediating effect of customer satisfaction.

It was found that the quality of service had a direct impact on customer loyalty, while Kristensen et al. (2000) [36] established that loyalty is affected by the quality of service both directly as well as indirectly through satisfaction. Actually, the service is an activity where production and consumption generally occur concurrently. In the purchaser–seller interface the service is to be provided to the client. This interface has an effect on the identified service and the upshot of this interface is quite important to the clients’ appraisal of the service quality. (Grönroos, 1983) [72]. Thus, we hypothesized that sustainable service quality was positively related to customer loyalty; this was later ascertained with strong numerical and statistical proof. Path beta of this link was quite significant (0.587) when checked. However, when customer satisfaction was introduced as a mediator, the results were quite surprising when analyzed. This mediation of customer satisfaction had made the preceding relationship insignificant. A distinctive difference in the values of path beta was observed, which led us to conclude that the presence of customer satisfaction is indispensable in establishing a strong relationship between sustainable service quality and customer loyalty. A number of empirical studies proved that customer satisfaction mediates the relationship between diverse factors and customer loyalty. Some of this research was conducted by Caruana (2002), Wang et al. (2006), Turel and Serenko (2006), Akbar et al. (2010), Santouridis and Trivellas (2010), Deng et al. (2009), Lim et al. (2006), Picon et al. (2014), Lee (2005), Chang (2015), Irfan et al. (2016), and Kim et al. (2016) [2,6,51,73–80].

The cellular phone market structure plays a critical role vis-à-vis the link between customer satisfaction and customer loyalty, as it affects the result of switching cost on the link between customer satisfaction and customer loyalty. In the case of the market being monopolistic in structure and having a single or a major shareholder as the service provider, switching cost in the cellular phone industry will have a little impact on the relationship between satisfaction and customer loyalty. However, in the competitive market structure, where switching costs are comparatively low, its impact needs to be assessed. Our study worked on this phenomenon and found out that switching cost has little moderating effect on the relationship between customer satisfaction and customer loyalty. These results led us to the conclusion that a switching cost in monetary terms does not have any moderating role, particularly in a highly competitive and erratic market structure like that of the Pakistani cellular
industry. Based on the level of relationship span and usage experiences, the effects of switching costs on customer loyalty are dissimilar.

6. Limitations & Future Directions

Basically, the scope of our study remained restricted due to limited resources, including the limited sample size, time, and finances. Conceptually, the study was restricted to the service sector, i.e., to the telecom industry/cellular phone sector of Pakistan, which was further narrowed down to the twin cities of Islamabad and Rawalpindi. It has a further scope of investigation by taking a large sample size which may enhance its generalizability. It is also favorable to take into consideration the other antecedents that may enhance customer loyalty, such as customer commitment, customer trust, etc. Switching costs may be incurred in monetary as well as in non-momentary terms, such as time efforts and emotional efforts. We have analyzed the switching cost in monetary terms, which leaves a gap for future researchers to work on non-monetary switching costs. Since the role of switching cost as a moderator has proven to be weak, it can be examined further by switching its role from moderator to mediator.

However, this study has also a positive aspect to it as well, since it can be attributed also to the sectors pertaining to the products, e.g., automobiles, smart phones etc.

The results also indicate that customer satisfaction has a crucial and critical role in building the link between quality of service and customer loyalty. Therefore, the concerns already expressed by several researchers, that companies should focus more on measuring customer loyalty and not merely on achieving customer satisfaction, e.g., Aksoy et al., 2013, Anderson and Mittal, 2000, Oliver, 1999 and Rust et al., 1995 [24,70,81–83], are quite relevant and valid which need to be given due consideration.

7. Managerial Implications

The inferences of our study in terms of managerial implications can be generalized to other product and service industries. However, specifically in the case of the telecom sector of Pakistan, our results highlight some guiding principles for management to follow. Surprisingly, the study showed that the switching cost is not a key moderation in the link between customer satisfaction and customer loyalty. The management is, therefore, required to devise such plans and strategies as to enable the companies to mitigate the effects of the factors other than the low switching cost as it has not been found to be an interactive variable. In this context, the major components or factors concerning customer satisfaction are the call rates, the packages, the call quality, the network spread, and the level of connectivity. Since call rate packages are quite competitive in the Pakistani telecom market, the focus of the customers naturally shifts to the quality of call, the network coverage, and connectivity. In these areas the customers mostly feel disappointed, as in majority of the cases, the quality of call, network coverage, and connectivity remain comparatively poor and sub-standard. Incidentally, the service providers are focusing more on the transient strategies, particularly on their innovative aspect of the cheap packages than on the differentiating strategies.

The differentiating strategies maintain that service marketers must focus on the need to create and implement durable strategies. Characteristically, it is a framework for identifying strategies resistant to competitive imitation, based on the positioning strategy which explains the distinctions among the services provided by the competitors. Distinctness is essentially the way positioning is carried out by the promotion of pronounced features and the extra advantages. For example, in advertisement messages, companies differentiate by highlighting the extra advantages or the company’s hallmarks and traits that impel the brand to be unique. Others focus on personalized services, competitiveness in price and quality, and niche products. In marketing, the companies also use a number of tools to promote their brand distinctiveness, such as a clearly distinguishable name, such as Pakistan Mobile Communications Limited with the logos and symbols of Mobilink and Jazz or Pakistan Telecom Mobile Limited with the logo of Ufone, meaning an effective and distinct brand logo provides for visually driven methods to differentiate.
As a result, the competing companies for attaining maximum market share will have to focus on those major factors which are achievable through the acquisition of the latest technology, such as introducing 3-Generation and 4-Generation. To achieve a competitive edge and leadership in the sector, management should act fast to acquire the technology. The implementation and execution of the latest technology will also help the acquiring company on two accounts, i.e., winning over fresh clients and sustaining the current customer base.

Acquisition of the latest technology also goes a long way in providing the services with added features to the customers. However, these value-based services put the companies under an obligation, i.e., to achieve “total quality management” (TQM), which can be achieved through:

“Doing the right things—through effectiveness”;
“Doing things right—through efficiency”;
“Doing the right things right the first time and every time—through continuous improvement”.

Apart from the above features, TQM also guides the companies to strengthen their customer service for maximizing customer satisfaction. Regular feedback from customers is an essential part of the implementation and execution of TQM. In some cases, such as post-paid connections, the switching cost is higher and therefore even the dissatisfied customers remain loyal to the service provider. This creates a hostage situation and not a pure loyalty, since they are compelled to stay with the same carrier due to high switching costs. Similarly, in the post-paid connections, most of the features of the packages offered are either superfluous or redundant for the majority of customers. This situation offers a very good opportunity for service providers to attract and retain customers through developing customized packages for the post-paid connections, which will ultimately be making them loyal customers.

In summary, the inference is that incentives, such as the customized loyalty packages along with well-planned customer satisfaction programs, can prove to be useful in enhancing customer loyalty, particularly keeping in view that the switching costs in the current market structure of the mobile service industry of Pakistan are comparatively very low. Since the sustainable service quality plays a pivotal role in customer retention or customer repurchase intention leading to higher customer satisfaction and loyalty, service providers are required to focus on improving and sustaining the service quality longitudinally for retaining their customer base—a prime objective of cellular phone service providers, which is universally relevant in the telecom sector.

8. Conclusions

In order to figure out the importance of customer satisfaction and switching costs in the Pakistani cellular market, this study hypothesized customer satisfaction as a mediator between service quality and customer loyalty, while using the switching cost as a moderator between customer satisfaction and customer loyalty. This study showed that customer satisfaction does mediate significantly between sustainable service quality and customer loyalty, while as a result of mediation, the direct relationship between sustainable service quality and customer loyalty became insignificant. On the other hand, we found the switching cost to be a weak and insubstantial moderator in the linkage between customer satisfaction and customer loyalty. Results of our research led us to the conclusion that the switching cost in the highly competitive but erratic market structure of the Pakistani cellular industry is generating minimal moderating effects in the linkage between customer satisfaction and loyalty. As a result, our findings have shone a light on a big challenge for future researchers to focus on; to study the undercurrents of the workings of the telecom sector of Pakistan, as the switching cost has not been found to be an effective and significant variable.

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