Chapter 7

Summary, Conclusion and Implications

This chapter summarizes the major findings of the study. It also discusses the theoretical and managerial implications of the study, limitations of the study and future research directions.

7.1 Major Findings

The purpose of the study was to know the role of perceived justice on customer satisfaction with service recovery and their behavioral intentions. To understand this, the following objectives were set:

1. To investigate the role that perceived justice plays in shaping customer satisfaction and dissatisfaction.

2. To determine the impact of satisfaction or dissatisfaction on behavioral outcomes of the customers facing service failure.

3. To examine the indirect impact of customers satisfaction with service recovery on the behavioral outcomes of the affected customers.

4. To examine the moderating impact of severity of service failure on customer satisfaction with service recovery.

5. To examine whether a service recovery paradox exists or not.
The present study is based on primary survey. The data was collected in two stages. In the first, data was collected for the development and refinement of the scale. The items for the scale were developed after an extensive literature survey. The items adapted from the existing literature were reviewed and modified and a few new items were introduced after interviews with few customers. The measure included fifty two items with each item ranging on a 7-point Likert scale ranging from ‘very strongly agree’ to ‘very strongly disagree’. Data for pre-testing was obtained from a usable sample of 241 respondents.

In the second stage, data was collected to test the model fit and the hypothesized relationships between the constructs. In this stage the questionnaire was administered to 900 mobile phone users of which a usable sample of 752 respondents was received yielding a response rate of 83.55%. The data for this purpose was collected from major cities of Punjab (Chandigarh, Ludhiana, Jalandhar and Amritsar) and National Capital Region (Delhi, Gurgaon, Noida and Ghaziabad).

Before pre-testing the scale, the instrument was sent to three renowned academicians and researchers in the relevant field to check the content validity of the instrument. They were asked to evaluate whether each item under the construct measures the relevant construct or not. As per their suggestions, all ambiguous, double-barreled and redundant items were deleted from the instrument. This process resulted in the deletion of 10 items, leaving a pool of 42 items under nine constructs for further analysis.

The major findings of the study are as under:

The revised scale was first refined using traditional psychometric techniques as explained by Churchill Jr., Ford and Walker (1974); Ruekret and Churchill (1984); Netemeyer, Bearden and Sharma (2003). The refinement of the scale includes four stages. During this process, Cronbach alpha values were checked at each stage of item analysis to examine whether the reliability of the scale has improved after item deletion. In the first stage, each item in the construct was correlated with the total score for that dimension to determine whether the item correlates with the hypothesized dimension. The items with
relatively low correlations with the dimension to which they are hypothesized were deleted and others were retained. This step resulted in the deletion of three items thus leaving a scale of 39 items. The value of Cronbach alpha was checked again after item deletion and it was observed that the value of Cronbach alpha had improved.

In the second stage, the items of each construct were correlated with the total score of other constructs. The items that did not have statistically significant correlation with the dimension to which it was hypothesized to belong in comparison to correlations with remaining dimensions total scores were also deleted. This step resulted in the deletion of two items and we were left with a scale of 37 items. The value of Cronbach alpha was again checked after this step and it showed considerable increase.

In the third stage of item analysis, corrected item-to-total correlations were examined and items that did not have corrected item-to-total correlation above 0.4 were deleted. This step resulted in the deletion of two more items and we were left with 35 items thereafter. The value of Cronbach alpha was again checked after this step and it showed considerable improvement in its value.

In the fourth and last stage of item analysis, to minimize skewness and maximize variance, items with both larger means and larger variances were retained and the rest deleted. This step resulted in the deletion of two items thereby reducing the scale items to 33. After this, the Cronbach alpha values were checked again and they showed considerable increase.

After the item analysis, exploratory factor analysis with principal component analysis was employed to check the internal consistency of the scale. The results showed that the items loaded on one factor and all the constructs had eigen values above 1. This proves the construct validity of the scale.

Churchill Jr. (1979) suggested that the reliability and validity of the scale should be tested with new data. Therefore, to finalize a scale and to confirm a theoretical factor structure
confirmatory factor analysis (CFA) was used. CFA helps to establish the discriminant and convergent validity of the scale. With the use of CFA, a theoretical factor structure is specified and tested for its degrees of correspondence with the observed covariances among the items in the factors (Netemeyer, Bearden and Sharma 2003). CFA provides a stricter interpretation of unidimensionality than can be provided by traditional methods such as co-efficient alpha, item-total correlation and EFA and provides different conclusions about the acceptability of the scale (Gerbing and Anderson 1988). Therefore, CFA was employed on new data to assess the model-fit and unidimensionality of the scale. The CFA model was run separately for the complainants and non-complainants.

First, the CFA model for complainants was run where the model fit indices such as GFI, AGFI, CFI, IFI, and TLI were within the acceptable range, but some of the items were not reliable. Therefore, those items were deleted. In this stage, six items were deleted, thus leaving a scale of 22 items and seven construct for the model of complainants. After deleting the items having low reliability, the model of complainants was re-estimated and it was observed that there is improvement in the values of fit indices. Then the measurement model of non-complainants was run and the model fit indices such as GFI, AGFI, CFI, IFI, and TLI for this model were within the acceptable range.

After assessing the model-fit for both the models of complainants and non-complainants, their reliability was checked using item reliability, composite reliability and average variance extracted (AVE). Item reliability of individual items was assessed by squaring their respective standardized factor loadings. All the items had $R^2$ values greater than 0.5, which proves that all items are significantly related to their specified constructs. Composite reliability for various constructs of both models was above the recommended level of 0.7. All the constructs of both the models had average variance extracted above the recommended level of 0.5, which provided further evidence of reliability.

After establishing the reliability of the scale, the construct validity was established using convergent and discriminant validity. Convergent validity is established when all the indicators had factor loadings of values ranging from 0.6 to 0.9 and the average variance
extracted for each construct is more than 0.5. Discriminant validity is proved when the values of inter-construct squared correlations of each construct are less than their AVE. The construct for both models prove the convergent and discriminant validity.

Eventually, structural equation modeling (SEM) was used to test the hypothesized relationships between the constructs. The results of SEM revealed that all three perceived justice dimensions positively affect the customer satisfaction with service recovery. It was also found that customer satisfaction with service recovery positively influence their post-recovery word-of-mouth and repurchase intentions. The results proved that customers’ perceived severity of service failure had a negative influence on their satisfaction with service recovery. As hypothesized, the moderating effect of customers’ perceived severity of service failure with justice dimensions to influence their satisfaction with service recovery was supported.

To test the mediating role of satisfaction with service recovery between customers’ perceived justice and their behavioral intentions was tested for its significance using Sobel’s test. The results provide support for the indirect effect of customer satisfaction with service recovery.

To test the existence of service recovery paradox, the mean values of customers’ prior satisfaction and their satisfaction after recovery process was compared. The results do not support the existence of service recovery paradox.

### 7.2 Theoretical and Managerial Implications

This study makes both academic and practical contributions. By providing a theoretical framework, the study adds to our understanding of how justice perceptions and perceived severity of service failure affects customer satisfaction and their behavioral intentions after recovery. This service recovery scale will not only assess how efficiently service recovery is carried out from customers’ point of view rather it will also help in understanding the organizational paradigm of satisfactory service recovery. It provides a
reliable and valid scale of service recovery which managers can use with requisite changes as per varying industry and sector type. This scale can also be modified according to different product types and used in similar settings. This service recovery scale will help managers to formulate strategies to retain their existing customers by providing superior and equitable service recovery whenever a failure occurs.

The results of the study indicate that justice framework is an important determinant to restore customer satisfaction with the firm after they have encountered service failure. Managers should therefore understand the importance of distributive, procedural and interactional justice and design their service recovery system which confirms to the justice framework. The results also indicate that customers give more importance to procedural justice as compared to other justice dimensions. The second most important component is distributive justice. This implies that managers should follow fair procedures to solve customers’ complaints. If two customers face the same problem they must be given same treatment and their problems should be sorted out using the same process. This indicates that a standardized recovery mechanism should be set in place by the company. The firm should provide for fair outcomes to customers in comparison to their problem being faced and they must be treated with humanity and courtesy during the recovery process.

The findings showed that severity of service failure has a significant negative impact on customer satisfaction with the recovery. Therefore, if the customers perceive the failure as ‘highly severe’, then they must be given more compensation as compared to the situation when they perceive failure to be ‘less severe’. The results also approve that the interaction of severity of service failure with justice perceptions impacts customer satisfaction with service recovery. It suggests that when a customer experiences severe problems, the outcome of the recovery will not be able to satisfy him as much as when the problem is not severe.

The findings of study do not support service recovery paradox which means that the customers’ post-recovery satisfaction is not greater than their pre-failure satisfaction and
even good recoveries can not bring customers back to their pre-failure satisfaction level. Therefore, firms should try to avoid failures as far as possible and should provide error free service in first instance itself.

7.3 Limitations of the Study

- The present study is a cross-sectional study to know the behavioral intentions of complainants after service recovery. A Longitudinal study is a better approach required to examine the customer’s behavioral intentions.

- The study has considered transaction specific customer satisfaction, while cumulative satisfaction of the customers can also be assessed as well.

- This research has taken the behavioral intentions of complainants after service recovery while the effect of satisfaction with service recovery on customers’ post-recovery trust, commitment and loyalty is missing.

- This study has not checked the interaction between three justice dimensions i.e. distributive justice, procedural justice and interactional justice to know its effect on customer satisfaction with service recovery.

7.4 Future Research Directions

The present study has been conducted for the telecommunication industry in India. In future, a similar study can be carried out in various other service industries to know the behavioral intentions of the complainants so that the results can be generalized.

A cross-cultural study can also be done within same service industry to know whether customers’ behavioral intentions vary across different cultures.
Given the role severity of service failure plays in shaping customer satisfaction after service recovery, further research can be carried out to know on what basis customers label service failures as severe and not severe and how their perceptions of severity influence their recovery expectations.

The personal characteristics such as age, gender and income also play an important role in shaping customers’ satisfaction and their behavioral intentions. Therefore, future research can be carried out considering the moderating effects of age, income and gender on customer satisfaction and their behavioral intentions.

A study can also be carried out to check both the direct effects of justice dimensions and the interactional effects of justice dimensions on customer satisfaction with service recovery.