Antecedents and Outcomes of Consumer Relationship Proneness after Service Failure and Recovery-Moderating Role of Informational Justice: A research on Pakistani Mobile Telecom Industry

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Abstract
The marketing research in services sector has got importance during the last two decades because services sector has dominated by adding profits to service provider businesses and companies and by adding huge income to the economy of almost all countries. This research aims to study the importance of relationship prone consumers when service failure occurs and companies step forward to recover that failure in mobile telecom service services sector in Pakistan. Research tries to put light on the personality traits like social affiliation, social recognition, product category involvement and consumer relationship proneness in generating the attitudinal loyalty i.e. word of mouth after the successful service recovery of any service failure occurred. This research also aims to study the moderating role of informational justice between consumer relationship proneness and word of mouth.

Survey method consisting of self administered questionnaires is used to collect data from students, retailers and job holder of Rawalpindi, Islamabad and Dera Ghazi Khan, who faced any kind of service failure regarding mobile telecom services they are using. Structural equation modeling technique is followed to test the relationships among the constructs.

It is found that social affiliation, social recognition and product category involvement have got significantly positive relationship with word of mouth after service failure and recovery. Consumer relationship proneness on the other hand is fully mediating the relationship between social affiliation and word of mouth, not mediating the relationship between social recognition and word of mouth and partially mediating the relationship between product category involvement and word of mouth after service failure and recovery. Study finds that informational justice is significantly moderating the relationship between consumer relationship proneness and word of mouth after service failure and recovery. Findings of this study elaborate the significance of relationship prone consumers. Companies can retain these consumers more easily by showing little efforts in recovering the occurrence of possible service failures. Findings of study also have theoretical implications. This research provides the foundations to carry the research on relationship proneness as fruitful personality trait in consumer psychology research.

Keywords: Consumer relationship proneness, service failure, service recovery, informational justice, word of mouth

Chapter 1
INTRODUCTION

1.1 Background
Service recovery as defined by Gronroos, (1988) is the actions and the reactions that are taken by an organization to respond recover a service failure. Almost all the companies always make a lot of efforts to provide greater customer services to compete their competitors’ business. On the other hand the service providers, even popular for their best services cannot overcome infrequent service failures. Service failure is always expected. When service failure occurs and it is not controlled and recovered, it can depreciate the customers-firm relationship and becomes the cause of the serious problems like dissatisfaction of customers, loss of word-of-mouth, and the end of customer loyalty. Therefore, it is critical issue for the firms to successfully overcome service failure and recover it to ensure positive relationships with their customers to obtain customer satisfaction, repurchasing, and positive word-of-mouth (Gustafsson, 2009). Successful service recovery can make customer visit again and again the service provider (Rio-Lanza et al., 2009). Berry and Parasuraman, 2004 studied the customer behavior before and after service recovery and concluded the positive relationship within successful service recovery and customers’ word of mouth intentions. Successful service recoveries of course make customer delighted and they talk positive things about the services of the service providers (Gelbrich and Roschik, 2010). As a part of the
marketing strategies, service recovery strategy can increase the loyalty and the word of mouth intentions, if implemented correctly (Harris et al., 2006; Orsingher et al., 2010).

While, Consumer relationship proneness is a part of personality traits of the customer, according to which customer himself is surely inclined and willing to be engaged in the long-term relationship with the seller of a product or service (Bloemer et al., 2003 and De Wulf et al., 2001). This particular type of relationship prone customers always become the cause of high customer shares, loyal to the marketing efforts in comparison with those customers who are not willing to make relationship with the sellers (Parish and Holloway, 2010). Consumers who like to be in relationships with sellers, high level of trust and commitment is developed in them (Hedrick et al., 2007). According to the past research some consumers are more psychologically inclined to tie strong relationships with sellers as compared to others (Christy et al., 1996). This argument is supported by Beatty et al., (1996) in their study. Retailers always want to obtain and retain relationship prone customers is not a surprising fact (Kim et al., 2012). This research aims to study consumer relationship proneness in service recovery context. When service failure occurs, firms go for service recovery to retain the customer. In this case relationship prone customers are more favorable to the firms, as they are more willing to engage in relationship with firm. Moreover, past research shows that service recovery justice has a lot of positive outcomes like customer retention & re-purchases intentions, WOM intentions and satisfaction (Ok et al., 2005; Ha and Jang, 2009).

1.2 Problem Statement
Service failure is likely to be an increasing problem as services sector is dominating in markets. Services sector is highly competitive and companies are striving to retain customers, as service failure tends customers towards switching to other companies. Pakistani mobile telecom market is highly competitive and diverse market. Now a day’s Pakistani customers can enjoy huge variety of services provided by prevailing mobile telecom companies. Although, the existence of intense competition between companies, customers can enjoy heavy price cuts, but its dilemma for companies to retain customers and making customers more loyal. So, different types of service failure can and existence of intense competition can result in negative word of mouth, lower brand loyalty and more customers switching. As any type of service failure can motivate the customers to switch towards the competitors. So, to overcome this, companies go for service recovery strategies. A good service recovery of the service failure can customer more loyal and make customer say positive things about their mobile telecom company. So the problems are how to make customer loyal in the competitive environment when service failures occur, and how to make customer say positive thing about companies in service failure situations.

There are two types of customers on the basis of personality segmentation. One, who are relationship prone customers, these customers willingly want to be in relationship with the company, service provider or retailer. These customers have tolerance and conscious tendency to receive the recovery efforts more positive when any service failures occur. Other type of customers are not interested in building long term relations with their service providers and they take recovery efforts less positive than prior type of customers. These customers have got more switching tendency.

In the occurrence of any service failure, customers want the clear information about the reasons of that failure, the type of failure, the method of the recovery of that particular failure, time needed to recover that failure and the compensation rewarded against that failure. In the service recovery literature informational factor of the perceived justice has got importance from the last decade. The problem is whether the customer is provided the sufficient information needed to satisfy him, so that he/she can rely on the service recovery efforts of the company.

In short, the problems that are going to be under observations and calculations are:

What should a company do, if any service failure occurs? Whether relationship prone customers are more favorable to firms in any disaster situation? Whether the company is providing amount of the information that customer wants? Whether the information transfer is dominating the relationship proneness trait of customer in failure situation?

1.3a Research objectives
By studying a plenty of literature related to the consumer relationship proneness, service failure and recovery and word of mouth and the strategies related to all of these variables, this study consists of following research objectives:

1- To investigate the role of consumer relationship proneness in generating positive word of mouth after service failure and recovery.

2- To investigate the impact of social affiliation, social recognition and product category involvement on word of mouth after service failure and recovery.

3- To identify the mediating role of CRP between social affiliation, social recognition and product category involvement and word of mouth after service failure and recovery.
4- To identify the moderating effect of informational justice between CRP and word of mouth after service failure and recovery.

1.3b Research questions
To achieve the objectives of the research, the following main research questions will be addressed:

1- What is the impact of CRP on word of mouth after service failure and recovery?
2- What is the impact of social affiliation, social recognition and product category involvement on CRP after service failure and recovery?
3- Does CRP mediate the relationship between social affiliation, social recognition, product category involvement and word of mouth after service failure and recovery?
4- Do perceived service recovery justice play moderating role between CRP and word of mouth after service failure and recovery?

1.4 Industry
Mobile telecom industry of Pakistan is selected for current research. Selection of this industry has got some reasons. Firstly, almost every person in Pakistan is user of mobile phone and uses telecom services of specific company. Secondly, service failure usually occurs more frequently in telecom sector as compared to other services industries. Customers frequently face package delays, services installation ambiguity, low or no coverage and connection issues in their routine life. Furthermore, customer retention is very important for the firms to achieve in the mobile telecommunication industry. It is a common phenomena that a strong competition exists among the service providers, for this purpose to compete they spend a lot to obtain new customers and to make the existing customers loyal (del Rio-Lanza et al., 2009). Mobile networks as the medium of communication has grown intensively in case of connections demand and in consumption (IDATE DigiWorld, 2007).

1.5 Significance and Gap analysis
The contributions of this research are worth studying. This research is examining the role of CRP in generating WOM after service failure and recovery that fulfills the theoretical gap in overall service recovery literature. Past literature in service recovery lacks the vital consumer characteristic (consumer relationship proneness). Perish and Holloway, (2010) argues that researchers could investigate the role of consumer relationship proneness in the context of service recovery management, where the influence of CRP is expected to be significant and worth studying. In this way it provides the researchers more deep insights in service recovery by examining CRP contextually. Secondly, it studies a facet of perceived service recovery justice i.e. informational justice as moderator between CRP and WOM. Informational justice as a forth facet of perceived service recovery justice in service recovery context, that got a very little attention in previous literature. Wang et al. (2011) studied the moderating role of perceived service recovery justice in service failure severity and customer loyalty relationship. Informational justice is ignore as compared to the other facets of perceived service recovery justice in service recovery literature, and recently applied contextually, only (Lee and Park, 2010). It also examines the CRP as mediator between the antecedents of CRP and the WOM that strengthens the novelty of this investigation. So, it provides greater insights for marketers and the firms in making service recovery strategies.

Mobile telecom industry of Pakistan is very competitive in nature. All the companies are providing different call packages, text massage packages and internet packages. This thing is leading the customers to price consciousness due to the intensive price wars between the companies. Price consciousness makes the customer more un-loyal and leads him towards the switching behavior. Service failures like package delays, voice interruptions, service breakages, new service installation confusions etc create the chance for companies to make customers loyal and advocates of their services as Blodggett et al., (1997) says the complaining customer is the loyal customer. So companies get a chance to retain customers by successful service recoveries and make them loyal so that they talk positive things about their services. Services recovery strategies can change the focus of customers from price consciousness to the services provided by the companies. So that the customer rely on the companies and become loyal to the companies, and this thing can decrease the switching behaviors of customers. So this research is significantly fruitful for the marketers of the mobile telecom companies to pursue service recovery strategies as the part of different marketing strategies that are made to enhance customer loyalty and their word of mouth intentions.

Chapter 2
LITERATURE REVIEW

2.1 Antecedents of CRP
Past research also puts the light on the several antecedents of CRP. Several studies insisted to understand the types of consumers who are inclined to engage in the relationships with the sellers of particular goods and
services (Barnes, 1997; Bendapudi and Berry, 1997). For this purpose, this study assesses the influence of three consumer personality traits that are social affiliation, social recognition and product category involvement on consumer relationship proneness and word of mouth (Gaby Odekerken Schroder et al).

2.1a Social affiliation
Social affiliation is a consumer’s personality trait that represents the consumer’s willingness for affiliation with others, so that they give preference to being with others (Cheek and Buss, 1981). The impact of social affiliation of employees positively influences the employee-customer relationship and it is argued in several studies (Hogan et al., 1984; Rosse et al., 1991). On the other side, that is consumer side; the customer’s social affiliation has been investigated the positive impact on buying behavior (Odekerken et al., 2003). Engaging in buyer–seller relationships is best way to fulfill the requirement of exchanges (Shim and Eastlick, 1998). For example if the customers have a regular visit to the same store, then they meet the same sales persons again and again. It supports the customers to develop the strong social ties with the sales people. Literature based on interpersonal relationships defines social affiliation as a preference given to other people for making the strong relationships with them (Sadowski and Cogburn, 1997; Barrick and Mount, 1991). Customers, who have high need for social affiliation, do not have any intention to get social rewards, but they are rather willing to give value to their developed relationship (Carver and Scheier, 1992). Consequently, an affable customer may take the relationship with a retailer as a source to develop strong social interactions. In service failure situation, customer has made a purchase and after purchase the failure happened, so now with good recovery tactics the customer can be satisfied for repeat purchase. In the case of relationship prone consumer, who is more prone to making relationship with service provider, can respond positively to the recovery effort made by service provider and shows loyalty by making repeat purchases after the recovery and by saying positive things about the services of the firm in society. It is expected that need for social affiliation directly influences behavioral intentions. Need for social affiliation has a strong positive impact on word-of-mouth communications and repeat purchasing (Wharton and Harmatz, 1995; Durgee et al, 1996). Need for social affiliation establishes the strong basis for spreading word-of-mouth communications to friends and peer. Relationship with a service provider through social affiliation ties the consumer’s relations with firm even if prices are increasing, or also becomes the cause of repeat purchasing.

2.1b Social recognition
This research defines social recognition as personality trait of consumer, for which consumer wants the respect from others (Brock et al., 1998). Social recognition is considered to be the path towards the relationship development and to describe the consequences of a relationship (Kirkpatrick and Davis, 1994). Some people want to be socially recognized and for this purpose they engage in purchase relationships with sellers (Forman and Sriram, 1991). Sheth and Parvatiyar (1995) took the reference group theory as a reference to establish that the consumers want to develop relationships with sellers solely depends on if they want to be associated to a reference group by being closer to that group, to get the positive outcomes of that association, and to possibly overcome the things like seller’s bad attitude if any type of service disaster occurs. We can say that, consumers’ attraction towards the marketing relationships can be stronger if consumers’ need for social recognition is satisfied. These arguments provide the support to the findings of Tauber (1972), who discovered that the revisit intention of consumer to a store is sometimes stimulated by peer influence or the influence of reference group. This argument supports the postulate that need for social recognition can play stronger role in generating loyalty if service disaster happened and successfully handled by the company.

2.1c Product category involvement
Involvement can be referred as the perceived relevance of a person for the main object that depends upon values, needs and interests that are inherent in nature (Zaichkowsky, 1994). High product category involvement stimulates the consumers to utilize their cognitive ability to interpret the arguments that are presented in front of them regarding a specific issue (Brown et al, 1998). In this regards, consumers tries to focus on attribute of the service or product and performance information about a product or service to evaluate it.

As Mittal (1995) described, product category involvement is a personality trait of a consumer that represents the importance of a product category perceived by consumer because of his inherent interests. This research considers product category involvement as a personality trait for which the propensity of involvement will differ across different consumers in particular product category (Bloch, 1981). Past research suggests that those consumers are expected to be more loyal to the seller who are highly involved in that particular category of a product or service (King and Ring, 1980). High involvement of consumers provides a strong background for the long-term relationship with seller firms (Christy et al., 1996). Gordon et al. (1998) described those buyers who are involved with the product or service, are more interested in participating in loyalty programs and are willing to the continuity of these relationships. For that these consumers become the cause of the spread of
positive word of mouth for that particular product or service.

2.2 Consumer relationship proneness

De Wulf et al., (2001) described relationship proneness as when a consumer is willing to engage in a long-lasting relationship with a company or a specific seller. Christy et al. (1996) stated that some customers want themselves and are favorable to be in relationships. In this research, author introduces the term consumer relationship proneness as a consumer’s conscious inclination to be in relationships with sellers of a particular product category. In addition, the emphasis of the author is that, consumer knowingly want to engage in the relation with seller that is not the loyalty or inertia that make consumer loyal to a specific brand or a seller of a brand (Dick and Basu, 1994). Moreover, the concept of proneness focuses on the consumer inner or cognitive willingness to be in relationship not to stimulate or maintain an existing relationship. The latter has more close to the construct of commitment. In past research, a lot of researchers state that consumers’ proneness can vary across seller to seller or the groups of sellers (Barnes, 1997). People who want to be in a romantic relationship, when they find it they perceive the opposite potential partner as more attractive one as compared to the people having that kind of romantic relationship (Simpson et al., 1990). Kim et al., (2012) found CRP has a significant positive impact on advantage that consumer perceive and resistance to change. Past research also establishes the foundations for CRP that it has got the significant direct relations with behaviors and behavior intentions. Current research hypothesized the positive impact of CRP on word of mouth. Past research is enriched with the literature supporting the positive outcomes of CRP on behavioral intentions. As CRP has positive impact on Price sensitivity, WOM and repeat purchase (Vazquez-Carrasco and Foxall, 2006). It is found that CRP has positive influence on overall satisfaction (Bloemer and Odekerken-Schroder, 2002). Customer retention orientation is also derived by CRP in the past literature (Odekerken-Schroder et al., 2003). CRP has also got positive outcomes like commitment (Bloemer et al. 2003 and Odekerken-Schroder et al. 2003) and intention to stay in relationship (Vazquez-Carrasco and Foxall, 2006). Relationship prone consumers may perceive the efforts of retailers more positively and optimistic (Odekerken-Schroder et al., 2003). So relationship prone consumer perceives the recovery efforts more positively as compared to those, who are not.

2.3 Perceived service recovery justice

On the basis of literature in social and organizational psychology justice theory has got a dominant role in the theoretical framework in service recovery (Wirtz and Mattila, 2004). Past literature gives strong recommendations for a lot of factors in the construct of perceived justice. One of these factors includes perceived fairness of outcome, named as distributive justice. Procedural justice is the perceived fairness of procedures that are followed to the service failure disasters and interpersonal justice is perceived fairness of the employee behavior with the customer during the service recovery process (Adams 1965). There is the other approach to the justice that divides interactional justice into two parts. One is interpersonal treatment and other is informational justice (Colquitt et al., 2001). Former explains the interpersonal part of service recovery process, as how the customer who is making the complaint is treated by the employees of the company. While the later; informational justice means the perceived reliability and adequateness of the information provided to the customer for the reason behind service failure and the information about its recovery (Colquitt, 2001). Consumer’s personally spontaneous and favorable evaluation of the results and his experience during service recovery becomes the main cause of consumer satisfaction with service recovery. Consumer compares his sacrifices with the beneficial outcomes during service recovery process and at the end consumer satisfaction is the result.

Distributive justice is described as the achievement of profitable exchange relations by allocating costs and benefits. In the service failure and recovery context, it is referred as the perceived fairness of a service failure/recovery outcome (e.g. Holloway et al., 2009). Distributive justice deals with monetary rewards such as service failure refunds, discounts, etc (Maxham and Netemeyer, 2002). In previous literature of service recovery distributive justice has been measured by the fairness and the rewards of the outcomes (Chebat and Slusarczyk, 2005). It is the perceived fairness of actions, and standards of compensations adopted by decision makers to get the favorable outcomes of a negotiation. In the context of service failure/recovery, procedural justice is referred the customer’s perception of justice for the steps and procedures followed for the recovery of disaster (Mattila, 2001). On the basis of past research, procedural justice has been studied by several dimensions that are, accessibility, flexibility, decision control, process control, acceptance of responsibility acceptance and response speed (Blodgett et al., 1997). Interpersonal justice is the fairness that customer perceives during interpersonal treatment during the service recovery procedures (Tax et al., 1998). Interpersonal justice is referred as the consumer’s experience of employee interactions during service recovery process (Sparks and McColl-Kennedy, 2001). In the literature different dimensions of interactional justice are discussed that are: honesty, courtesy, endeavor, offering apologies and empathy (Rio-Lanza et al., 2009). Greenberg (1993) described informational justice related to the communication issues can be separated from the interpersonal justice as a separate
construct. Informational justice is referred as the fitness and truthfulness of information that explains the reason behind a disaster event and its recovery (Colquitt, 2001). This justice dimension deals with the fairness of the justifications and explanations that are provided for the reasons that support recovery decisions (Ambrose et al., 2007). Customer’s perception of informational justice is harmed when the explanations provided about procedures that would be used to recover the failure are not adequate enough to satisfy customer.

2.4 Informational justice as Moderator

Based on the justice theory, (Blodgett et al., 1997) studied the relationship of perceived justice of recovery and post-complaint behavior. They found that when consumers are treated unfair, they behave as distressed, and in the result they reduce intentions for repatronage. When customers perceive improper service recovery handling by service employees, 42.9 percent of them become dissatisfied (Bitner et al., 1994). Many other authors also stated that future behavioral intentions and customer satisfaction like repurchase intention and WOM are positively related to perceived justice in the context of service recovery (Ha and Jang, 2009; Kim et al., 2009). Goodwin and Ross, 1992 also noted when would be no service failure customers would be satisfied, but if service failure occurs and it is handled effectively then customer would be delighted. In the past literature researchers suggest that distributive justice and informational justice on higher levels result in more favorable word of mouth and re-patronage intentions (Blodgett et al., 1997). Goodwin and Ross (1992) hypothesized the procedural justice and informational justice to check the customer’s reactions to service failures. The findings indicated that procedural justice and informational perceived by customers had got a significant direct relationship with customer satisfaction. Rio-Lanza et al. (2009) also found that Procedural justice and informational justice perceived by customer during service recovery has a significant and positive relationship with satisfaction during the service recovery and customer loyalty. Revisit intention is positively affected by perceived justice during successful service recovery (Ha and Jang, 2009). Moreover, other literature has also suggested that higher the perceptions of procedural justice and informational justice higher will be re-patronage intention and positive WOM (Blodgett et al., 1993; Clemmer, 1993). McColl-Kennedy and Sparks (2003) proposed that consumer feels negative and dissatisfied when he perceives there is absence of care or empathy from service provider during a service recovery process. Rio-Lanza et al. (2009) also found that interactional justice including informational justice during service recovery has a positive impact on satisfaction with the service recovery. Other researchers have also stated that more higher the interactional justice as a construct including interpersonal justice and informational justice higher will be re-patronage intentions and WOM (Clemmer, 1993). Blodgett et al. (1997) also concluded that perceived justice in service recovery has a positive direct impact on the customer’s behavioral intentions. In past literature justice theory has taken more attention in the service recovery theoretical framework (Bolton, & Wagner, 1999; Chandrashekaran, 1998). Customer satisfaction and future behavioral intention (repurchase intention and WOM) are definitely increased by customer’s perceived justice during the service recovery process (Kim, Kim, & Kim, 2009).

Y.-S. Wang et al. (2011) studied Perceived justice of service recovery as moderator between service failure severity and customer loyalty results the distributive justice and interactional justice (including interpersonal and informational justice) significantly moderated, but procedural justice found not moderating the relationship. On the basis of this overflow of past literature regarding perceived justice of service recovery, it concluded that informational justice of service recovery has a very stronger impact on positive WOM and future loyalty intentions after service failure and recovery.
2.5: **Research hypothesis**
In the light of literature review, on theoretical basis this research proposes following hypothesis.

1. Social affiliation has positive impact on word of mouth after service failure and recovery.
2. Social recognition has positive impact on word of mouth after service failure and recovery.
3. Product category involvement has positive impact on word of mouth after service failure and recovery.
4. Consumer relationship proneness mediates the relationship between social affiliation and word of mouth after service failure and recovery.
5. Consumer relationship proneness mediates the relationship between social recognition and word of mouth after service failure and recovery.
6. Consumer relationship proneness mediates the relationship between Product category involvement and word of mouth after service failure and recovery.
7. Informational justice moderates the relationship between consumer relationship proneness and word of mouth after service failure and recovery.

**Chapter 3**
**METHODOLOGY**

3.1 **Research design and type of study**
This research is methodologically deductive in nature. As seven hypotheses covering the expected consequences were deducted from a theoretical model. Such investigation is casual in nature.

3.2 **Sample profile**
Primary data was collected from respondents through survey method by using self administrative questionnaire. Non-probability convenience sampling technique was applied in research to collect data. Total of 300 questionnaires were distributed in students, retailers and job holders living in Rawalpindi, Islamabad and Dera Ghazi Khan. 270 were received back from which 20 incomplete questionnaires were removed. After the removal of incomplete questionnaires a sample size of 250 yielded response rate up to 83.7%.

3.3 **Scale description and Operationalization of variables**
3.3a **Demographic variables**
Four demographic variables were used in this study namely gender, age and education level. These are coded as,

- Gender was coded as “1 = male” and “2 = female”.
- Profession was coded as “1 = student”, “2 = job” and “3 = business”.
- Age was coded as “1 = less than 21”, “2 = 21-25”, “3 = 26-30”, “4 = 31-35”,...


3.3b Scale

Data is collected using self-administered questionnaires from mobile telecom service users in Pakistan. The questionnaire in this study is adapted from previous studies. The scale for Social Affiliation, Social Recognition, Product Category Involvement and consumer Relationship Proneness are adopted from the study Odekerken-Schroder et al. (2003). In this study Social affiliation scale is adopted from Cheek and Buss, (1981) & Villani and Wind, (1975). Product Category Involvement scale is adopted from Laurent and Kapferer, 1985; Zaichkowsky, 1985; Mittal, 1995. While the scale for Social recognition and Consumer relationship proneness are developed by the authors of the study. The scale for informational justice is adopted from Nikbin et al. (2012). These authors borrowed or adapted four items measuring informational justice are adopted from Ambrose et al. (2007), Colquitt (2001), and Mattila and Cranage (2005). Firstly 60 questionnaires were distributed among the mobile telecom services users to perform a pilot study in order to check the feedback about the design of questionnaire. The pilot test is usually conducted in research setting to improve the overall quality of the questionnaire and for this purpose the current study used this survey method. The use of survey is chosen because its generalizability is usually higher and its external reliability is considered to be greater as they are based on actual marketing exchanges (Churchill and Iacobucci, 2005). It provides a large room for assessing large set of variables (Ma, 2007). In addition, it is convenient, fast and is a cost effective means of gathering data from the respondents (Zikmund, 1999).

Except for demographic questions all of the variables are measured on interval scales using 5-point LIKERT scale, from strongly disagree to strongly agree.

3.4 Sample and sampling

3.4a Unit of analysis

Mobile phone users of Islamabad, Rawalpindi and Dera Ghazi Khan were considered the unit of analysis for this study. The selection of Islamabad, Rawalpindi and Dera Ghazi Khan was made to explore cultural heterogeneity and a little effort to increase the geographic generalizability of this study.

3.4b Sampling technique and data collection

Unit of analysis for this research was the users of mobile telecom services, who faced any type of service failure regarding telecom services. It is not possible for researchers to get response from all population of mobile phone users. To determine the appropriate sample size has always been the complex task for researchers. The population of mobile phone users of Islamabad, Rawalpindi and Dera Ghazi Khan is more than 10,000 (having no upper limit). So, in line with Saunders, Lewis & Thornhill (2011) following formula can be used to determine the sample size for the population more than 10,000.

\[
n = p\% \times q\% \times (z / (e\%))^2
\]

Where,

- \( n \) = the minimum sample size required
- \( p\% \) = proportion belonging to the specified category
- \( q\% \) = proportion not belonging to the specified category
- \( z \) = value corresponding to the level of confidence required
- \( e\% \) = the margin of error required

To estimate the appropriate sample size pilot study was performed by taking the sample of 50. Pilot study of 50 questionnaires supported to determine the quantity that how much mobile phone users face service failure of their mobile telecom company and thus belonged to specified proportion. 80% respondents considered for pilot study affirmed the happening of service failure. Only 20% respondents neglected the happening of service failure. 95% level of confidence is considered, that gives the 5% margin of errors. Z value associated with 95% level of confidence is 1.96. According to (Saunders et al., 2011),

- \( p\% = 0.8 \)
- \( q\% = 0.2 \)
- \( z = 1.96 \)
- \( e = 0.05 \)

\[
\begin{align*}
n & = 80 \times 20 \times (1.96/0.05)^2 \\
n & = 1600 \times 0.154 \\
n & = 246
\end{align*}
\]

Sample size of 246 respondents was considered to cover the population of mobile phone users. Randomly 300 questionnaires were distributed in Rawalpindi, Islamabad and Dera Ghazi Khan; 100 questionnaires for each of
three cities.

3.5 **Time horizon**
Data was collected on cross-sectional basis because of time and resource constraints. It took the period of nearly one month between March-April. Time and resource limitations made researcher to use cross-sectional technique.

3.6 **Data collection method**
Data was collected by provided well-organized questionnaires to mobile phone users of Rawalpindi, Islamabad and Dera Ghazi Khan. Respondents consisted of three categories (students, retailers and job holders). Necessary information related to the topic of research work and general information of researcher was also mentioned in questionnaire.

3.7 **Procedure for data collection**
There are different methods used for data collection are: telephonic interviews, face to face interviews, self-administered questionnaires, electronic questionnaires and mail questionnaires (Cavana, Delahaye & Sekaran, 2001). The technique that is used in this research is self administered questionnaire technique for data collection.

50 questionnaires were used for pilot study by asking “Being a mobile phone user did you ever called or visit the customer care centre or complaint centre of your mobile telecom company, if any service failure occurs? If your answer is YES, then proceed”. It was supportive to know whether the issue was pertinent and for deciding appropriate sample size because any rationale we cannot take sample size or generalize result to whole population. Researcher’s personal contacts were used for data collection purpose. After the collection of data, whole data was entered in SPSS for analyses. Researcher is very thankful to the people for being supportive and for their cooperation in data collection. Data analyses were undertaken by using SPSS and AMOS. Descriptive statistics is used to represent the characteristics of participants.

3.8 **Pilot study**
Pilot testing technique was adopted for different purposes. It was supportive to investigate whether the issue is pertinent. It helped in the determination of appropriate sample size. It guided the researcher to the useful modifications in some demographic items. After modifications according to the pilot study and supervisor’s assistance, the main study was conducted.

3.8.1 **Factor loadings for the items of latent variables**
Basically common factor analysis is mostly used in social research to measure the understanding of researcher’s hypothesis and the items of his survey questionnaire to support its variables used in hypothesis. Standardized regression weights are checked for the inclusion or the exclusion of any item. The minimum bearable value for the construct having factor loading for the inclusion is 0.40 (Cua et al., 2001).

3.8.2 **Result of factor loadings for each latent variable**
Six latent variables were included in this study named as social affiliation, social recognition, product category involvement, consumer relationship proneness, informational justice and word of mouth. The minimum standard cut-off point that was considered for the factor loadings to check convergent validity was taken 0.50. A construct having the value of factor loadings above 0.50 are considered to be practically significant (Paswan, 2009). All the values were ranged from 0.58 to 0.96 according to the calculations of standardized regression weights after excluding one item of the variable (word of mouth), which had got loading of 0.44.
Chapter 4
RESULTS AND DATA ANALYSIS

4.1 Data analysis
Structure equation modeling technique was used for the analysis and verification of the hypothesis. For this purpose, SPSS AMOS v 20.0 was used to testify the causal relationships and other estimates. To check frequencies between the demographic characteristics of respondents and to check descriptive statistics the SPSS v 20.0 was used. For the mathematical calculations MS EXCEL 2007 was used. For analysis, the technique that
was used is based on three steps (Mulaik & Millsap, 2000). Firstly exploratory factor analysis (EFA) was performed to match theory with response or to check the validity. Secondly, confirmatory factor analysis (CFA) was performed to testify the appropriateness of the data. Finally standardized regression weights were used to confirm the measurement model.

4.2 Handling of collected data
As discussed earlier, the purpose of the study was to investigate the impact of CRP and its antecedents on WOM of customer and the moderating role of informational justice after service failure and recovery. The sample was the mobile phone users of Rawalpindi, Islamabad and Dera Ghazi Khan. 300 questionnaires were distributed among students, job holders and retailers belonging to these cities. Out of 300 questionnaires, 270 were received back. 20 were not included due the data missing. So the response rate was 83.3.

4.3 Demographic characteristics of the participants
To have an overview of demographic characteristics of 250 participants, SPSS version 20.0 was used. Descriptive statistics are discussed below.

4.3.1 Gender of the participants
Table 4.1: Characteristics of participants (gender)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>male</td>
<td>189</td>
<td>75.6</td>
<td>75.6</td>
<td>75.6</td>
</tr>
<tr>
<td>female</td>
<td>61</td>
<td>24.4</td>
<td>24.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>250</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.4: Graphical representation of participants’ gender

The distribution indicates that most of the participants included in this research are male (75.6% or 189 of 250). On the other hand (24.4% or 61 of 250) are female participants.

4.3.2 Profession of participants
Table 4.2 shows the grouping of participants on basis of their profession.
Table 4.2: Profession of participants

<table>
<thead>
<tr>
<th>Profession</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>student</td>
<td>127</td>
<td>50.8</td>
<td>50.8</td>
<td>50.8</td>
</tr>
<tr>
<td>Job</td>
<td>72</td>
<td>28.8</td>
<td>28.8</td>
<td>79.6</td>
</tr>
<tr>
<td>retailer</td>
<td>51</td>
<td>20.4</td>
<td>20.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>250</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.2: Graphical representation of participant’s profession

The distribution of data related to profession indicates most of the participants are students (50.8 or 127 of 250). The representation of job holders is 28.8% or (72 of 250) participants.

4.3.3 Age of participants

Table 4.3 shows the distribution of data for the age groups of participants.

Table 4.3: age grouping of participants

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 21</td>
<td>7</td>
<td>2.8</td>
<td>2.8</td>
<td>2.8</td>
</tr>
<tr>
<td>21-25</td>
<td>49</td>
<td>19.6</td>
<td>19.6</td>
<td>22.4</td>
</tr>
<tr>
<td>26-30</td>
<td>67</td>
<td>26.8</td>
<td>26.8</td>
<td>49.2</td>
</tr>
<tr>
<td>31-35</td>
<td>42</td>
<td>16.8</td>
<td>16.8</td>
<td>66.0</td>
</tr>
<tr>
<td>36-40</td>
<td>46</td>
<td>18.4</td>
<td>18.4</td>
<td>84.4</td>
</tr>
<tr>
<td>More than 40</td>
<td>39</td>
<td>15.6</td>
<td>15.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>250</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Figure 4.3: Graphical representation of data related to age

Bar chart shows that participants belonging to age group that is (less than 21) are very few (2.8% or 7 of 250). Participants belonging to age group (21-25) are 19.6% (49 of 250) participants. Participants belonging to age group (26-30) are 26.8% (67 of 250) participants. Participants belonging to age group (31-35) are 16.8% (42 of 250) participants. Participants belonging to age group (36-40) are 18.4% (46 of 250) participants and the participants belonging to age group (more than 40) are 15.6% (39 of 250) participants.

4.4 Frequencies of type of connection used by participants
Table 4.4 shows the frequencies of the type of connection that are used by participants.

<table>
<thead>
<tr>
<th>Type of connection used by participants</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepaid</td>
<td>185</td>
<td>74.0</td>
<td>74.0</td>
<td>74.0</td>
</tr>
<tr>
<td>Postpaid</td>
<td>32</td>
<td>12.8</td>
<td>12.8</td>
<td>86.8</td>
</tr>
<tr>
<td>Corporate customer</td>
<td>33</td>
<td>13.2</td>
<td>13.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>250</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
As the table 4.4 shows, participants who use prepaid connection are 74% (185 of 250). Postpaid connection users are 12.8% (32 of 250) and the corporate customers, who use corporate connection, are 13.2% (33 of 250).

4.5 Preparation of data for analysis
Questionnaire that was consisted of 23 items was distributed and total of 250 were useful for analysis. Responses collected from the respondents were entered into SPSS v 20.0 for the required analysis.

4.6 Data coding
Before the analysis was started, items related to each variable were coded. Items related to social affiliation were coded as SA1, SA2 and SA3. Items related to social recognition were coded as SR1, SR2 and SR3. Items related to product category involvement were coded as PCI1, PCI2 and PCI3. Items related to consumer relationship proneness were coded as CRP2, CRP2 and CRP3. Items related to informational justice were coded as IJ1, IJ2, IJ3 and IJ4. Items related to word of mouth were coded as WOM1, WOM2, WOM3, WOM4, WOM5, WOM6 and WOM7.

4.7 Tests performed for analysis
To fulfill the purpose of study, different tests were performed. Common factor analysis was used for matching theory with results by checking the validity. Confirmatory factor analysis was performed to check model fitness and construct reliability. Descriptive statistics were used to identify the demographic characteristics of the participants and

4.8 Tests performed for measurement model
Tests performed to test the perfection of measurement model were common factor analysis and confirmatory analysis.

4.8.1 Common factor analysis
To explain shared and common variances by different observed variables common factor analysis or principal factor analysis is helpful. This method is used to identify interrelationship among variables and to reduce original variables on basis of required items. Different estimates are used in common factor analysis. One is description of standardized factor loadings also known as standardized regression weights. Squared multiple correlation is used to show the variance explained by each item related to a variable. Items having low factor loadings are eliminated in common factor analysis.

To explain the matching of theory with variables the performance of common factor analysis and confirmatory factor analysis is important. These analyses are also very useful for the improvement of specified model. Each variable is checked through individual factor in common factor analysis, while in confirmatory factor analysis factors are combined through covariance to check cross interaction. So, in common factor analysis homogeneity of items is checked according to their factor which supports theoretical representation and
understanding of participants (Gerbing & Anderson, 1988). The benchmark value for standardized regression weights was 0.50 as suggested by (Paswan, 2009) it should be minimum 0.50 and preferably 0.70 or higher.

### 4.8.2 Confirmatory factor analysis

Confirmatory factor analysis is used for model appropriateness and it deals with testing of model, observed and latent variables. This technique is used explain how comprehensively and clearly the construct is captured by indicators of variables (Steenkamp & Baumgartner, 2000).

### 4.8.3 Analysis of measurement model

#### 4.8.3.1 Result of common factor analysis for each latent variable

Results of the factor loadings of six variables under study are satisfactory. All values were from 0.74 to 0.89 except one item of word of mouth (WOM7), and deleted for the purpose of best fit of model.

#### 4.8.3.1a Construct validity

To check construct validity of the measurement model, four components are checked. These are:

- **Face validity**
- **Convergent validity**
- **Discriminant validity**
- **Nomological validity**

#### 4.8.3.1a (I) Face validity

Face validity explains whether the content of items is consistent with the construct’s definition. According to the author’s judgment, content of all items is consistent with the definition of constructs. For example, “Generally, I am someone who likes to seek contact with others”, is the item of construct “social affiliation”. The content of item is consistent with the definition, because the person, who has got the trait of social affiliation, always likes to seek contact with others.

#### 4.8.3.1a (II) Convergent validity

$$VE = \frac{\sum_{i=1}^{n} \lambda_i^2}{n}$$

In above formula, “$\lambda_i$” represents the standardized factor loading and “$n$” is the number of items. So, for n items, AVE is computed when the sum of the squared standardized factor loadings divided by the number of items, as shown above.

Paswan, (2009) described the rule of thumb for AVE of .5 or higher indicates adequate convergent validity. An AVE of less than .5 indicates that on average, there is more error remaining in the items than there is variance explained by the latent factor structure you have imposed on the measure.

AVE = 0.71

The overall convergent validity is 0.71. The validity for each variable is given below in table 4.5.

**Table 4.5: Convergent Validity for each variable**

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>SR</th>
<th>PCI</th>
<th>CRP</th>
<th>IJ</th>
<th>WOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Valid</td>
<td>0.76</td>
<td>0.74</td>
<td>0.76</td>
<td>0.68</td>
<td>0.63</td>
<td>0.72</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

#### 4.8.3.1a (III) Discriminant validity

To check whether all the constructs are uni-dimensional, discriminant validity is checked. Discriminant validity checks whether all the constructs are distinct from each other.

A good rule of thumb is that all construct average variance extracted (AVE) estimates should be larger than the corresponding squared inter-construct correlation estimates (SIC). If they are, this indicates the measured variables have more in common with the construct they are associated with than they do with the other constructs.
Table 4.6: Comparison of AVE & SIC

<table>
<thead>
<tr>
<th>Construct</th>
<th>AVE</th>
<th>SIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA Construct</td>
<td>0.76</td>
<td>0.5625, 0.512656, 0.567009, 0.509796, 0.537289</td>
</tr>
<tr>
<td>SR Construct</td>
<td>0.74</td>
<td>0.506944, 0.474721, 0.425104, 0.561001, 0.5625</td>
</tr>
<tr>
<td>PCI Construct</td>
<td>0.76</td>
<td>0.495616, 0.390625, 0.550564, 0.512656, 0.506944</td>
</tr>
<tr>
<td>CRP Construct</td>
<td>0.68</td>
<td>0.434281, 0.527076, 0.567009, 0.474721, 0.495616</td>
</tr>
<tr>
<td>IJ Construct</td>
<td>0.63</td>
<td>0.466489, 0.509796, 0.425104, 0.390625, 0.434281</td>
</tr>
<tr>
<td>WOM Construct</td>
<td>0.72</td>
<td>0.537289, 0.5625, 0.550564, 0.527076, 0.466489</td>
</tr>
</tbody>
</table>

All variance extracted (AVE) estimates in the above table are larger than the corresponding squared interconstruct correlation estimates (SIC). This means the indicators have more in common with the construct they are associated with than they do with other constructs. Therefore, our model demonstrates discriminant validity.

4.8.3.1a (IV): Nomological validity

Nomological validity is tested by examining whether the correlations between the constructs in the measurement model make sense. The construct correlations are used to assess this.

Table 4.7: Correlation analysis

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>SR</th>
<th>PCI</th>
<th>CRP</th>
<th>IJ</th>
<th>WOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SR</td>
<td>0.750</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCI</td>
<td>0.716</td>
<td>0.712</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRP</td>
<td>0.753</td>
<td>0.689</td>
<td>0.704</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IJ</td>
<td>0.714</td>
<td>0.652</td>
<td>0.625</td>
<td>0.659</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>WOM</td>
<td>0.733</td>
<td>0.750</td>
<td>0.742</td>
<td>0.726</td>
<td>0.683</td>
<td>1</td>
</tr>
</tbody>
</table>

According to the theoretical background, all the constructs should be significantly positively related to each other to validate the nomological validity of the measurement model. In Table 4.7, results show that all are significantly positively related to each other, that proves the nomological validity of the measurement model.

4.8.3.1b Construct reliability

\[
CR = \frac{\left(\sum_{i=1}^{n} \lambda_i^2\right)}{\left(\sum_{i=1}^{n} \lambda_i^2 + \sum_{i=1}^{n} \delta_i\right)}
\]

CR is computed from the sum of factor loadings (\(\lambda_i\)), squared for each construct and the sum of the error variance terms for a construct (\(\delta_i\)) using the above formula. Error variance is also referred to as delta. The rule of thumb for a construct reliability estimate is that .7 or higher suggests good reliability. Reliability greater than or equal to 0.7 may be acceptable provided that other indicators of a model’s construct validity are good. High construct reliability indicates that internal consistency exists. This means the measures all are consistently representing something.

CR = 0.98

The construct reliability is 0.98. CR for each variable is given below in table 4.8.
Table 4.8: Construct reliability for each variable

<table>
<thead>
<tr>
<th>Construct</th>
<th>SA</th>
<th>SR</th>
<th>PCI</th>
<th>CRP</th>
<th>IJ</th>
<th>WOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CR</td>
<td>0.91</td>
<td>0.87</td>
<td>0.91</td>
<td>0.87</td>
<td>0.87</td>
<td>0.93</td>
</tr>
</tbody>
</table>

Table 4.9: Descriptive statistics

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social affiliation</td>
<td>250</td>
<td>1.00</td>
<td>5.00</td>
<td>4.2867</td>
<td>.77041</td>
</tr>
<tr>
<td>Social recognition</td>
<td>250</td>
<td>1.00</td>
<td>5.00</td>
<td>4.2987</td>
<td>.78282</td>
</tr>
<tr>
<td>Product category</td>
<td>250</td>
<td>1.00</td>
<td>5.00</td>
<td>4.2720</td>
<td>.77831</td>
</tr>
<tr>
<td>Consumer relationship</td>
<td>250</td>
<td>1.00</td>
<td>5.00</td>
<td>4.3267</td>
<td>.74052</td>
</tr>
<tr>
<td>Informational justice</td>
<td>250</td>
<td>1.00</td>
<td>5.00</td>
<td>4.3130</td>
<td>.72414</td>
</tr>
<tr>
<td>Word of mouth</td>
<td>250</td>
<td>1.00</td>
<td>5.00</td>
<td>4.3184</td>
<td>.74147</td>
</tr>
</tbody>
</table>

4.8.3.2 Results for confirmatory factor analysis

During the model fitness, fit indices were according to the standards given by different research scholars. The value of CMIN/DF was 1.359. The value of AGFI was 0.897. The value of GFI was 0.922, CFI was 0.985. The value of RMSEA was 0.038. Standard for the value of acceptance for CMIN/DF ranges between 1 and 5 and below 2 is preferred, as explained by Chin & Todd (1995). The value is supposed to be average fit if it is greater than 3. Same as value standards for GFI and CFI are explained by Gefen et al. (2000). The value of GFI and CFI should be above 0.90. The value of AGFI should lie between (0.80 and 1.00) and the value of RMSEA should lie between 0.01 and 0.08. After the CFA was performed, all the fit indices were according to the standard values. This shows the model is excellent for measuring responses. The values obtained and the standard values comparison is given in Table 4.10.

Table 4.10: Results and comparison between initial and final measurement model

<table>
<thead>
<tr>
<th>#</th>
<th>Fit-statistics</th>
<th>Standard values for model</th>
<th>Results of final measurement model</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CMIN/DF</td>
<td>Degree of freedom</td>
<td>(1-5)</td>
</tr>
<tr>
<td>2</td>
<td>GFI</td>
<td>Goodness of fit index</td>
<td>Above 0.90</td>
</tr>
<tr>
<td>3</td>
<td>AGFI</td>
<td>Adjusted goodness of fit index</td>
<td>(0.80-1.00)</td>
</tr>
<tr>
<td>4</td>
<td>CFI</td>
<td>Comparative fit index</td>
<td>Above 0.90</td>
</tr>
<tr>
<td>5</td>
<td>RMSEA</td>
<td>Root mean square error of approximation</td>
<td>(0.01-0.08)</td>
</tr>
</tbody>
</table>
To examine hypothesis that whether they are supported or not, structural equation modeling technique is used for the regression analysis. Structural equation modeling itself is the extended for of general linear modeling (GLM), in which the researchers test number of regression equations at a time. The steps that a researcher follows are, firstly, he/she determines a model that is based on theory, and then describes how measures are related to the construct, collects the response data and inputs the response data into the statistical software. The software
packages fit data and gives the results of model fit and parameter estimates.

According to the research model the results are categorized into three parts, direct relationships, mediation analysis and the moderation analysis.

There are three hypothesis related to the direct relationships of the latent variables. The detail of test performed and their results are given below.

4.9.1: Direct relationships
In this section of direct relationships, the relationship between the independent variables (SA, SR, and PCI) and dependent variable (WOM) is tested, without including the mediator variable (IJ).

4.9.1.1: Hypothesis 1
Relationship between social affiliation and word of mouth
The relationship between social affiliation and word of mouth was proposed to be significant under hypothesis 1.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Structural path</th>
<th>CR</th>
<th>Un-standardized regression coefficients</th>
<th>Standard error</th>
<th>P-value</th>
<th>Significant/Insignificant</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>WOM ← SA</td>
<td>3.087</td>
<td>0.243</td>
<td>0.079</td>
<td>0.002</td>
<td>Significant</td>
</tr>
</tbody>
</table>

The results of the analysis for the relationship between social affiliation and word of mouth showed that the un-standardized regression coefficient is 0.243. We can say that one unit change in social affiliation causes 24.3% positive change in word of mouth. P-value is 0.05 and the value of critical ration (CR) is 3.087 that is greater than 1.96 so, hypothesis is accepted. As a result we can say that there is significant relationship between social affiliation and word of mouth.

4.9.1.2: Hypothesis 2
Relationship between social recognition and word of mouth
The relationship between social recognition and word of mouth was proposed to be significant under hypothesis 2.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Structural path</th>
<th>CR</th>
<th>Un-standardized regression coefficients</th>
<th>Standard error</th>
<th>P-value</th>
<th>Significant/Insignificant</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2</td>
<td>WOM ← SR</td>
<td>3.960</td>
<td>0.301</td>
<td>0.076</td>
<td>***</td>
<td>Significant</td>
</tr>
</tbody>
</table>

The results of the analysis for the relationship between social recognition and word of mouth showed that the un-standardized regression coefficient is 0.301. We can say that one unit change in social recognition causes 30.1% positive change in word of mouth. P-value is *** and the value of critical ration (CR) is 3.960 that is greater than 1.96 so, hypothesis is accepted. As a result we can say that there is significant relationship between social recognition and word of mouth.

The acceptance of hypothesis 2 reveals that consumers who want to be socially recognized are more likely to spread positive word of mouth about the company, whom services they are using. The logic behind is that when service failure occurs, the companies do efforts for its recovery and the consumer with high social recognition trait feels himself recognized by the company and after successful recovery the consumer feels delighted and says positive things about the services of that company to other people.

4.9.1.3: Hypothesis 3
Relationship between product category involvement and word of mouth
The relationship between social recognition and word of mouth was proposed to be significant under hypothesis 3.
Table 4.13: Hypothesis 3

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Structural path</th>
<th>CR</th>
<th>Un-standardized regression coefficients</th>
<th>Standard error</th>
<th>P-value</th>
<th>Significant/Insignificant</th>
</tr>
</thead>
<tbody>
<tr>
<td>H3</td>
<td>WOM</td>
<td>PCI</td>
<td>4.304</td>
<td>0.317</td>
<td>0.074</td>
<td>***</td>
</tr>
</tbody>
</table>

The results of the analysis for the relationship between product category involvement and word of mouth showed that the un-standardized regression coefficient is 0.317. We can say that one unit change in product category involvement causes 31.7% positive change in word of mouth. P-value is *** and the value of critical ration (CR) is 4.304 that is greater than 1.96 so, hypothesis is accepted. As a result we can say that there is significant relationship between product category involvement and word of mouth.

Figure 4.6: Direct impact of SA, SR and PCI

4.9.2: Mediation analysis

To examine the mediating role of a variable between the independent and dependent variable and to observe whether there is partial or full mediation, this study uses the procedure as explained by Hoyle and Smith (1994). First, the direct effect of the independent to the dependent variable is to be examined. Second, the indirect effect
of the independent to the dependent variable is to be examined through mediating variable. If the relationship of the independent variable to the dependent variable is insignificant through the mediating variable, it indicates that there is complete mediation; but if it is still significant and the path declines, it is the evidence of partial mediation (Hoyle and Smith 1994).

If a variable is needed to act as a mediator, the following conditions must be fulfilled: Firstly the independent variable should have a significant relationship with the dependent variable. Secondly independent variable must have significant relationship with mediator. Third, the mediator variable must have significant relationship with the dependent variable. And fifth, when independent variable and the mediator are incorporated, the direct relationship between independent variable and the dependent variable should become significantly smaller or non-significant. For significantly smaller relationship between independent and dependent variable there will be partial mediation and for non-significant relationship, there will be full mediation (Baron and Kenny, 1986).

4.9.2.1: Hypothesis 4
Mediating role of consumer relationship proneness between social affiliation and word of mouth
The mediating role of consumer relationship proneness between social affiliation and word of mouth is proposed to be significant.

Table 4.14: Hypothesis 4

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Structural path</th>
<th>CR</th>
<th>Standardized regression coefficients</th>
<th>Standard error</th>
<th>P-value</th>
<th>Significant/Insignificant</th>
</tr>
</thead>
<tbody>
<tr>
<td>H4 WOM</td>
<td>SA → CRP</td>
<td>1.836</td>
<td>0.155</td>
<td>0.085</td>
<td>0.066</td>
<td>In-significant</td>
</tr>
<tr>
<td></td>
<td>WOM → CRP</td>
<td>2.602</td>
<td>0.237</td>
<td>0.091</td>
<td>0.009</td>
<td>Significant</td>
</tr>
</tbody>
</table>

As we can observe that by including the mediator variable (CRP) the direct relationship between social affiliation and word of mouth has been decreased from 0.243 (24.3%) to 0.155 (15.5%) but insignificant as p-value is greater than 0.05 and critical ration (CR) is also less than 1.96. The relationship between social affiliation and consumer relationship proneness is significant with regression coefficient 0.374 (37.4%) with CR (4.502) more than 1.96. Likewise impact of consumer relationship proneness on word of mouth is significantly 0.237 (23.7%). As a result consumer relationship proneness is fully mediating the relationship between social affiliation and word of mouth as direct relationship of social affiliation and word of mouth is insignificant by the inclusion of consumer relationship proneness. So the hypothesis 4 is accepted.

4.9.2.2: Hypothesis 5
Mediating role of consumer relationship proneness between social recognition and word of mouth
The mediating role of consumer relationship proneness between social recognition and word of mouth is proposed to be significant under hypothesis 5.

Table 4.15: Hypothesis 5

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Structural path</th>
<th>CR</th>
<th>Standardized regression coefficients</th>
<th>Standard error</th>
<th>P-value</th>
<th>Significant/Insignificant</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5 WOM</td>
<td>SR → CRP</td>
<td>3.555</td>
<td>0.266</td>
<td>0.075</td>
<td>***</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>CRP → SR</td>
<td>1.879</td>
<td>0.145</td>
<td>0.077</td>
<td>0.060</td>
<td>In-significant</td>
</tr>
<tr>
<td></td>
<td>WOM → CRP</td>
<td>2.602</td>
<td>0.237</td>
<td>0.091</td>
<td>0.009</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Here we see that the direct impact of social recognition on word of mouth, with the inclusion of consumer relationship proneness, has been decreased from 0.301 (30.1%) to 0.266 (26.6). And this impact is significant because p-value is less than 0.05 and CR in greater than 1.96. The relationship between social recognition and consumer relationship proneness is insignificant as p-value is greater than 0.05 and CR is less than 1.96. The relationship between consumer relationship proneness and word of mouth is significant with regression coefficient 0.237 (23.7%). As a result we can say that consumer relationship proneness is not mediating the relationship between social recognition and word of mouth as the impact of social recognition on consumer relationship proneness is insignificant. So the hypothesis 5 is rejected.

Form the results of hypothesis 5, it can be said that consumers who want to be socially recognized don’t need to be relationship prone to admire the recovery efforts of the company for successful recovery. Their trait of social recognition makes them to say good and positive things about company if company resolves the service disaster by a successful recovery.
4.9.2.3: Hypothesis 6
Mediating role of consumer relationship proneness between product category involvement and word of mouth

The mediating role of consumer relationship proneness between product category involvement and word of mouth is proposed to be significant under hypothesis 6.

Table 4.16: Hypothesis 6

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Structural path</th>
<th>CR</th>
<th>Un-standardized regression coefficients</th>
<th>Standard error</th>
<th>P-value</th>
<th>Significant/Insignificant</th>
</tr>
</thead>
<tbody>
<tr>
<td>H6 WOM</td>
<td>PCI</td>
<td>3.477</td>
<td>0.261</td>
<td>0.075</td>
<td>***</td>
<td>Significant</td>
</tr>
<tr>
<td>CRP</td>
<td>PCI</td>
<td>3.219</td>
<td>0.244</td>
<td>0.076</td>
<td>0.001</td>
<td>Significant</td>
</tr>
<tr>
<td>WOM</td>
<td>CRP</td>
<td>2.602</td>
<td>0.237</td>
<td>0.091</td>
<td>0.009</td>
<td>Significant</td>
</tr>
</tbody>
</table>

The estimates of Table 4.16 show that impact of product category involvement on word of mouth is decreased from 0.317 (31.7%) to 0.261 (26.1%) and is significant because p-value is less than 0.05 and CR is greater than 1.96. The relationship between product category involvement and consumer relationship proneness is significant at 0.244 (24.4%) because p-value is greater than 0.05 and CR is greater than 1.96. The relationship between consumer relationship proneness and word of mouth is significant at 0.237 (23.7%) with p-value less than 0.05 and CR greater than 1.96. As a result we can say that consumer relationship proneness is partially mediating the relationship between product category involvement and word of mouth. So the hypothesis 6 is accepted.

Results revealed that consumer involved in a specific product category can perceive the recovery efforts of a firm positively if he is relationship prone. His involvement in the services of company and his proneness trait combine to make him spread positive things about company if his service failure problem is resolved.

Figure 4.7: Indirect relationships (Mediation analysis)
4.9.3: Moderation analysis

4.9.3.1: Hypothesis 7

Moderating role of informational justice between consumer relationship proneness and word of mouth

The moderating role of informational justice between consumer relationship proneness and word of mouth was proposed to be significant under hypothesis 7.

Table 4.17: Hypothesis 7

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Structural path</th>
<th>CR</th>
<th>Un-standardized regression coefficients</th>
<th>Standard error</th>
<th>P-value</th>
<th>Significant/Insignificant</th>
</tr>
</thead>
<tbody>
<tr>
<td>H7</td>
<td>WOM ← CRPxIJ</td>
<td>-10.445</td>
<td>-0.359</td>
<td>0.034</td>
<td>***</td>
<td>Significant</td>
</tr>
</tbody>
</table>

The estimates of table 4.17 show that the un-standardized regression coefficient for moderating role of informational justice between consumer relationship proneness and word of mouth after failure and recovery decreases the impact of consumer relationship proneness on word of mouth by 35.9%. In other words, one unit change in informational justice decreases the impact of consumer relationship proneness on word of mouth by 35.9%. P-value is less than 0.05 to support that hypothesis is accepted. Acceptance of hypothesis 7 clearly shows that informational justice moderates the relationship between consumer relationship proneness and word of mouth after failure and recovery.

From the results of hypothesis 7, it is revealed that with the occurrence of any service failure, customer goes for its recovery. If the customer is provided adequate information about failure, its recovery options, recovery process, the cause of failure and time needed to recover the problem then a successful recovery will lead the customer towards saying positive things about the service provider company. No matter he/she is relationship prone or not. Even the customer is relationship prone, the perceived informational justice will dominate the relationship proneness trait of customer in spreading positive word of mouth about company if recovery is successful.

Figure 4.8: Moderation analysis
Chapter 5

Discussion, conclusion, implications, limitations and future research direction

5.1 Discussion
The discussion about each tested hypothesis is given below.

5.1.1 Relationship of social affiliation and word of mouth
In hypothesis 1, the positive relationship of social affiliation and word of mouth was proposed. The acceptance of hypothesis revealed that the more need of social affiliation for a customer more he/she will spread positive word of mouth about company after a successful service recovery. One possible explanation can be, the consumers having the trait of social affiliation, the get affiliated with the services of the specific firm and perceive positively the recovery efforts of the firm and as a results get satisfied and say good things about the firm to the other people.

5.1.2 Relationship between social recognition and word of mouth
In hypothesis 2, the positive relationship between social recognition and word of mouth was revealed. The acceptance of hypothesis 2 reveals that consumers who want to be socially recognized are more likely to spread positive word of mouth about the company, whom services they are using. The logic behind is that when service failure occurs, the companies do efforts for its recovery and the consumer with high social recognition trait feels himself recognized by the company and after successful recovery the consumer feels delighted and says positive things about the services of that company to other people.

5.1.3 Relationship between product category involvement and word of mouth
The positive relationship between product category involvement and word of mouth was proposed under hypothesis 3. From the acceptance of hypothesis 3, we can say that the consumer who is more involved in that product/service category, which he is using, can spread positive word of mouth for that company, whom services he is using. By successful recovery of any failure occurred in that product or service makes consumer more happy than a consumer not so much involved in that specific product or service. So good service recovery tends consumer to say positive things about the services of company to other people.

5.1.4 Mediating role of consumer relationship proneness between social affiliation and word of mouth
The mediating role of consumer relationship proneness and word of mouth was proposed to be significant under hypothesis 4. As we observed that by including the mediator variable (CRP) the direct relationship between social affiliation and word of mouth has been decreased from 0.243 (24.3%) to 0.155 (15.5%) but insignificant as p-value is greater than 0.05 and critical ration (CR) is also less than 1.96. The relationship between social affiliation and consumer relationship proneness is significant with regression coefficient 0.374 (37.4%) with CR (4.502) more than 1.96. Likewise impact of consumer relationship proneness on word of mouth is significantly 0.237 (23.7%). As a result consumer relationship proneness is fully mediating the relationship between social affiliation and word of mouth as direct relationship of social affiliation and word of mouth is insignificant by the inclusion of consumer relationship proneness. So the hypothesis 4 is accepted.

By the acceptance of hypothesis 4, we can say that the relationship proneness trait of consumer builds the relationship of his social affiliation quality and his intentions to spread positive word of mouth. If the consumer is not relationship prone, even its social affiliation trait cannot tend him to say positive things about the company after a successful service recovery.

5.1.5 Mediating role of consumer relationship proneness between social recognition and word of mouth
Under hypothesis 5, the mediating role of consumer relationship proneness and word of mouth was proposed to be significant. We noticed that the direct impact of social recognition on word of mouth, with the inclusion of consumer relationship proneness, has been decreased from 0.301 (30.1%) to 0.266 (26.6). And this impact is significant because p-value is less than 0.05 and CR in greater than 1.96. The relationship between social recognition and consumer relationship proneness is insignificant as p-value is greater than 0.05 and CR is less than 1.96. The relationship between consumer relationship proneness and word of mouth is significant with regression coefficient 0.237 (23.7%). As a result we can say that consumer relationship proneness is not mediating the relationship between social recognition and word of mouth as the impact of social recognition on consumer relationship proneness is insignificant. So the hypothesis 5 is rejected.

Form the results of hypothesis 5, it can be said that consumers who want to be socially recognized don’t need to be relationship prone to admire the recovery efforts of the company for successful recovery. Their trait of social recognition makes them to say good and positive things about company if company resolves the service disaster by a successful recovery.

5.1.6 Mediating role of consumer relationship proneness between product category involvement and word of mouth
The mediating role of consumer relationship proneness between product category involvement and word of mouth is proposed to be significant under hypothesis 6. The results show that impact of product category involvement on word of mouth is decreased from 0.317 (31.7%) to 0.261 (26.1%) and is significant because p-value is less than 0.05 and CR is greater than 1.96. The relationship between product category involvement and
consumer relationship proneness is significant at 0.244 (24.4%) because p-value is greater than 0.05 and CR is greater than 1.96. The relationship between consumer relationship proneness and word of mouth is significant at 0.237 (23.7%) with p-value less than 0.05 and CR greater than 1.96. As a result we can say that consumer relationship proneness is partially mediating the relationship between product category involvement and word of mouth. So the hypothesis 6 is accepted.

Results revealed that consumer involved in a specific product category can perceive the recovery efforts of a firm positively if he is relationship prone. His involvement in the services of company and his proneness trait combine to make him spread positive things about company if his service failure problem is resolved.

5.1.7 Moderating role of informational justice between consumer relationship proneness and word of mouth
The moderating role of informational justice between consumer relationship proneness and word of mouth was proposed to be significant under hypothesis 7. The results show that the un-standardized regression coefficient for moderating role of informational justice between consumer relationship proneness and word of mouth after failure and recovery decreases the impact of consumer relationship proneness on word of mouth by 35.9%. In other words, one unit change in informational justice decreases the impact of consumer relationship proneness on word of mouth by 35.9%. P-value is less than 0.05 to support that hypothesis is accepted. Acceptance of hypothesis 7 clearly shows that informational justice moderates the relationship between consumer relationship proneness and word of mouth after failure and recovery.

From the results of hypothesis 7, it is revealed that with the occurrence of any service failure, customer goes for its recovery. If the customer is provided adequate information about failure, its recovery options, recovery process, the cause of failure and time needed to recover the problem then a successful recovery will lead the customer towards saying positive things about the service provider company. No matter he/she is relationship prone or not. Even the customer is relationship prone, the perceived informational justice will dominate the relationship proneness trait of customer in spreading positive word of mouth about company if recovery is successful.

5.2 Conclusion
This research work set out to identify how antecedents of consumer relationship proneness and consumer relationship proneness itself play the role in creating customer attitudinal loyalty that in this study we called it word of mouth, after the service failure to mobile telecom connection and its successful service recovery. In Pakistan, there is held a tough competition between the mobile telecom companies, having the large customer base. The consumers of these mobile telecom companies usually face different types of service failures and confront the employees of the service provider by making a call to the service centre or by visiting the service centre. It is concluded that the consumers who have a high need for social affiliation, social recognition and high product category involvement, perceive the recovery efforts of company in a very positive way as they want to be affiliated to and recognized by the company or its employees as they have high product involvement. It is also concluded that relationship prone consumers with the need of social affiliation, social recognition and their involvement in product or service can spread positive word of mouth after a service failure and a successful service recovery. It is also added to the conclusion that after the failure occurred with the mobile phone telecom services, the customer should be provided by clear, adequate and comprehensive information about the failure cause, its recovery method and the time needed to recover that failure. Providence of optimal information makes the customer delighted and he perceives the recovery efforts more positive and says positive and favorable things about the company.

5.3 Implications for managers and marketers
Findings of this research work are helpful and supportive to managers and marketers. This research work is an addition to the literature and there are several contributions of this research work having the important implications. The findings of this research work reveal that companies need to find out and focus on their customers who have got the need for social affiliation, social recognition and high product involvement. In case of any service failure these customers are more favorable than other customers and get more satisfied with the recovery efforts of the company. As these consumers are relationship prone, they want to stay in touch with the services of the specific company; they even ignore the small disasters and say positive things about company if these disasters are compensated. Managers or the employees, who deal with or confront the consumers in case of service failure or complaint situation, should provide the consumers comprehensive and adequate information about the failure and its recovery. Employees should give extra time to consumer make sure customer is satisfied with the information provided to them. For the marketers this study implicate that the service recovery strategies should be the part of overall marketing strategy of the company. Marketers should be proactive about service failures and they should train the front line employees with full product or service failure and recovery information. Marketers should also identify the consumers who are relationship prone to the services of the
company. Marketers can run short surveys among their consumers to identify the relationship prone consumers.

5.4 Limitations and future research directions
This research has also got some limitations which can also be focused by other researchers for the future research directions. The focus of this research was only on the mobile telecom services. The research can also be prolonged to the other services such as hospitality, banking and internet services for future considerations. Research can also be conducted by taking product (goods)/physical products sector into the account. The population that was considered in this research was comprised of university students, job holders and small business retailers. Enhancements in sample can be done in order to get more consistent results in Pakistani context. Experimentation technique can also be incorporated in the research model. The antecedents taken for the consumer relationship proneness are limited. More antecedents like brand image, shopping enjoyment, peer/media influence, product/service quality consciousness and shopping orientation can be inducted into the model to get more comprehensive insights into the consumer relationship proneness construct (Hye-young kim et al., 2012) in the service recovery framework. Informational justice is taken as a moderator between consumer personality traits and word of mouth. In the future researchers can also take all the facets of perceived service recovery justice like distributive justice, procedural justice and interpersonal justice as moderator into this relationship. Because, their impact on word of mouth is significant when service failure occurs (Blodgett et al., 1997; Rio Lanza et al., 2009).

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