

**CUMULATIVE APPROACH TO CUSOTMER  
SATISFACTION WITH RESPECT TO COMPACT  
SEGMENT CAR USERS**

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**DOCTOR OF PHILOSOPHY**  
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By

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**CERTIFICATE**

This is to certify that the thesis entitled “Cumulative Approach to Customer Satisfaction with Respect to Compact Segment Car Users” is the record of bonafide research work done by Mr. Hamza V.K. under my supervision and guidance at the School of Management Studies, in partial fulfillment of the requirements for the Degree of Doctor of Philosophy under the Faculty of Social Sciences, Cochin University of Science and Technology. It is also certifying that all the relevant corrections and modifications suggested by the audience during the pre-synopsis Seminar and recommended by the Doctoral Committee of the candidate have been incorporated in the thesis.

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## DECLARATION

I, Hamza V.K., hereby declare that the thesis titled “Cumulative Approach to Customers Satisfaction with respect to Compact Segment Car Users” is a bonafide record of research work done by me under the guidance of Dr. Zakkariya K.A (Associate Professor, School of Management Studies, Cochin University of Science and Technology) for the Doctor of Philosophy programme in the School of Management Studies, Cochin University of Science and Technology. I further declare that it has not previously formed the basis for the award of any degree, diploma, fellowship or any other title for recognition.

Hamza V.K.

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## **LIST OF ABBREVIATIONS**

CCS with Car	: Cumulative Customer Satisfaction with Car
CCS with Dealer	: Cumulative Customer Satisfaction with Dealer
OCS with Car	: Overall Customer Satisfaction Dealer
OCS with Dealer	: Overall Customer Satisfaction with Dealer
OCS	: Overall Customer Satisfaction
RPI	: Repurchase Intention
WOM	: Word of Mouth
CS Models	: Customer Satisfaction Models

# *Chapter 1*

## *INTRODUCTION*

### **1.1 Introduction:**

Customer satisfaction has been recognized as an important goal for all business activities. It is the measure of how products and services supplied by a company meet or surpass customer expectation. In a competitive market where businesses race for customers, their satisfaction is seen as a key differentiator and increasingly has become a key element of business strategy. The shrinking market space forced companies to boost existing customer's satisfaction and channelizing resources to chase potential customers. Besides, it is stated that investments in customer satisfaction will leads to excess return and suggesting that satisfied customers are economic assets with high return and low risk (Fornell, 1992).

Customer satisfaction is an outcome of cognitive and affective evaluation based on the comparison of actual perceived performance with certain standards. Instead of checking the customer satisfaction, organizations have to understand how to satisfy a customer that establishes long term client relationships (Paterson et al., 1997). The marketers of any product should listen and ensure to satisfy their customers. It has been reported that long-term

successes of the organizations are closely depends to its ability to adapt the customer changing needs (Takala et al., 2006).

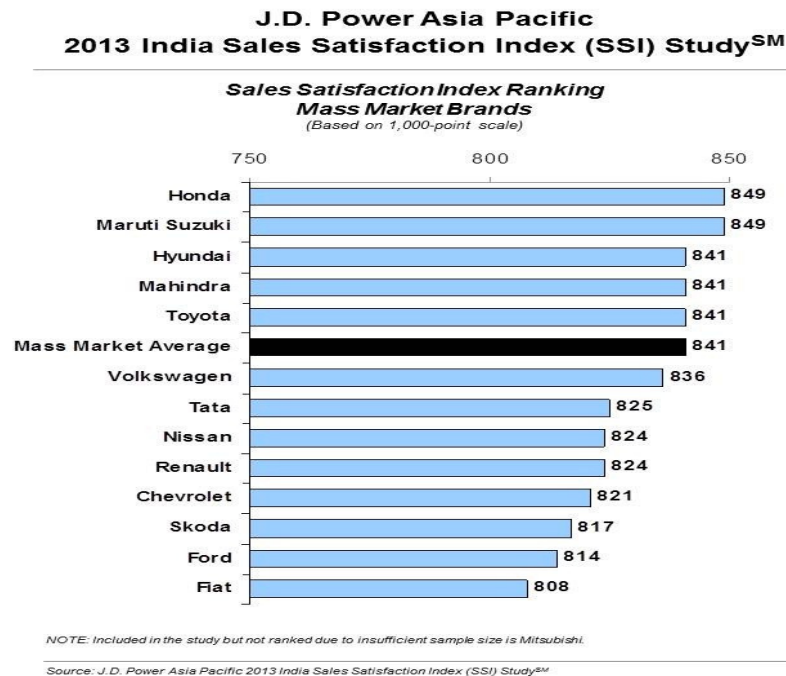
Measurement of customer satisfaction is an innovative approach by business organization that has been identified through financial performance. Now a day, organizations recognize the drastic changes in global economy that leads to the notion of their existence are based on customer satisfaction. According to Kotler (2000) it is important to measure customer's level of satisfaction regularly because 95 percent of dissatisfied customers do not make any complaint and they just switch the product or organization. Their reason for dissatisfaction cannot be identified without measuring the level of satisfaction continually.

The basic concern in the measurement of customer satisfaction is how specific each item in the determinants list should be prepared. The marketers required micro level experiences but the customers usually rate on the basis of an overall evaluation that leads to macro level rating of their experiences. If marketers go with micro level items for satisfaction evaluation, many aspects of the product engineering cannot be understood to the lay consumer (Oliver 1997). It is the duty of the researchers in the field of customer satisfaction to make a tradeoff between the marketers' requirement and customers' evaluations at the time of measuring customer satisfaction.



The J.D Power Satisfaction Index of 2013 gives the overall ratings of customer satisfaction with each company's cars in India. It is based on a 1000 point scale and the maximum satisfaction rating was 849 for Honda and Maruti Suzuki. But the same time the rating of Fiat was 808 that light to another question in the decision makers about the reason for less satisfaction. These indexes used overall customer satisfaction as a base for rating but failed to consider the influences of each element.

Chart 1



Earlier studies on measurement of customer satisfaction are based on either transaction specific or overall approaches. The transaction specific approach

evaluates customer satisfaction with single components in the whole purchase process but the overall satisfaction was based on all the encounters or experiences to the customer throughout the purchase process. Consumers will comment on particular events of their purchase process when asked about transaction-specific satisfaction and they will comment their overall impression and general experiences in overall satisfaction (Bitner & Hubbert 1994)

Through a critical review on the literature, it has been identified a new approaches to customer satisfaction, say, cumulative approaches that can be more useful than overall and transaction specific approaches for strategic decision making (Fornell et al 1996). The cumulative approach to customer satisfaction doesn't study earlier due to the difficulty in operationalization of the concept. But the influencers of customer satisfaction are context specific and the prevailing models doesn't give the sources of variations in the satisfaction, the importance of cumulative approaches to customer satisfaction has emerges that lights to a new research. The current study has focused to explore the influencers of overall customer satisfaction to form individual elements that can be used to identify the cumulative customer satisfaction.

## **1.2 The Research Problem:**

Consumer satisfaction is not a single point satisfaction level when consumers enjoy a product or services. It relates to various experiences encountered by a consumer since the time s/he wishes to have the product to the ultimate usage and experience of that product. A customer may be satisfied with a product or service, an experience, a purchase decision, a salesperson, store, service provider, or an attribute of any of these (Renoux 1973). Customer satisfaction includes total experiences of the customer during the purchase process.

Literature shows that cumulative approach to consumer satisfaction is more useful than transaction specific and overall approach (Anderson et al., 1994; Fornell, 1992). But the prevailing satisfaction models are based on customers overall experiences. The satisfaction ratings of various models such as ACSI, ECSI, etc. would provide a general score for industry comparison that fails to give any insight to the decision makers regarding the role of various attributes to the total customer satisfaction. The model would be more useful if it provides the influencers of customer satisfaction substantially that help the users to improve level of customer satisfaction.

The prevailing customer satisfaction models calculate the level of satisfaction with overall purchase experiences of customers. It shows a customer or a group of customers has been satisfied /dissatisfied with the entire product purchase and usage experience. But it doesn't provide any guidelines to the

companies or organizations to improve the satisfaction level of its customers once such customers are dissatisfied/ less satisfied. The reason is such models are failed to consider the individual elements or attributes that constitute a customer's satisfaction during the product purchase and usage. They considered only the overall experiences of customers during the purchase process. In such situation, there would be some attributes in which the customers are fully satisfied and some other attributes where the customers are least satisfied. Only the combined effect would be reflected in such models. If an organization/company looking to improve the level of satisfaction, it has to know the influences of each attributes towards the satisfaction and take remedial measure to improve the level of satisfaction with such attributes causing least level of satisfaction.

The determinants of customer satisfaction are context specific and vary as per the cultural changes. It demands separate studies for each culture and context. Even though the literature favours cumulative approaches to customer satisfaction, it has not yet studied empirically. The prevailing models have not considered each attributes substantially for identifying its role in generating customers' cumulative satisfaction that is more fundamental and useful for decision making.

Customers are usually able to rethink their purchase experiences when their involvement during the purchase was very high (Oshikawa 1969). Purchase

involvement means the extent of personal relevance of the decision to the individual in terms of their basic values, goals and self-concept (Hawkins et al, 2007). The purchase of a new automobile is a typical example for large purchase involvement and search effort. The great deal of money and durability of automobile may leads to consumer anxiety. Besides, car purchases involve a high level of social and psychological involvement, compounding the anxiety caused by the car's price and life span (Abramson & Desai 1993).

According to Laurent and Kapferer (1985) the major reasons for high involvement during the purchase as follows:

1. The importance of product to the buyer
2. High perceived risk or functional risk
3. There is a symbolic value to the product (psychological risk)
4. The emotional value to the product (ability to give pleasure)

The literature on consumer behaviour reveals that a buyer who has involved in an extensive problem solving during the purchasing process passes through various stages of decision making. These stages are Problem recognition, Information search, Evaluation of alternatives, Purchase decision, and Post purchase behavior and so on. Consumers of compact segment cars are expected to be highly involved in purchasing as they always follow a value for money concept while making their purchase decision. Hence, it can be

presumed that certain attributes related to the cars which are considered by the consumers during these stages, have significant influence in turning them as satisfied/dissatisfied. A clear understanding of such attributes and their relevance during the purchase is of great importance to marketers as the same will help them to deal their potential customer in an efficient manner (Kotler & Armstrong, 2010; Hawkins, 2007).

Since the compact segment cars accommodate all the possible stages of interaction of customers during its purchase, buyers of this segment have been chosen as respondents for this study. The conceptual model developed through literature review and personal interview involves a number of attributes relating to consumer psychology. In order to identify its importance in consumer buying behaviour, it is necessary to have an industry where customers are fully involving during their purchase. The above stated literatures on customers' involvement supports that if the conceptual model is validated with the compact segment car industry, it would be more generalisable.

### **1.3 Evidence to support the research gap:**

1. The prevailing customer satisfaction indexes such as American Customer Satisfaction Index, Swedish Customer Satisfaction Barometer, etc. rates the overall experiences of customer satisfaction.

2. The overall satisfaction approach doesn't provide any door to identify the real source or reason of customer satisfaction/dissatisfaction.
3. The existing customer satisfaction models say that a customer or a group of customers has been satisfied /dissatisfied with the entire product purchase experience. But it doesn't provide any guidelines to the companies or organizations to improve the satisfaction level of its customers once such customers are dissatisfied/ less satisfied.
4. The prevailing model doesn't consider each element or attributes that constitute a customer's satisfaction during the product purchase and usage. There would be some attributes in which the customers are fully satisfied and some other attributes where the customers are least satisfied. Only the combined effect would be reflected in such models. If an organization/company looking to improve the level of satisfaction, it has to know the level of satisfaction with each attributes and take remedial measure to improve the level of satisfaction with such attributes causing least level of satisfaction.
5. Overall satisfaction is the function of all transaction specific satisfaction (Parasuraman et al 1994, Teas 1993). But the present model doesn't consider each transaction specific satisfaction in order to find out overall satisfaction.

6. A customer may be satisfied with a product or service, an experience, a purchase decision, a salesperson, store, service provider, or an attribute of any of these (Renoux 1973). The satisfaction with each attributes can be considered as transaction specific satisfaction and the satisfaction with all the attributes can be considered as cumulative satisfaction. So a cumulative approach to consumer satisfaction should have to include all such attributes which have relevance in the total product purchase and usage encounter.
7. Some consumer satisfaction index and models have considered comparatively more number of attributes influencing the customer's satisfaction. They asked the customers to prioritize attributes which they considered more important to them (UKCSI, MUSA). But normally customers may have, almost, common priorities with respect to a product. For e.g. the priority for buying a passenger car is to ride comfortably for the customers' personal use. These are the basic requirements of such products. Now a day, customers' expectations are changed and they are looking for certain attributes beyond the core function of the product (Kano et al., 1984). Each invisible but influential determinant to the customers' satisfaction evaluations should be diagnosed for ensuring inclusive satisfaction.



#### **1.4 Objectives of the Study:**

- To develop an instrument for measuring the cumulative customer satisfaction in the automobile industry that helps to understand the source of variation in customers satisfaction
- To formulate a cumulative customer satisfaction model in automobile industry with special reference to compact segment car users.

#### **1.5 Significance of the Study:**

Earlier studies on consumer satisfaction states that experiences of many stages of interaction during the purchases constitute customer satisfaction. Total satisfaction with a purchase could include satisfaction with the purchase process together with the information available for the decision and the experience of actually making the purchase, as well as satisfaction with the service or product. In addition, satisfaction with one component, such as the product itself, may be influenced by the level of satisfaction with other components, such as the salesperson (Hawkins et al 2007).

Studies of consumer satisfaction have measured specific components which might be varying according to the product or services classification and the purposes of the given study. Customer satisfaction depends on the situation and the product or service. A customer may be satisfied with a product or service, an experience, a purchase decision, a salesperson, store, service provider, or an attribute or any of these (Renoux 1973). These studies up hold

the requirement of an exclusive research in the field of cumulative aspect of consumer satisfaction in automobile cars owners.

The significance of the study was to help the marketers of compact segment car in the state of Kerala to understand the customer's requirement and influencers during their purchase and usage of the product. Once the marketers are aware of it, it could be more helpful to them to completely satisfy its customers by meeting their requirements.

#### **1.6 Research question:**

The review on customer satisfaction reveals three approaches to customer satisfaction. The transaction specific approach measures the individual encounters of customer satisfaction and the overall approach measures the general level of satisfaction that includes all the encounters. But the cumulative approaches to customer satisfaction consider all transaction specific satisfaction individually that can be better explained more variances in overall customer satisfaction which helps the decision makers for diagnosing the reason for customer satisfaction or dissatisfaction. Bearing the limitations of existing approaches to customer satisfaction, the researcher has addressed the following questions through the study:

1. What are the items that customers consider for his cumulative satisfaction with the dealer?

2. What are the items that customers consider for his cumulative satisfaction with the car?
3. Whether the cumulative customer satisfaction can better explain the variances in overall customer satisfaction that helps the decision makers to identify the reasons for customer satisfaction or dissatisfaction?

### **1.7 Hypothesis:**

There are six major hypothesis were stated to study the research questions. It has been listed below:

H1: Overall Satisfaction with Car positively influences overall customer satisfaction.

H2: Overall satisfaction with the dealer positively influences overall customer satisfaction.

H3: Overall customer satisfaction positively influences repurchase intention.

H4: Overall customer satisfaction positively influences word of mouth.

H5: Overall customer satisfaction has a mediating role between the antecedents and consequences.

H5a: Overall Customer Satisfaction mediates the relationship between Overall Satisfactions with the car to Repurchase Intention

H5b: Overall Customer Satisfaction mediates the relationship between Overall Satisfactions with the car to Word of Mouth

H5c: Overall Customer Satisfaction mediates the relationship between Overall Satisfactions with the dealer to Repurchase Intention

H5d: Overall Customer Satisfaction mediates the relationship between Overall Satisfactions with the dealer to Word of Mouth

H6: Overall customer satisfaction has a moderating role between the antecedents and consequences.

H6a: Overall Customer Satisfaction stronger the relationship between Overall Satisfaction with Car to Repurchase Intention and Word of Mouth

H6b: Overall Customer Satisfaction stronger the relationship between Overall Satisfaction with the Dealer to Repurchase Intention and Word of Mouth

### **1.8 Conclusion:**

The studies on customer satisfaction to date have given more focus to overall approach that became the basis for various satisfaction indexes and models. These models are the representatives of national consumer satisfaction that consists of various industries. The holistic approach to the ratings of customer satisfaction can be operationalised easily but doesn't give any insight for various reasons to customer satisfaction or dissatisfaction . Through cumulative approaches to customer satisfaction, the cause and effect of customer satisfaction can be easily traced that would be more useful to decision makers for retaining and expanding the customer base. This study has channelized to diagnose various transactions that would have influences to the customers' overall ratings. The sum of all transaction can be taken as cumulative satisfaction score that would better predict more variances in the overall customer satisfaction.

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## *Chapter 2*

# *REVIEW OF LITERATURE*

### **2.1 Introduction:**

The extensive research on customer satisfaction leads to diverse interpretation of the concept. Earlier, the research on customer satisfaction typically focused as a post purchase evaluation concerning a specific purchase decision (Oliver 1980). The approaches have emerged and the trend is to consider the customer satisfaction as a process and outcome (Parker & Mathews, 2001). Again the concept has researched and introduces a new approach that satisfaction bases a person's feelings of pleasure or disappointment resulting from comparing the perceived performance and expectations (Kotler, 2003, p.36). These different views are not converged and still emerging that leads to the scope of research in customer satisfaction in to new heights. The available study on customer satisfaction has reviewed before starting this research. This chapter will explain the details of the literatures on customer satisfaction to date.

### **2.2 Consumer satisfaction:**

Consumer satisfaction can be defined as an evaluation of the surprise inherent in a product acquisition and consumption experience (Oliver 1981, p.27). It is

an evaluation rendered that the experience was at least as good as it was supposed to be (Hunt 1977, p. 459-460). The various literatures on consumer satisfaction have studied the concept on different angle. Some of the studies are listed below:

Customer satisfaction has been studied from the perspective of the individual customer. The drives of their satisfaction are different at varying situations and individuals. It is a context specific concept that depends on the individuals experiences that leads to his satisfaction. Each individual has to be considered in isolation for studying their satisfaction (Oliver & Swan, 1989).

Consumer satisfaction has been studied from an industry-wide perspective to compare customer satisfaction scores across firms and industries. In this case, the decision makers would get a score or numerical value in order to compare the satisfaction scores of one firm or organization to the industry. It finds the best performer in the case of satisfying customers (Mittal & Kamakura, 2001)

Research has examined customer satisfaction in a single organization or across several organizations. The ability of each department or units within the organization has been measured to know its ability to satisfy the customers. Once an organization can develop a score with respect to its consumer's satisfaction, it can compare the score with the satisfaction score of other firms in the same industry (Schlesinger & Zornitsky, 1991).

Customer satisfaction brought through price promotions, rebates, switching barriers, and other means will not have the same long-run impact on profitability as such attitudes and behaviours are won through superior products and services. The ultimate evaluation of the customer could include the performance of the real product (Anderson & Mittal, 2000).

While measuring customer satisfaction, it is possible that attributes can have different satisfaction implications for different consumer and market segment like the usage context, segment population, and market environment that can influence satisfaction. Failure to consider such segment-specific variation may lead a firm to focus on the wrong aspect for a given set of consumers. Consumers with common satisfaction ratings and different characteristics may show different levels of repurchase behaviour. It is clear that market and consumer segments should be important factors to consider while measuring customer satisfaction and its implication (Anderson & Mittal, 2000, Mittal & Kamakura, 2001).

A study on consumer satisfaction in the newspaper and healthcare industries shows that the nature of the dependence of satisfaction would vary substantially across subunits such as stores, markets etc. For a subunit, some specific type of satisfaction such as satisfaction with the selection, employees etc. may be a strong predictor of overall satisfaction while for another subunit



the same specific type of satisfaction may have little or no relationship to overall satisfaction (Malthouse et al, 2003).

Increased customer satisfaction leads to higher future profitability. It increases buyer willingness to pay price premiums, provide referrals, and use more of the product, and higher levels of customer retention and loyalty that lead to increase future revenue and reductions in the cost of future transactions. This evidence suggests that customer satisfaction is valuable from both a customer goodwill perspective and an organization's financial perspective (Malthouse, et al, 2003).

Excellent companies are experiencing loss of market share and customer satisfaction presumably because they stopped investing in continuous improvement processes once they achieved desired levels in quality and customer satisfaction. Consumer satisfaction is not a single time achievement of a standard, but it has to make up always on the basis of customer needs and preferences. Consumer satisfaction is an ongoing process and it never ends (Peters & Waterman, 1982).

In the buyer behaviour model, consumer satisfaction is defined as the point at which expectation and reality coincide. Customers might have some kind of expectation before buying or using a product or service. If the product is able to meet such expectation, the customer would be satisfied. In other words,

dissatisfaction means the degree of disparity between expectations and perceived product performance (Anderson 1973, Howard & Sheth, 1969).

It has been identified through the data obtained from the Swedish Customer Satisfaction Index that firms actually achieve higher customer satisfaction also enjoy superior economic returns. So once an organization having more satisfied customer base, its profits also increase. There would be a positive relation between consumer satisfaction and financial performance (Anderson et al, 1997, 1994, Reichheld & Sasser, 1990).

Customer satisfaction means meeting or exceeding customer expectations. Depending on the degree to which expectations are exceeded, it can range from satisfied to very satisfied and delighted customers. Customer satisfaction has a number of unique properties, which are important to recognize for retention purposes. First, it is partly psychological and partly real. Expectations are psychological and experiences are real. Therefore, reality of experiences can and will share future expectations that are likely to have larger diversity than experiences. This is due to its psychological nature and diversity of sources of expectations. If an organization focuses on its most demanding customers or most demanding market expectations, it is likely to exceed all other customers and expectations (Sheth & Kellstadt, 1992)

Research consistently shows that the way employees are treated by their management has a direct impact on the way those employees treat the businesses' customers. This translates in to a single principle that high performing customer service organizations should treat the employees as they want to treat their customers. To satisfy customers, staffs need training, flexibility and empowerment to solve problems and satisfy customers. To know that the organization values them, frontline staff also needs recognition and rewards for strong performance because the communication between customers and organizations are done through them and it has a direct influence to customer satisfaction (Kaldenberg & Regrut, 1999).

Customer satisfaction can be operationally measured by asking consumers to evaluate their satisfaction with the purchase decisions they made rather than with the products themselves. This concept of satisfaction embraces not only what is gained in the use of the product but also consumers' feelings about the effectiveness of their own decision process (Giese & Cote 2000).

There was a distinction between satisfaction with the product itself and the purchase process. While conceptually separable, product and purchase process seem codetermined, and satisfaction really deals with the evaluation of an entire product bundle or offering that include the experience with the product and purchase process. It can be concluded that in order to get

complete satisfaction to a customer, he/she has to be satisfied with both purchase process and product (Cardozo, 1965).

Consumer expectations are largely rational in nature and adaptive to changing market conditions. They have some kind of expectation by considering the capability and relevance of the product they intended to. Their expectations are dynamic with the product and changing situations. So a common approach to the customer in the entire marketing for long term will not produce much satisfaction (Anderson et al 1994).

The raising consumer expectations for a product may enhance the product's perceived performance. Studies have also shown that both expectations and perceived quality are positively related to satisfaction, especially at the cumulative or aggregate level and perceived performance may have a stronger influence on satisfaction than expectations. Like perceived quality, perceived value should also be enhanced by raising expectations and should be positively related to consumer satisfaction (Chan et al, 2001).

Perceived quality and perceived performance are the two terms synonymously used in the consumer satisfaction literature which means the consumer's global judgment of the overall excellence of a product. It is not generally value or price related. However, it is intuitive, and it has been shown that consumer satisfaction depends on value to some extent which in turn depends

on price. Adding the value component to explain consumer satisfaction framework to increase the comparability of the results across products with different prices as well as across consumers with different incomes would be a suitable way of explaining the concept of consumer satisfaction (Fornell et al 1996, Lancaster, 1971).

Dissatisfied consumers may complain formally to the producer or informally to service personnel or the retailer. They may also complain to a third party (e.g. a public agency, a TV program) and tell others about the unsatisfactory product (i.e. negative word-of-mouth). Similarly, satisfied consumers may express their appraisals to various parties and have positive word-of-mouth. Furthermore, a consumer can be both satisfied and dissatisfied with different aspects of the same product and thus can have complaints and appraisals for the same product (Mittal et al, 1998, Chan et al 2001).

Studies shows that increased consumer satisfaction should decrease the incidence of complaints and increase the occasion of appraisals. It is also true that satisfied consumers are more likely to be loyal consumers. Consumer loyalty indicates consumers repurchase intention, and repeated business is core to the firms. It simply means loyalty is a proxy for profitability of organizations (Reichhel & Sasser, 1990).

Consumers' satisfaction positively influences to consumer appraisal and loyalty that leads to profitability. Finally, loyalty is also influenced by voice. Whenever a customer praises the company, this behavioral response is indicative of the customer's decision to remain with the firm. A positive link between complaints and loyalty indicates that the firm is successful in managing to run complaining consumers in to loyal consumers (Chan et al, 2001).

Consumer satisfaction can be measured with the antecedents and consequences in an equation system to estimate their relationships with the indicators as well as with each other. The antecedents and consequences not only achieve better reliability and validity, but also improve the ability to relate consumer satisfaction for the economic benefits (Fornell 1992).

Product level consumer satisfaction means the consumer's response to the evaluation of the perceived discrepancy between some comparisons or expectations and the perceived performance of the product. That means with respect to a product, the consumer expectancy confirmation leads to their satisfaction and expectancy disconfirmation leads to their dissatisfaction (Yi, 1990).

Consumer satisfaction is a post consumption evaluation of perceived quality with relates to pre-purchase expectation about quality. The quality of the

product was the nexus in which consumers might have some kind of expectation about its performance and their confirmation decides whether he would be satisfied or not (Churchill & Suprenant 1982).

A firm's future profitability depends on satisfying customers and the existing customers should be viewed as revenue producing assets for the firm. Studies have found evidence that improved customer satisfaction need not entail higher costs, in fact, improved customer satisfaction may lower costs due to a reduction in defective goods, product re-work, etc. (Malthouse et al, 2003, Anderson & Mittal, 2000).

There was a time dimension to consumer satisfaction. It would be reasonable to assume that satisfaction may change from the time of purchase through the consumption and final disposal of a product. Three time frames become relevant such as instantaneous, short-run, and long-run. Certain generalizations can be made about the concept of consumer satisfaction in marketing as it is a complex evaluative attitude, its level is determined by every aspect of the purchasing-consumption process and it can be measured (Czepllel & Rosemberg, 1978).

Customer satisfaction differs depending on the situation and the product or service. A customer may be satisfied with a product or service, an experience, a purchase decision, a salesperson, store, service provider, or an attribute or

any of these. In order to satisfy a customer completely, the marketers has to consider all aspects where the customer have an interaction for getting a product (Padilla 1996).

Consumer satisfaction is a short-term attitude that can readily change as per circumstances. It resides in the user's mind and is different from observable behaviour such as product choice, complaining, and repurchase. It has some thresholds at both a lower levels (insufficiency or under fulfillment) and an upper level (excess or over fulfillment). It means that a consumer's satisfaction may drop if he gets too much of a good thing. Many people focus upon the lower threshold and neglect the potential for an upper threshold (Andreassen & Lindestad, 1998).

Some researchers argue that consumer satisfaction cannot be measured. They completely avoid satisfaction as a measurement objective because it is a fuzzy idea that cannot be fixed meaningful benchmark. Instead, they focus on the customer's entire experience with an organization or service contact and the detailed assessment of that experience constitute whether a customer is satisfied or not (Wreden, 2004).

The definition of customer satisfaction is often linked to both the personal interaction with the service provider and the outcomes experienced by service users. For example, the Urban Institute and Mathematica conducted customer



satisfaction surveys for the federal child support enforcement system. The definition they developed addresses three aspects of customer satisfaction such as Satisfaction with client-worker interaction, Satisfaction with the support payment and Satisfaction with the effect of child support enforcement on the child (Houten & Cox, 1998)

The literatures on customer satisfaction states that the concept is context specific and varying as per products. A customer would be satisfied and dissatisfied with the different aspects of the same product or service. The satisfaction of customers even depends on the time dimensions, that is, if a customer satisfied with the product now, may not be satisfied with the same product on tomorrow or later. The expectations of customers should be succeeded in order to make them as satisfied and their expectation varies on the basis of time, different aspects of the same product and their perceived quality of the product or service. So consumer satisfaction is context specific and varying as per products or service on the basis of customers' expectations.

### **2.3 Approaches to Customer Satisfaction:**

Review on existing literatures of customer satisfaction revealed three approach to the concept such as transaction specific, cumulative and overall customer satisfaction. These classifications were made on the basis of diverse views to the concept. The Transaction-specific consumer satisfaction is a post-

consumption evaluative judgment of a specific purchase occasion. Cumulative approach to customer satisfaction is relatively a new idea that consists of all transaction specific satisfactions. Instead, the overall customer satisfaction is a general evaluation based on the entire purchase and consumption experiences with the product or service over time. These three approach has discussed in the following manner:

Transaction-specific consumer satisfaction is a post-consumption evaluative judgment of a specific purchase instance, on which the rich body of literature on consumer satisfaction is focused. In contrast, cumulative consumer satisfaction is a relatively new idea that represents the entire purchase and consumption experience with a product over time which is more fundamental and useful than transaction-specific consumer satisfaction in predicting consumer's subsequent behaviors and firm's economic performance. The overall satisfaction is a general evaluation of the customer about the product purchase and usage (Chan et al 2001, Fornell 1992).

A consumer's evaluation of a purchase can be influenced by the purchase process itself, post purchase dissonance, product use, and product or package disposition. Further, the outlet or the product, or both may be involved in the evaluation. When the customer has been satisfied with all the above aspects of his product purchase, it can be concluded that he is satisfied with the product purchase and he has a cumulative consumer satisfaction. If the customer is

satisfied with some of the above aspects of his product purchase, it can be concluded that he is partially satisfied with his product purchased that leads to overall evaluation. But he has the transaction specific satisfaction with some encounters during the purchase (Halstead, Hartman & Schmidt 1994).

Transaction specific approach to customer satisfaction refers to the customer satisfaction or dissatisfaction with a discrete service encounter that means satisfaction with single components in the whole process. The cumulative evaluation would occur when adding each transaction specific satisfaction. The overall approach to customer satisfaction refers to the consumer's overall satisfaction or dissatisfaction with the organization based on all the encounters or all the experiences to the customer with that particular organization. Consumers will comment on particular events of their purchase process when asked about transaction-specific satisfaction and they will comment their overall impression and general experiences while inquiring about overall satisfaction. (Bitner & Hubbert, 1994)

Consumers may evaluate each aspect of the purchase, ranging from information availability to price to retail service to product performance. Their evaluation would be critical and they need a good response from whatever the aspect they considered for their purchase process. Each component in their purchasing process has its own role to satisfy the customer. That is if the customer look for information, the availability of enough

information shall constitute his satisfaction with respect to information search. As like he would have some kind of expectation about the retail service, he would be satisfied only that expectations was succeeded (Hunt 1977, Keaveney 1995).

Even though transaction specific satisfaction has been considered as one of the elements in overall satisfaction, several times we can't get a linear relation between transaction specific and overall satisfaction. The basic reason for such phenomena is the service quality would vary from experience to experience due to changeable levels of transaction-specific satisfaction. But overall satisfaction would be generally more stable and can be viewed as a moving average of transaction specific satisfactions (Parasuraman et al, 1994). Transaction specific satisfaction provides specific diagnostic information about a particular product or service encounter. There would be a number of encounters between the customer and service provider. Transaction specific satisfaction represents the satisfaction/ dissatisfaction of a customer with respect to a single encounter. Cumulative consumer satisfaction is more fundamental and useful indicator of the firm's past, current and future performance. Cumulative satisfaction involves all the encounters between the customer and service provider that consist of past encounters, present interactions and future encounters. It is the sum total of all interaction between the customer and service provider (Spiteri 2003).

Cumulative consumer satisfaction stimulates a firm's investment in customer service. If the customer is getting a cumulative satisfaction, then only it can be concluded that he is a satisfied customer. Firms' are looking for long term customers in order to establish strategic alliance through relationship marketing. In such sense, the organization has to bother cumulative satisfaction in order to ensure customer satisfaction with their product purchase and usage (Ravald & Gronroos, 1996).

Overall evaluation includes several components that constitute the satisfaction. Each component has to be satisfied to consider customer satisfaction. Overall satisfaction with a purchase could include satisfaction with the purchase process, including the information available for the decision and the experience of actually making the purchase, as well as satisfaction with the service or product purchased (Andreassen 2001).

Edward (2005) has highlighted that satisfaction experience means the sum total of satisfaction with the individual attributes of the products and services that constitute the total experience. The study verified the importance of attribute satisfaction and their role in overall satisfaction.

Consumers don't have any static expectation and they are rational in nature and adaptive to changing market conditions. A consumer would be both satisfied and dissatisfied with different aspects of the same product and thus can have complaints and appraisals for the same product. If he experienced

satisfaction and dissatisfaction with different aspects of the same product, their overall satisfaction would be partial. It would be reasonable to assume that satisfaction may change from the time of purchase through the consumption and final disposal of a product. (Czepllel & Rosemberg 1978, Mittal et al 1998, Chan et al 2001).

Customer satisfaction differs depending on the situation and the product or service. A customer may be satisfied with a product or service, or an experience, or a purchase decision, or a salesperson, or a store, service provider, or an attribute or any of these. All these attributes can influence a customer as satisfied or not. Most studies in the field of consumer satisfaction to date have measured specific components. These specific components might have different influences to the satisfaction of a customer with respect to a particular product (Renoux 1973).

Under conventional definition, a customer is satisfied at the stage where he ultimately used or enjoyed the product or service, or it is a customer's evaluation of his or her experience with and reaction to a particular product transaction, episode, or service encounter. Here the customer may be satisfied with any of the aspect of his interaction. But in modern times, to satisfy a customer, it requires many interaction and the marketers should have to ensure that whatever the interaction taken place with the customer have to be clearly monitored and succeeded. Here a customer would be satisfied only when he

gets satisfaction with various aspects and interactions throughout his product purchase (Olsen & Johnson, 2003).

Studies in tourism industry state that there are two types of satisfaction, such as satisfaction with a destination and satisfaction with each transaction. Various parties are involved in tourism industry in order to encounter different needs of customers and these parties can be grouped as transport, accommodation, guide assistance and so on. It is the destination level of satisfaction that is influenced by the various transactions occurs during the experience of such destination (Foster 2001).

While attempting to measure customer satisfaction, it can be seen that attributes would have different satisfaction implications for various consumer and market segments. The usage context, segment population, and market environment are capable of influencing satisfaction and product use. Very clearly, it can be seen that consumer satisfaction are individual specific, and also product specific. Even a customer is satisfied with a product at one time, may not be satisfied with the same product at different time because of various reasons. If an organization failed to account segment specific and context specific variation may lead a firm to look on the wrong aspect for a given set of consumers (Anderson & Mittal, 2000).

Consumers, who are having similar satisfaction ratings, yet different characteristics, may exhibit different levels of repurchase behavior. It is

obvious that if the customer is repurchasing the same product in a highly competitive market, he should be satisfied with his recent purchase of the product. If a group of customers expressing same satisfaction rating with a specific product may not be repurchased because of some other extraneous reasons specific to individuals. So segmenting markets, grouping consumers, etc. are the some measure to commonly identify their customer satisfaction. Otherwise an organization should have to go individually to identify their satisfaction level (Mittal & Kamakura, 2001).

There are a number of encounters a customer goes through in the course of their entire service experience. A service experiences can be breaks in to different components and has to measure each components performance or ability in satisfying a customer. Through a paper on Cumulative Encounter Satisfaction in hotel conference process, proposed a model for valuing cumulative satisfaction of its customers. The service delivery process has been broken down in to distinct encounters that comprise the main parts of the entire process. A customer would be satisfied fully if he satisfies all the components or stages of his interaction with the product purchase or service encounter (Danaher & Mattson, 1994).

Cumulative customer satisfaction is an evaluation of a customer based on the total purchase and consumption experience obtained from the product or service over time. It is the evaluation made after the product purchase. Any



experiences he had from the purchase process will influence his satisfaction. A single component or aspect in the purchase process can lead to the dissatisfaction which leads to the negative word of mouth about the company and its product. In order to satisfy a customer, the common interactions of them during the product purchase process have to be diagnosed and ensure that the customers are satisfied with all the aspects (Anderson et al, 1994).

Cumulative consumer satisfaction is especially important in the industries of continuously provided service like public utilities, health care, financial services, telecom service and other subscription services. But transaction specific satisfaction may provide specific diagnostic information about a particular service encounter. Cumulative satisfaction is a more fundamental indicator of the firm's past, current, and future performance and it concerns expectations in different time. Thus, measurement of satisfaction should take into account changes of expectation and impact from prior expectation on subsequent expectations (Johnsons & Fornell 1991).

The meaning of the construct used to measure consumer satisfaction is context specific and vary as per the situation. Measurement and theory are inextricable linked because theoretical concepts are defined not merely in terms of their empirical conditions but also in terms of the theoretical context in which they occur. Satisfaction would be measured with its antecedents and consequences in an equation system to estimate their relationships with their

indicators as well as with each other that not only achieve better reliability and validity, but can, also, improve the ability to relate consumer satisfaction to economic benefits (Oliver 1980).

Companies are measuring consumer satisfaction in isolation of its causes and consequences and if needed, measuring the satisfaction on the basis of consumer loyalty and profit. These results exhibit low reliability in the measurement and strong bias in the coefficients. So many companies are not able to build up a strong relationship between satisfaction measures and economic performance (Fornell 1992).

Cumulative approach can better predict customers' intentions and behavior. A study on the drivers of satisfaction and behavioral intentions for vehicle owners 3 to 4 months after purchase of the vehicle (initial consumption period) and 21 months later (later consumption period) using more open (cumulative) evaluations. They found that service satisfaction has a greater impact on intentions earlier in the consumption history, whereas product satisfaction has a greater impact later on (Olsen 2003).

The empirical evidence reveals that cumulative customer satisfaction and brand value leads to profitability. However, those effects have been studied substantially from each other. Researchers have supported that firms follow either increasing customer satisfaction or growing brand value. There are

firms that pursue not only increasing cumulative customer satisfaction but also growing brand value (Angulo & Rialp 2007).

In order to measure the consumer satisfaction, companies using single-item scales of several points (five to seven) to seek consumers' responses about their experience with the product. But consumer satisfaction is a theoretical construct or a latent variable like attitude and emotion that cannot be measured directly. On the other hand, single-item scales cannot assess or average out the variance due to random errors. The reliability of single-item scales is difficult to assess and, even when assessed in various studies using the only available test-retest reliability estimate, most estimates of this kind are low to moderate and indicate that the scales should be used caution. Some studies employ multi-item scales to measure consumer satisfaction and show that they are significantly more reliable than the single-item scales. It is a well-known fact that a multi-indicator is more appropriate and reliable when measuring a theoretical construct than a single indicator. Altogether, it is more desirable to use a multi-indicator to measure consumer satisfaction that is a theoretical construct that cannot directly be measured by an objective variable but can indirectly be measured using proxies or indicators (Chan et al 2001).

Customer satisfaction has been studied from transactional and cumulative perspective. In a transactional perspective, customer satisfaction is viewed as a customer evaluation of a specific buying situation. But in a cumulative

perspective, customer satisfaction is the result of an evaluation of whole purchase and consumption experience with a good or service over the time (Auh & Johnson 2005).

The above stated literatures on customer satisfaction are more favour to the cumulative approach to the concept. Earlier studies were progressively researched the transaction specific and overall approach but least bothered about cumulative approach to customer satisfaction. Many researchers focused that customer satisfaction includes several components and the expectancy confirmation of these components leads to the ultimate satisfaction of consumers. Substantiating each components of customer satisfaction and succeeding all the expectations of customers with respect to each component would leads to the total satisfaction of customers and it can be termed as cumulative approach to customer satisfaction.

#### **2.4 The Mediation and Moderation role of Customer Satisfaction**

A moderator is a qualitative or quantitative variable that affects the direction and strength of the relation between an independent or predictor variable and a dependent or criterion variable. A mediator variable accounts the relation between the predictor and the criterion (Barron & Kenney 1986). A moderator variable changes the strength of a relationship or effect between two variables. It indicates the conditions in which a particular effect can be

expected. It may decrease, increase or change the strength and direction of a relationship (Mohr et al 2005, Cooper et al 1990).

Mediator variable specifies how or why a particular effect or relationship occurs. It describes the process that occurs to create the relationship. Statistically, the mediation variable is indicated when the relationship between the predictor and criterion is non-significant after controlling for the effect of the mediator variable (Cooper et al 1990, Baron & Kenny, 1986). Mediation means the effect of an independent variable on a dependent variable is transmitted through a third variable (Alwin & Hauser 1975). It is an indirect effect of an independent variable on a dependent variable that passes through a mediator variable (Shrout & Bolger 2002).

Studies on customer satisfaction explain that it mediates the antecedents and consequences (Anderson & Sullivan 1993). Most of the satisfaction models used the customer satisfaction as a mediating variable between the antecedent and consequence (Fornell et al 1992, Oliver 1980). Bolton and Drew (1991) says that customer satisfaction mediates customer loyalty, increases positive word of mouth (Szymanski & Henard 2001) and leads to customers' willingness to pay premium prices for their purchase (Homburg & Furst 2005). A review on customer satisfaction models revealed that there are studies on the mediation role of customer satisfaction (Srivastava et al 1998,

Anderson et al 2004) but least diagnosed the moderating function of customer satisfaction. Through this study, the researchers decided to check the mediation as well as the moderation role for customer satisfaction between the antecedents and consequences.

### **2.5 The Antecedents and Consequences of Customer Satisfaction**

It is the cause and effect of customer satisfaction. The antecedents are the determinants or causes that decide the level of satisfaction. It can be understood through the consequences, that is the effect of customer satisfaction. Studies on customer satisfaction have based on the antecedents and consequences (Churchill & Suprenant, 1982) as it is a behavioural response of customers that cannot be measured directly (Chan et al, 2001). Customer satisfaction is a post purchase evaluation with pre purchase expectations (Kotler, 1991) of certain determinants or antecedents. Critical analysis of such expectations would help the marketer for producing good consequences of customer satisfaction such as positive word of mouth, repurchase intention, customer loyalty, etc. (Rust & Zahornik, 1993, Henning-Thurau et al, 2002). Through this study, the researchers diagnosed the major antecedents or determinants of customer satisfaction in the compact segment car industry and formulated a model of customer satisfaction with antecedents and consequences. The antecedents of customer satisfaction for the study consists of product related as well as process related customer satisfaction.

## **2.6 Product level satisfaction and Process level satisfaction**

Past studies on customer satisfaction has discussed the concept with certain objects like satisfaction with product, satisfaction with purchase process, satisfaction with the salesman. It resembles that while identifying the customer satisfaction, the researchers has to relate the concept with enough specificity.

Studies on consumer satisfaction have confirmed its mediation role between the antecedents and consequences. The antecedents or the determinants of satisfaction lead to some outcomes or consequences. It means high performance of the product leads to customer loyalty. Here, the high performance is one of the antecedents and customer loyalty is the consequences of that antecedents. But in actual purchase experience, the high performance of the product is one of the determinants of customer satisfaction, and if the customer is satisfied due to high performance of the product, he would have customer loyalty. In this incident, the customer satisfaction would be considered as the mediating variable between high product performance and customer loyalty (Fornell et al 1992, Anderson et al 1994).

### **2.6.1 Product Level Satisfaction**

Churchill and Suprenant (1982) have stated that customer satisfaction was determined solely by the product performance. Product performances are

determined by a large number of components specific to the product such as quality, utility, usage and so on. If the product has all such features, the customer would be satisfied with such products.

Every customer would have expectations before buying the product. If the product performs well, the customer would be satisfied. Product specific satisfaction is there at every purchase process and it intervenes between expectancy disconfirmation and post purchase state of feelings of the customer (Oliver & Linda, 1981).

Product satisfaction is the outcome of expectancy confirmation with the performance of the product to the customer. It is the post purchase experience evaluation of a customer with a product (Westbrook 1980, Swan & Trawick 1981).

Earlier studies in the field of customer satisfaction are highly concentrated on satisfaction with the product. Consumers want to fulfill their expectation with the product and they undertake enough efforts for getting maximum satisfaction. The theory of expectancy confirmation is of high importance in customers' satisfaction with the product (Cardozo 1965, Oliver, 1977).

There are studies claiming only the product level satisfaction constitute customer satisfaction. The effect of disconfirmation of expectancy for the product makes positive or negative behavioural change to the customer. It



also states that overstating the quality of the product makes a favourable evaluation by the customer towards the product (Olson & Dover, 1979, Olshavsky & Miller, 1972).

### **2.6.2 Process Level Satisfaction**

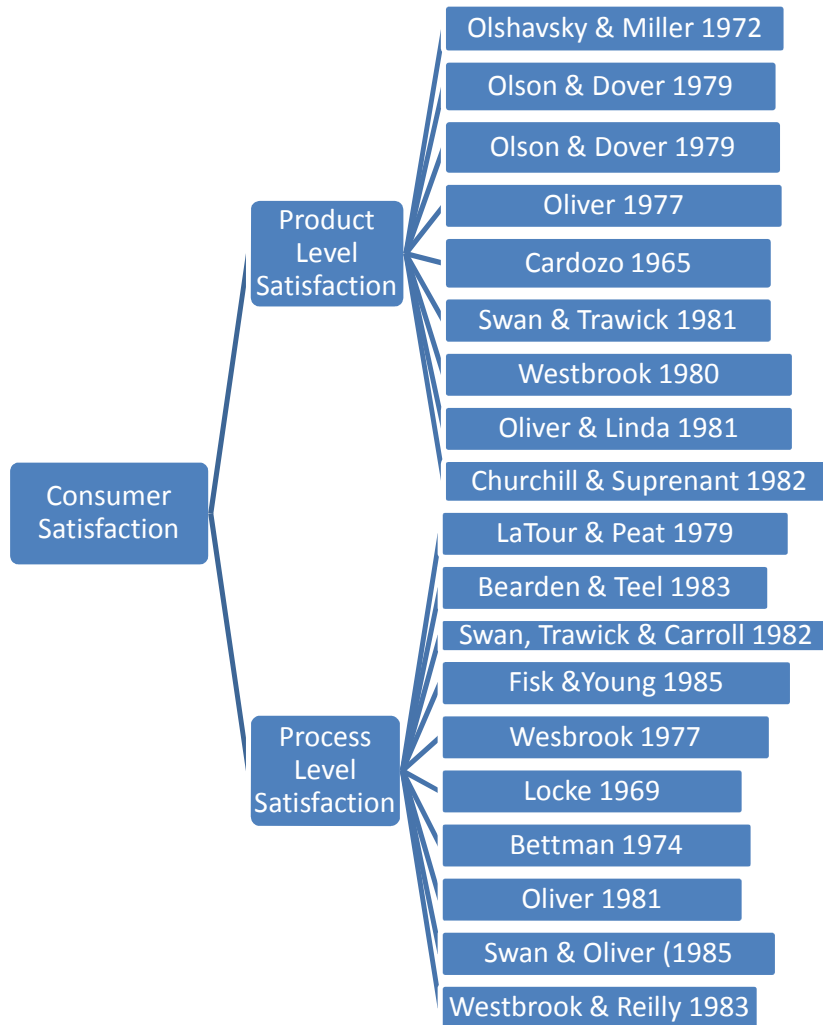
Customer satisfaction also studied in a context of purchase process. The experiences of a customer during the purchase process leads to process satisfaction (Fisk & Young 1985). There would be predictive expectations about the purchase experience and it has to be confirmed. It decides the process satisfaction (Swan, Trawick & Carroll 1982).

The customer would have complaining behaviour if he dissatisfied with the purchase process (Bearden & Teel, 1983). The post consumption experiences of customers have become the determinants of customers' satisfaction. The purchase experiences might influence level of customer satisfaction (LaTour & Peat, 1979).

Consumers compare the pre-purchase beliefs about a product to post-purchase beliefs formed during the consumption of the product. Satisfaction is the response through a cognitive evaluation process in which the perceptions of an object, action, or condition are compared to one's values (Locke 1969, Westbrook & Reilly 1983).

Swan and Oliver (1985) have stated that customer satisfaction comes from the positive response of the salesperson. The positive shopping experience of a customer leads to customer satisfaction (Oliver 1981). Each components or attributes encountered by a customer during the purchase process directly influence customer satisfaction (Bettman, 1974). The pre-purchase experiences such as information gathering, outlet selection, etc. has directly influence the customer satisfaction (Wesbrook, 1977).

Chart 2: Product Level and Process Level Satisfaction Literature



### **2.7 Consequences of Customer Satisfaction:**

Consequences of customer satisfaction mean the behavioral changes to a customer if he is satisfied or dissatisfied. Customer will respond in such a

manner that will have direct influence to the market share of the organization (Anderson et al 1994).

### **2.7.1 Repurchase Intention:**

Repurchase intention is the willingness to buy the same product or service by a customer (Dodd et al 1991). It is the anticipated response of the effectiveness of a transaction (Li et al 2002). If a customer is satisfied with the service provider, he will approach the same provider for future purchase (Oliver 1997, Bitner 1990). Overall satisfaction as compared to transaction specific satisfaction will influence more on repurchase intentions because the overall satisfaction would have the effect of more encounters than transaction specific satisfaction (Anderson et al 1994, Jones & Suh 2000).

The satisfying customer will buy the product from the same supplier and that leads to increased future revenues to the organization (Bolton 1998, Fornell 1992). If a customer is satisfied with certain product, he would be loyal to the organization. His involvement in future purchase would be low and can easily choose the product. It reduces the future transaction cost to the organizations (Reichheld & Sasser 1990). Customers are ready to purchase the product or service even though with a small hike in the price. They believe that the price hike is due to the quality of the product and they may not shift their preferences to alternatives (Anderson 1996). Sometime the customer is ready

to adjust the quality aspect of the product. Satisfied customers may not make complaints about the quality of certain aspects of the product as they felt that it is a minor issue and can be accommodated. They may not change their preferences for this product in future because they already satisfied with the product in their past experience (Anderson & Sullivan 1993).

Kotler (2006) says that satisfied customers are less sensitive to seasonal fluctuations, cost changes, and changes in accounting practices. Customer satisfaction and customer complaints are inversely related and customer satisfaction and customer loyalty has positively related (Fornell 1992, Oliver 1980). Customer satisfaction positively affects repurchase intention. It is the most important factor in creating repurchase intention (Anderson & Sullivan 1993). Satisfied customers have a propensity to recommend the offers to other customers (Selnes 1993, Hartline & Jones 1996). Loyal customers usually have repurchase intention and they make positive recommendation of the product to potential consumers (Rust & Zahornik 1993).

Loyal customers repurchase from the same service provider, and continue to propose a positive attitude towards the service provider. Once the customer become loyal, it can conclude that he has repurchase intention (Anderson & Narus 1990). Customer satisfaction is an important factor leading to customer loyalty. The loyal customer will recommend the product and will result in purchasing services from the same supplier (Jamal & Naser 2002).

### **2.7.2 Word of mouth**

Word of mouth is the extent that a customer informs colleagues and relatives about an experience that he had from a product or service. Positive word of mouth is a behavioral intention to recommend the product or service (Fornell & Wernerfelt 1987).

Satisfied customers talk about their experiences with products or services to their friends and colleagues, workers and others that influence other potential customer to purchase the same product (Reichheld & Sasser 1990). Customer satisfaction is one of the important determinants of favorable word of mouth and satisfied customers always communicate their experiences to others (Frenzen & Nakamoto 1993).

There is a positive correlation between customer satisfaction and positive word of mouth. If there is a customer satisfaction, there would be a positive word of mouth (Gotlieb et al. 1994, Patterson et al. 1997). It has realized that, for maintaining a long-term customer base, word of mouth communication is very common and important especially in the case of service marketing (Swanson & Davis 2003).

It has identified that dissatisfied customers are more harm to an organization than the benefit accrued through satisfied customers. They make negative word of mouth to a large community (Hart et al., 1990). Word of mouth is

very important in service industry where consumers are more likely to be dependent on communication of colleagues. A satisfied customer informs friends and relatives about their experiences (Gremler et al. 1994).

Word of mouth is highly influential in purchase decision, especially in the field of service sector. The reason is services are intangible and very difficult to evaluation before purchasing such services. It has no standardized tool and so associated with much risk. Outcomes of interaction such as customer satisfaction and positive word of mouth are significantly influenced by the interaction between employees and customers (Henning Thureau et al. 2002).

It has stated that less satisfied customers are more likely to transmit negative word of mouth. The frequency of word of mouth would be high when there is a negative event is encountered. Customers have a tendency to communicate others about their bad experiences than their good experiences (Peeters & Czapinski 1990).

The level of customer satisfaction has directly influences consumers' behaviors such as repurchase intention and word of mouth. If there is a high customer satisfaction, there would be more repurchase intention of the product and good word of mouth (Maxham & Netemeyer 2002).

If the product or service performance exceeds the customers' expectations would motivate them to communicate others about his positive experiences.

In the case of service oriented industry, satisfied customers are more eager to make positive word of mouth. (Ranaweera & Prabhu, 2003). Whenever the customers' expectations are not fulfilled, they would be highly disturbed and leads to customer regret. Such customers will engage in negative word of mouth and would have frustration, anger, warning others about the purchase (Sweeny et al 2005).

Heckman and Gusky (1998) states that satisfied students make positive word of mouth about their institution. After their education from an institution, they would be in a position to evaluate the performance of the same. They have to suggest the same institution to the society.

There is a significant relation between customers' satisfaction and word of mouth. In the case of consumer electronics industry, satisfied customers are the real advertiser of the product. Potential customers are ready to hear the experiences of existing customers before purchasing electronics product. Satisfied customers recommend the product to potential customers if they are satisfied (Heitmann et al 2007, Brown et al 2005).

Word of mouth is the mediating as well as moderating variable for new customer acquisition. Satisfied customers would make positive word of mouth. That ultimately leads to new customer acquisition. There is a link between customer satisfaction, word of mouth and new customer acquisition.



The level of interdependence would be high if there is high customer satisfaction (Wangenheim & Bayon 2007).

Word of mouth is one of the outcomes of relationship marketing. Consumers receive benefits apart from the core service or product that forms a relationship between the customer and the service provider. The antecedents for relationship marketing vested with the service provider. If they manage the antecedents, it leads to relationship marketing that follows to customer satisfaction. If the customer satisfied, there would be positive word of mouth (Henning-Thurau et al. 2002).

Word of mouth and repurchase intention are two outcomes of customer satisfaction. Satisfied customer would loyal to the company's product or service. Customer loyalty is the consequences of customer satisfaction and leads to repurchase intentions and word of mouth (Soderlund 2006).

Word of mouth and repeat purchase are the two behavioural changes of customer loyalty. Customer loyalty makes a change in the customers' mind that leads to repurchasing the same product or from the same supplier while he looks for a new purchase. As like, he engages in positive word of mouth regarding the service provider and his services (Sirdeshmukh et al. 2002).

There is an interrelation between customer value, customer satisfaction, customer loyalty and switching cost. Customer satisfaction is the mediating

variable that makes the relationship between customer value and customer loyalty. It clearly states that customer satisfaction has a direct relation to customer loyalty. The study supports that customer satisfaction has a mediating role for the interrelationships (Lam et al. 2004).

The satisfied customers are in a position to make electronic word of mouth communication about their experience. The customer perception about the value of a product would be exchanges on a customer to customer basis. The repurchase intention of a customer also can be identified through the electronic word of mouth and any potential customers can relay the electronic transfer and sharing of individual customers experience (Gruen et al. 2006).

Customers make positive word of mouth and repurchase intention if they are satisfied not only with the offerings or products, but also with the retailer. Product satisfaction is an essential aspects but the customer expect good respect and consideration from the retailer also. A retailer has to design the shop in such a manner that the customer can experience a new please at his every visit (Jones & Reynolds 2006).

Retailers have to satisfy not only the basic demands of the customer such as high quality product with low price, but also have to make the joy during their purchase process. Customer may not communicate the positive word of mouth only due to product satisfaction. He can purchase the product from any

shop. But, if the retailer is able to give pleasure during the purchase product, the customer would recommend the product to peers and he will consider the same retailer for his future purchase (Arnold & Reynolds 2003).

The service failure leads to negative word of mouth. It is due to customers' dissatisfaction. Once an organization is satisfactorily recover the failure, such customers would have high positive word of mouth. The customers would have more word of mouth and repurchase intention if the organizations subsequently resolve the service failure to the customer (Maxham & Netemeyer 2002).

Carpenter and Fairhurst (2005) explain the customers' value during shopping leads to satisfaction. A satisfied customer becomes loyal to the organization especially in the retail industry and such customers makes positive word of mouth regarding the experiences and offerings from such retail outlets.

Studies claim that customer loyalty influence word of mouth. A loyal customer usually supports the products or services that he enjoyed and recommends the same to his near once if they have same needs. Customer loyalty enabled a customer for the product recommendations (Dick & Basu 1994). Customer satisfaction includes satisfaction with the produce, evaluations of the product performance and interpersonal interaction with sales personnel or agency (Ostrom & Iacobucci 1995).

## **2.8 A Review on Customer Satisfaction Models:**

Customer satisfaction models are used to assess the level of satisfaction to a customer. These models aggregate a score for customers overall evaluation of certain purchase experiences (Fornell et al 1992). Some models used the antecedents and consequences approach for measuring customer satisfaction. These antecedents are perceived quality, customer expectation, etc. cannot be measured in exact numerical value because these are all internal feelings of customers (Yi 1990, Oliver & DeSarbo 1988). The expectancy confirmation theory on customer satisfaction has revealed some customers expectations during their purchase process (Helson, 1964, Oliver, 1980). But the customers' expectations on what is still unstandardised as it depends on the situation and changes as per the contexts. So a common model for customer satisfaction will not be possible but framing the model for each product is more useful to the decision makers. A detailed review on customer satisfaction models and indexes as follows:

Swedish Customer Satisfaction Barometer (SCSB) has been considered as first attempt in modeling customer satisfaction. This satisfaction model uses more than thirty industries and more than hundred corporations. SCSB contains two primary antecedents of customer satisfaction, that is, perceived performance and customer expectation. Perceived performance means the perceptions of a customer's recent performance experience with a product or service and

customer expectations means the future performance of the product or service to be bought. The consequences of customer satisfaction would be either customer complaints or customer loyalty. Customer satisfaction and customer complaints are inversely related and customer satisfaction and customer loyalty has positively related. The latent variables under this model are perceived performance, customer expectations, customer satisfaction, customer complaints and customer loyalty that have been constituted by eight manifest variables (Fornell 1992, Oliver 1980).

American Consumer Satisfaction Index (ACSI) reports a score on 0-100 scale at national level. It produces indexes for 10 economic sectors, 44 industries (including e-commerce and e-business), and more than 200 companies and governmental agencies. ACSI produces scores for the causes and consequences of customer satisfaction and their relationships. It indicates the drivers of satisfaction as customer expectations, perceived quality, and perceived value as the determinants of consumer satisfaction and the outcome as customer complaints and customer loyalty (Source: official website of ACSI).

Hong Kong Consumer Satisfaction Index (HKCSI) is the function of three indicators of consumer satisfaction such as general or overall satisfaction, confirmation of expectations, and comparison to ideal. HKCSI is estimated at the product level first, and then combine to product category and overall levels

using the CPI weights of the product concerned in the Hong Kong economy. A product represents directly usable commodity or service having different brands or models produced or provided by various firms and the product level CSIs are representatives of the performance of the relevant firms in terms of consumer satisfaction with their product. Key features of HKCSI includes the direct introduction of consumer characteristics (such as age, education, and income) in model construction; the wide coverage of services, especially free services; and the adoption of a product weighting system based on consumer price index (Chan et al. 2001).

Multi criteria Satisfaction Analysis (MUSA) is the aggregation of individual preferences in to a combined value as the score of consumer satisfaction. As per this model, customers are asked to express their judgments with respect to their global or overall satisfaction and their satisfaction with regards to the set of discrete predefined criteria. The customers' preferences and judgments are on the basis of ordinal and qualitative form has to be aggregated to get the satisfaction score. The basic objective of this model is to cumulative individual preferences in to a collective value as the score of satisfaction. The major results would be the global and partial satisfaction functions, weights on the criteria or relative importance of the criteria and average satisfaction indexes (Grigoroudis & Siskos 2002).

United Kingdom Consumer Satisfaction Index (UKCSI) uses online questionnaire that asked the customers to rate organizations across various sectors on each of the factors they considered most important. UKCSI consumers considered 20 priorities that they provide most important to them. They have to weight each of these priorities according to their importance to them and the total value of these weighted averages constitutes the consumer satisfaction index. The weightings would be varying from sector to sector as some priorities are more important in some sectors than others (Official website of UKCSI).

The Norway Customer Satisfaction Barometer was very much similar to the original American Consumer Satisfaction Index with the exception that it included corporate image and its relationships to customer satisfaction and loyalty. But now the original model has been restructured and included more construct to consumer satisfaction and loyalty such as affective commitment, calculative commitment, perceived price/index and so on (Johnson et al 2001).

The Normative Model of Retaining Consumer Satisfaction is a process type model which consists of ten process elements for increasing the retention of customer satisfaction. They are competence and professionalism, corporate culture, responsiveness, quality obsession, value migration, mass customization, proactive innovation, front line information system, market based organization, and customer based compensation. These ten processes

are capable of retaining customer satisfaction. This ten process elements carry different weights in retaining customer satisfaction. In a preliminary study conducted by the author itself presumes that customer based compensation, frontline information system and market based organization having less influences in retaining customer satisfaction than corporate culture, competence, professionalism and responsiveness having more influence (Sheth & Kellstadt1992).

Kano model of customer satisfaction demonstrates that there are three different types of customer requirement. In order to satisfy a customer completely, a marketer has to know the three dimensions of customer requirement and has been classified as threshold attributes, performance attributes and excitement attributes. Threshold attributes means the expected or must be features of a product or service which should be embedded with the product and the absence of such features leads to customer dissatisfaction and the presence of such attributes doesn't contribute much to customer satisfaction. Performance attributes are those features whose absence leads to customer dissatisfaction and their presence leads to customer satisfaction. Excitement attributes are unexpected by the customer but their presence leads to high customer satisfaction or delight and absence doesn't constitute any dissatisfaction (Kano 1984).



The European Consumer Satisfaction Index (ECSI) is seen to be an economic indicator designed to measure customer satisfaction. The Swedish Customer Satisfaction Barometer has been considered as the base for ECSI and it is the simple adaptation of the same. There are seven latent variables defined by twenty one manifest variables has been considered for identifying the ECSI. The model includes the variables are corporate image, customer expectations, perceived value, perceived service quality, perceived product quality, customer satisfaction and customer loyalty. Under this, customer expectation, perceived quality, image, perceived value are the determinants of customer satisfaction which ultimately leads to customer complaint or customer loyalty (Bayol et al 2000).

The Swiss Index of Customer Satisfaction (SWICS) has been developed by Department of Marketing and Business Administration at University of Basel. As per SWICS customer satisfaction has been measured by three indicators as the global satisfaction with the product or the service, the satisfaction compared to the expectations before consumption, and the satisfaction compared to an ideal product or service. A new construct named customer dialogue has been used as the outcome of customer satisfaction. This latent variable was defined by other three manifest variables like willingness to contact the company, easiness of dialogue and satisfaction with dialogue. It has been hypothesized that satisfied customers are more interested in an

enduring dialogue than others and they feel more loyal to the company. The customer loyalty is the other latent variable in the model and measured by three manifest variables like the intention to recommend the product or the service, the intention to buy again and the intention to switch the company or provider. It is an extension of ACSI and ECSI (Bruhn & Grund 2000).

The Extended Performance Satisfaction Index (EPSI) has become a recognized non-financial measurement system for European organizations, encompassing customer and employee satisfaction as well as corporate social responsibility and living condition indexes. EPSI Rating is conducting studies in more than 20 European countries. It considers both the business to consumer (B2C) and business to business (B2B) segments. The number of industries included varies from country to country. EPSI rating also measures employee satisfaction in various industries across Europe. The EPSI research and analysis focus on the three main areas of non-financial performance and their integration. They are customer satisfaction, employee satisfaction and corporate social responsibility. An integrated analysis model is devised for the purpose of studying how these three dimensions interrelate and drive the financial results of any organization. For customer satisfaction, a cause-effect structure has been used and the latent variables as image, customer expectations, customer perceived product quality, customer perceived service

quality, customer perceived value, customer satisfaction and customer loyalty or trust (official website of EPSI).

JD Power customer satisfaction index is a survey based response from car owners that projects the level of customer satisfaction with respect to their cars. Each of the respondents has to fill-up a detailed questionnaire that explores the different aspect of their car ownership. The areas comes under this study is mechanical problems, interior problems, exterior problems, vehicle performance, vehicle interior, vehicle exterior, quality of service from dealers and ownership costs. These eight criteria has to be rated by the respondents with respect to his car and which gave an overall customer satisfaction index score states that whether he satisfied or not. JD Power and Associates not only conduct research in automobiles but also other industries ranging from mobile phones to real products. They conduct research in various countries like China, UK, France, and so on. Their research solely based on customer response through the questionnaires (official website- WWW.JDPOWER.COM, 2011).

Electronic Commerce User-consumer Satisfaction Index (ECUSI) for Internet shopping considered two kinds of experiences of the customer while using internet for their product purchase. They are the satisfaction with the shopping place and satisfaction as the user of information technology. Altogether, ten factors have been considered namely product information,

consumer service, purchase result and delivery, site design, purchasing process, product merchandising, delivery time and charge, payment methods, ease of use and additional information services that determine the satisfaction of consumers in electronic commerce (Cho & Park 2001).

SERVQUAL/RATER is a method of measuring the quality of services provided by the organization. As per this, there are five gaps between organization and its customer; they are Consumer expectation-management perception gap, Management perception-service quality specification gap, Service quality specification-service delivery gap, Service delivery-external communications gap and Expected service-perceived service gap. These gaps should have to be reduced in order to improve the quality of service. The consumer uses some similar criteria to evaluate the service quality. This model consider 10 key dimensions of service quality determinants such as access, communication, competence, courtesy, credibility, reliability, responsiveness, security, tangibles and understanding/knowing the customer. But later, the authors simplified the original SERVQUAL in to RATER as the five dimensions in named reliability, assurance, tangibles, empathy and responsiveness are capable of measuring the service quality (Parasuraman et al. 1985, 1991).

Through a review on customer satisfaction models, it has realised that all such models are holistic in nature and accommodates different contradicting

industries. This approach questions the nature of customer satisfaction such as context specific that varies as per cultures. The model developers accept that customer satisfaction would change on situation and requires separate models for assessing the customer satisfaction at varying cultures. More than this, past studies supported cumulative approach to customer satisfaction, but due to operational difficulty, they forced to use a common framework and try to include all industry to that framework for calculating customer satisfaction score.

### **2.9 The Expectancy/Disconfirmation Theory on Customer Satisfaction:**

The customer would have a perceived performance about the product or service they are looking for and they might compare various alternatives in order to form a decision. The perceived disconfirmation may be positive, negative or neutral. The perceived disconfirmation shall be positive if the products or services perform well than the alternatives and vice versa. The satisfaction feeling is a state of mind or an attitude enjoyed by the customer. The outcomes of the satisfaction or dissatisfaction would reflect in the consumer repurchase probability, word of mouth and complaining intentions (Woodruff & Gardial 1996). Following are the traditional macro theories of consumer satisfaction that underlies much of the research in customer satisfaction over the decades.

Satisfaction model explains the linkage of overall service satisfaction, encounter satisfaction, and perceived service quality. This approach supports the conceptualization of perceived quality as a separate construct that distinct from overall satisfaction in contrast to the construct of an encounter service satisfaction (Bitner & Hubbert 1994).

There are many constructs leads to the expectation of service to an individual before the encountering the actual service. While experiencing the service, he might be persuaded through a lot of items like the quality, service providers ability, etc. which leads to his perceived service. As per this, a consumer's prior experience joins with other inputs to shape current satisfaction with a service (Hui & Bateson 1991).

The expectancy confirmation model explains the degree to which a customer has been succeeded or confirmed his expectation with the product or service. Every consumer might have some kind of expectation before buying any product or service. Consumers compare these pre-consumption expectations with post-consumption experiences of products or services that form their satisfaction or dissatisfaction. The expectations of the customer would be generated through his beliefs about the level of performance that the product or service could provide (Khalifa & Liu 2003).

Perceived performance model states that perceived performance regarding the product or service purchased determines consumer satisfaction or dissatisfaction. If a customer has experienced with the product or service in past, he might be aware of some kind of perceived performance of the product from his experience itself. When he buys a new product, if the performance of the same product is not met the perceived performance experienced by the customer in past, he would be dissatisfied and vice versa. Here only the perceived performance of the product decides the satisfaction of the customer with respect to the specific product or service (LaTour & Peat 1979).

As per the social equity theory, a customer evaluates the benefit received from a brand in relation to its cost (price, effort) and then compares this ratio with the corresponding cost/benefit ratio realized by some other relevant person (e.g.: friends, seller, etc.). The basis for comparison becomes the degree of equity that consumers perceive between what they achieved and what the other person achieved. Here he would be satisfied if his equity surpass or succeed the equity experienced by other people (Swan & Mercer, 1981).

Consumer satisfaction is an additive function of positive or negative disconfirmations of perceived attribute obtained from a brand and the corresponding comparison levels of those attributes. The comparison level is developed from prior experience with the salient attributes of a brand or of similar brands in a product category. These attributes are subjective to

consumers as per their preferences in each product or service. The comparison levels would be persuaded by perceived abilities of brands other than the one purchased and used. It suggests that the bases of comparison considered by consumers are more than just their expectations (LaTour & Peat, 1979). Most of the research on customer satisfaction was based on the expectancy/disconfirmation paradigms of the construct (Cohen & Goldberg, 1970, Olshavsky & Miller, 1972, Ulaga, 2001, Bower & Garda, 1985, Jones & Sasser, 1995).

Various models on consumer satisfaction focused the post purchase experiences of customers such as expectancy confirmation, overall satisfaction, and comparison of actual experience with ideal as the criterion for satisfaction. Researchers agree that satisfaction cannot be identified directly and they used various manifest variables to identify the satisfaction or dissatisfaction of customers. Literature on customer satisfaction has stated that it should consider the encounter specific experiences of customer during the purchase and the sum of each encounter is termed as cumulative approach to customer satisfaction (Fornell 1992).

## **2.10 Customer Satisfaction Instruments**

A critical review on consumer satisfaction instruments reveals that measurement scales are developed for each context and specific purposes.



There are some scales that can be adapted for general usage but some others have to be used for designed purpose only. The following table shows the name, number of items, major objectives and the reported studies based on the respective scales.

**Table 1: Customer Satisfaction Instrument**

<b>NAME OF THE SCALE</b>	<b>NUMBER OF ITEMS</b>	<b>OBJECTIVES</b>	<b>USED BY</b>
Satisfaction general	9	Measures consumer's degree of satisfaction with an object	Oliver & Swan 1989, Price &Arnould 1999, Bansal, Taylor & James 2005, Reynolds &Beatty 1999, Jones, Mothersbaugh, & Beatty 2000, Bansal, Irving, & Taylor 2004; Bansal, Taylor, & James 2005; Thomas,

			Vitell, Gilbert, & Rose 2002, Westbrook & Oliver 1981
Satisfaction (General)	12	Measures a consumer's degree of satisfaction with a product he/she has recently purchased	Mano & Oliver (1993), Mattila & Wirtz (2001), Hausman (2004), Westbrook & Oliver (1981), Oliver, Rust, & Varki (1997)
Satisfaction (General)	7	Measuring a consumer's degree of satisfaction with some stimulus	(Crosby & Stephens 1987), (Eroglu & Machleit 1990), (Nijssen et al. 2003; Sirdeshmukh, Singh, & Sabol 2002), (Spreng, MacKenzie, &

			Olshavsky 1996).
Satisfaction (General)	3	Assess the extent to which a consumer is satisfied with something	Magi (2003)
Satisfaction (Voter)	4	Measure a voter's satisfaction with politics and election outcomes	O'Cass (2002), Evrard and Aurier (1996), Gaski (1984).
Satisfaction with Car Brand	7	Measure a customer's level of satisfaction with several aspects of a brand of car.	Brown et al. (2005)
Satisfaction with Choice of Service Provider	4	Measures the degree to which a customer is pleased with a decision that was made regarding the selection of service provider	Westbrook & Oliver (1981), Patterson & Smith (2003)
Satisfaction	3	Measure the level of	Homburg & Fürst

with Company (Post- Complaint)		satisfaction a consumer expresses towards the purchase of product from a company to which he/she had complained	(2005)
Satisfaction with Complaint Process	3	Measure the satisfaction level of a customer with the manner in which a company has handled his/her complaint	Homburg & Fürst (2005), Maxham & Netemeyer (2002)
Satisfaction with Educational Institution	4	Measure the degree to which a person is satisfied with the institution where one received some education	Arnett, German, & Hunt (2003), Westbrook & Oliver (1981)

Satisfaction with Encounter	6	Measure how positive a customer reports a recent “encounter” with a sales person in a retail store	Dolen et al. (2002), Oliver (1997)
Satisfaction with Grocer's Customer Service	7	Measure an aspect of grocery store satisfaction that focuses on various customer service attributes	Gomez, McLaughlin, & Wittink (2004), Sirohi, McLaughlin & Wittink 1998)
Satisfaction with Health Plan	4	Measure the degree to which respondents are pleased with their respective health plans	Caparo, Broniarczyk, & Srivastava (2003)
Satisfaction With	4	Measure the level of satisfaction a consumer	Homburg, Koschate, &Hoyer

Hypothetical Experience		believes he/she would experience if a certain set of events transpired as described in the study	(2005)
Satisfaction with Internet Search Process	5	Measure a person's satisfaction with the search process	Diehl & Zauberman (2005)
Satisfaction with Life	5	Measure one's global attitude about his/her life	Burroughs & Rindfleisch (2002), Diener et al. (1985)
Satisfaction with Most Recent Experience	4	Measure both affective as well as cognitive aspects of satisfaction with regard to a person's most recent experience with something	Matilla (2003)
Satisfaction	4	Measuring the level of	Tsiros & Mittal

with Performance		satisfaction a consumer expresses with regard to the performance of something like a product or company	(2000),  Tsiros, Mittal, & Ross (2004)
Satisfaction with Problem Resolution	3	Measure the degree to which it is believed that a business one has recently interacted with has resolved a particular problem in a satisfactory manner	Maxham & Netemeyer (2002a, 2002b, 2003)
Satisfaction with Purchase Experience	3	Measure a customer's global attitude regarding the quality of service he/she received from a firm	Maxham & Netemeyer (2002a, 2002b, 2003)
Satisfaction with	7	Measure a consumer's attitude about retailers	Gaski & Etgar (1986),

Retailers		and their salespeople in general	Mangleburg, Doney, & Bristol (2004)
Satisfaction with Service	3	Measure the degree to which a customer of a service provider is satisfied with the service	Voss, Parasuraman, & Grewal (1998), Brady et al, (2005)
Satisfaction with Service	7	Measuring the degree of satisfaction a consumer reports with respect to the services	Verhoef, Franses, & Hoekstra (2002), Singh (1990)
Satisfaction with Service	3	Measure the degree to which a customer is pleased with the service	Hui et al. (2004), Westbrook (1980)
Satisfaction with Service Provider	4	Measure the level of general satisfaction a consumer expresses towards a	Burnham, Frels, & Mahajan (2003)



		service provider	
Satisfaction with Service Provider	3	Measure the level of general satisfaction a customer has with a certain service provider	Gustafsson, Johnson, & Roos (2005)
Satisfaction with Shopping Experience	3	Measure a consumer's level of satisfaction received from shopping at a particular store	Seiders et al. (2005)
Satisfaction with Store	5	Measure a person's belief that the right decision was made to buy items from a particular vendor	Harris & Goode (2004), Cronin, Brady, & Hult (2000)
Satisfaction with Weight Loss Program	8	measure the degree to which a person expresses satisfaction with a	Dellande, Gilly, & Graham (2004), Oliver (1980), Westbrook &

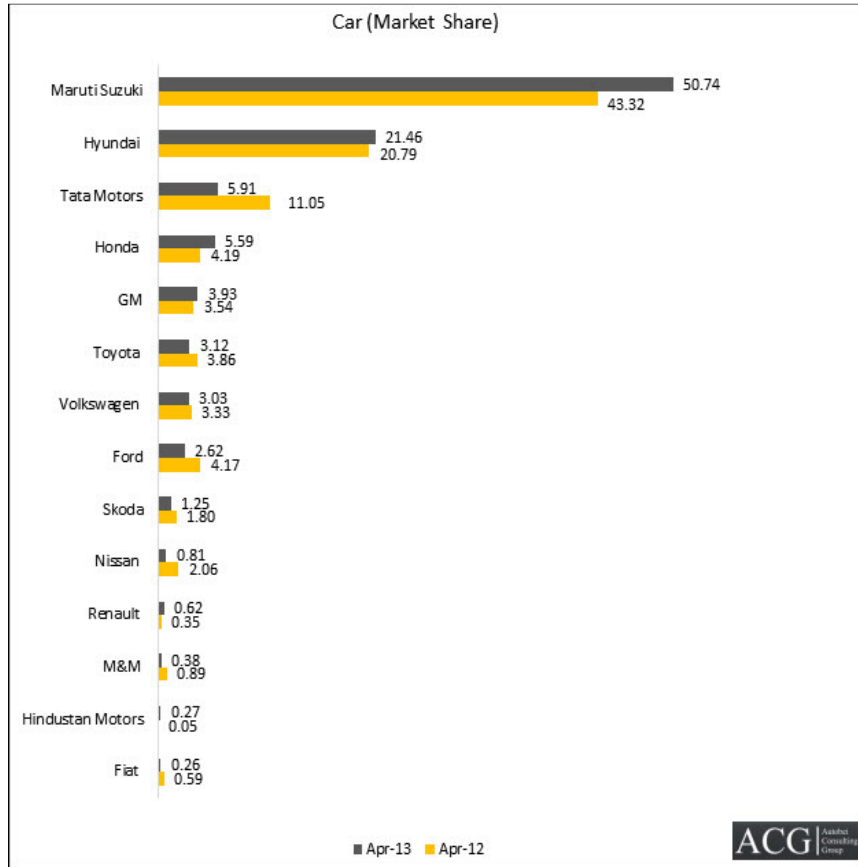
		weight loss program	Oliver (1981)
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### **2.11 The Automobile industry and Compact Segment Car market**

Indian car market is fast emerging as one of the largest car markets in the world. The technological advancement and liberalization of economy have drastically changed the size and nature of the Indian car market. The data furnished by SIAM showed passenger vehicle sales grew about 5 percent in every year. Recognizing the huge potential of Indian car market, leading car companies of the world are trying to find their space in this fast growing market and the competition has become very intensive. When the new players are trying to find a space in the market, the existing players are trying to retain their market and also grow further with constant innovation of their products and regularly adding new models to their product lines.

The recent report from the car industry shows notable variations in the car sales of different players. The following chart shows that Maruti Suzuki is the major player in Indian car market that shares 50.74 percentages (43.32% in 2012) followed by Hyundai 21.46 (20.79 % in 2012). At the same time some players are losing their market share such as Tata Motors and Toyota. The stiff competition in the market leads to set aside some automobile companies even though they are the major players in the world market.

Chart 3: Compact Segment Car Market in Kerala



Kerala is not an exception from the national trend as far as the sales of the cars are concerned. Kerala's car market had shown growth trend to the tune of 8% even when the automobile industry all over the world had affected by the economic recession. The growth of Kerala's car market is due to various reasons; both economic and non-economic factors played a very significant role in the increasing sale of the cars. Whatever be the reason, it is a fact that Kerala's car market is facing a cut throat competition in the compact car

segment. Domestic companies and foreign companies are competing with each other by consistently launching new models and attracting customers with competing sales offers. The purchase involvement of the consumers is very high in car industry (Abramson & Desai 1993) and marketers are very keen to understand the buying behaviour of consumers in the compact segment. The interest of the marketers is obvious as the largest potential consumer segment in the car market is the consumers of compact segment cars.

The Indian customers are more proximate to small cars because it is fuel efficient compared to mid-size or luxury cars. Customers are highly sensitive to fuel efficiency of the car and small cars become a solution to this concern. Indian roads are congested and driving of big cars is a hassle. Small cars are more compact and can be maintained pretty well when compared to the other segment cars. They are much reliable in terms of life and also resale value (carazoo.com on 16/08/2012).

A better understanding of buyer behavior in a highly competitive market is essential for marketers to effectively cater to the needs of the potential buyers. As each and every marketer sells quality cars in varying models with variety of accessories and service offers to the same market, the marketing efforts of the sellers matter to a large extent in converting the potential buyers as its customers. The potential customers might have different expectations and they

need to ensure that a product in question is satisfying all their queries and requirements related to the expectations at various stages of buying process (Anderson et al. 1994).

Marketer, who moves with a buyer during his purchase involvement, satisfying his requirements at every stage, can only be successful. There are so many factors influencing a purchase decision in general and some of them are price, prior relation with vendor and sales people, trust in brand name, company reputation, peer recommendation, official recommendation, trade show demonstration, and information on company website. The marketers should vigil regarding these areas to satisfy its customers (D'Ausilio 2008).

The importance of purchase decision depends up on the involvement by the purchaser. Purchase involvement is referred as the level of concern for or interest in the purchase process triggered by the need to consider a particular purchase and it is influenced by the interaction of individual, product and situational characteristics. In other words, purchase involvement simply means the extent of personal relevance of the decision to the individual in terms of their basic values, goals and self-concept (Hawkins et al 2007).

The purchase of a new automobile is a typical example for large purchase involvement and search effort. Automobile sellers are often seen as slick talkers out to take advantage of the consumer. It is partially realistic because

salespeople have price, product, and sales knowledge, including a selling strategy. Consumers may not have that much knowledge and frequently have no buying strategy. The great deal of money and durability of automobile may leads to consumer anxiety. Besides, car purchases involve a high level of social and psychological involvement, compounding the anxiety caused by the car's price and life span (Abramson & Desai 1993).

According to Laurent and Kapferer (1985) the major reasons for high involvement in purchasing as follows:

1. The importance of product to the buyer
2. High perceived risk or functional risk
3. There is a symbolic value to the product (psychological risk)
4. The emotional value to the product (ability to give pleasure)

The literature on consumer behaviour reveals that a buyer who has involved in an extensive problem solving during the purchasing process passes through various stages of decision making. These stages are Problem recognition, Information search, Evaluation of alternatives, Purchase decision, and Post purchase behaviour. Consumers of compact segment cars are expected to be highly involved in purchasing as they always follow a value for money concept while making their purchase decision. Hence, it can be presumed that

certain factors related to the cars which are considered by the consumers during these stages, have significant influence in turning them as satisfied or dissatisfied. A clear understanding of such factors and their relevance in different stages is of great importance to marketers as the same will help them to deal their potential customer in an efficient manner (Kotler & Armstrong 2010, Hawkins et al. 2007).

Since the compact segment cars accommodate all the possible stages of interaction of customers during its purchase, the researchers decided to validate the model for cumulative approach of customer satisfaction with the compact segment car owners. A model for satisfying the compact segment car owners would be helpful to the marketers to completely satisfy its customer.

## **2.12 Conclusion**

A detailed review on the literatures of customer satisfaction states that the concept is context specific and varies as per the cultural changes. It become meaningless to holistically approach to the concept but requires customized outlook to each regions and product. The concept can be measured on the basis of antecedents and consequences because the processing and evaluation of customers' satisfaction cannot be traced easily. A marketer can give some inputs to satisfy a customer and can be measured through repurchases or positive word of mouth. Through this study, the researcher has developed certain influencers to customer satisfaction that can be considered as cumulative evaluation of each transaction specific satisfaction that better predict the reasons and causes of customer satisfaction. If the marketers are able to aware of the causes of customer satisfaction or dissatisfaction, he can take effective decisions as per the requirements.

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## *Chapter 3*

# *RESEARCH METHODOLOGY*

### **3.1 Introduction**

The prevailing competition in the industry persuaded the marketers to ensure the satisfaction of its customers. It should be noted that increasing customer satisfaction leads to increasing performance (Aaker & Jacobson 1994) and decreasing complaints (Anderson et al 1997). Beside, dissatisfied customers would switch the existing product/brand and search for new marketers. As the customer satisfaction is a state of feeling of customers based on a number of factors, the marketer should understand all the constituents of such feelings for ensuring customer satisfaction.

The available customer satisfaction models assess the customers' overall satisfaction. The overall approach doesn't help marketer to take any action for improvement, but gives a score of overall evaluation by the customers. The causes of customer satisfaction or dissatisfaction should be enlightened so as to help the decision makers for improving customer satisfaction. Earlier studies on customer satisfaction have stated that it can be identified with the help of antecedents and consequences (Fornell & Cha, 1994).

This study is important because the model proposed would help the marketers to identify the role of each attributes in customers' satisfaction, and decision makers can use the same for improving satisfaction level because the sources of customer satisfaction or dissatisfaction can be identified easily.

### **3.2 Rationale of the Study**

Literature on consumer satisfaction states that in order to satisfy a customer, it requires many stages of interaction and the comparison of experiences in each stage constitute customer satisfaction or dissatisfaction. Total satisfaction with a purchase could include satisfaction with the purchase process, including the information available for the decision and the experience of actually making the purchase, as well as satisfaction with the service or product. In addition, satisfaction with one component, such as the product itself, may be influenced by the level of satisfaction with other components, such as the salesperson (Hawkins et al 2007). Studies of consumer satisfaction to date have measured specific components which might be varying according to the product or services classification and the purposes of the given study. Customer satisfaction was depending on the situation and the product or service. A customer may be satisfied or dissatisfied with a product or service, an experience, a purchase decision, a salesperson, store, service provider, an attribute or any of these (Renoux 1973).

The above stated studies uphold the requirement of an exclusive research in the field of consumer satisfaction. The researchers decided to test the conceptual model in automobile industry with specific to compact segment cars in the state of Kerala. In short, the study would bring a customer satisfaction model that helps the marketers of compact segment cars in the state of Kerala to understand the various determinants and its role in customer satisfaction or dissatisfaction. Once the marketers are aware of it, it could be more helpful to them to completely satisfy its customers by meeting their requirements.

### **3.3 Research question**

The following are the research questions addressed through this study:

1. What are the items that a customer considers for his cumulative satisfaction with the dealer?
2. What are the items that a customer considers for his cumulative satisfaction with the car?
3. Whether the cumulative customer satisfaction can better explain the variances in overall customer satisfaction that helps the decision makers to identify the reasons for customer satisfaction or dissatisfaction.

### **3.4 Statement of the Problem**

#### **3.4.1. Back ground of the Problem**

Customer satisfaction cannot be measured through a single item scale such as 'are you satisfied' when a consumer experiences a product or service. The overall rating of current customer satisfaction models would not help the decision makers to address the reason of satisfaction or dissatisfaction. There are different levels that constitute customer satisfaction or dissatisfaction and whenever the marketer notices detrimental effects on its customers' satisfaction, he should have a model for taking remedial measures.

The customer satisfaction was depended on the total experiences that include all the encounters during the purchase process (Anderson et al., 1994). The effect of various encounters are depends on context and the highly influenced item in one culture might have low influences on another culture (Oliver & Swan, 1989). Literature on customer satisfaction has stated that it should consider the encounter specific experiences of customer during the purchase and this approach is termed as cumulative approach to customer satisfaction (Fornell 1992). But the available satisfaction models are least considered the cumulative approach but based o overall evaluations for identifying customer satisfaction (overall ratings in ACSI, ECSI and so on).

### **3.4.2 Problem Statement**

The research problem can be stated as prevailing models doesn't consider various influencers of customer satisfaction substantially for identifying its role in generating cumulative satisfaction. Beside, the determinants of customer satisfaction are context specific and acceptable models are inappropriate in the state of Kerala for identifying customer satisfaction. The present study has organized to bring the influencing attributes of Customer Satisfaction at various encounters during their product purchase and usage experiences to suggest a customer satisfaction model for compact segment automobile consumers in Kerala.

### **3.5 Objectives of the Study**

- To develop an instrument for measuring the cumulative customer satisfaction in the automobile industry that helps to understand the source of variation in customers satisfaction
- To formulate a cumulative customer satisfaction model in automobile industry with special reference to compact segment car users.

### **3.6 Theoretical Background of the Study:**

Literature stated that customer satisfaction can be studied through the antecedents and consequences. As it is clear that, the antecedents of customer

satisfaction is large in number, it is too difficult to point out one or few item have the sole role in generating positive consequences. Instead, the researchers identified some major item that leads to customers' satisfaction. These items are listed under satisfaction with car and satisfaction with the dealer, and used for developing a framework that can be used in compact segment car market.

The researchers identified the following aspects from literatures that support the current study:

1. Prevailing Customer Satisfaction Models evaluates the overall experience of Customer Satisfaction that cannot give any idea regarding the sources of customer satisfaction or dissatisfaction (ACSI, SCSB, Norway CSB and so on).
2. The present customer satisfaction models measure the level of satisfaction with overall purchase experiences of customers. It says that a customer or a group of customers has been satisfied or dissatisfied with the entire product purchase experience. But it doesn't provide any help to the companies or organizations to improve the satisfaction level of its customers once they are dissatisfied or less satisfied. The reason is such models are not considering the each elements or attributes that constitute a customer's satisfaction during the product purchase and usage. They considered only the overall

satisfaction experiences of customers. In such situation, there would be some attributes in which the customers are fully satisfied and some other attributes where the customers are least satisfied. Only the combined effect would be reflected in such models. If an organization is looking to improve the level of satisfaction, it has to know the level of satisfaction with each attributes and take remedial measure to improve satisfaction with such attributes causing least satisfaction (Andreassen, 2001, Angulo, & Rialp, 2007, Khalifa, & Liu, 2003).

3. A customer may be satisfied with a product or service, an experience, a purchase decision, a salesperson, store, service provider, or an attribute of any of these (Renoux 1973). The satisfaction with each attributes can be considered as transaction specific satisfaction and the satisfaction with all the attributes can be considered as cumulative satisfaction (Parasuraman et al, 1985). So a cumulative approach to consumer satisfaction should have to include all such attributes that have relevance in the total product purchase and usage encounter.

### **3.7 Hypothesis**

The researcher tested six hypotheses through the study. The anticipated influences of various antecedents such as Overall Satisfaction with Car and Overall satisfaction with the dealer towards the consequences of customer satisfaction such as Repurchase Intention and Word of Mouth were tested.

Beside, the mediation and moderation effect of overall customer satisfaction towards the consequences, such as repurchase intention and word of mouth also tested in the study for validating the Cumulative Customer Satisfaction Model. They are as follows:

**Hypothesis 1:**

Customers' Overall Satisfaction with Car might influence their overall satisfaction. Customers' evaluates the expectancy confirmation of the performance of their car, actual performance of the car with an ideal level and overall usage experiences of their car that leads to customers' Overall Satisfaction with Car. Fornell et al, (1996) has stated that performance of the product has significantly influences customer satisfaction. A customer evaluates the performance of their car on the basis of their experiences (Howard, 1977) and uses as a criterion for satisfaction evaluation. The researcher has to test whether the customers experiences with their car has significant influences with their overall satisfaction evaluation in the compact segment car industry in Kerala and formulated the following hypothesis:

**H1: Overall Satisfaction with Car positively influences overall customer satisfaction (OCS WITH CAR→OCS).**



## **Hypothesis 2**

Johnson and Fornell (1991) states that purchase experiences lead to customers' satisfaction evaluation. Customers have pre-purchase expectation and post purchase evaluation of their purchase experiences. They would have complaining behaviour if dissatisfied with the purchase process (Bearden & Teel 1983). The post consumption experiences of customers have become the determinants of customers' satisfaction and the purchase experiences might influence level of customer satisfaction (LaTour & Peat 1979). These studies highlights that customers experiences with the purchase process that includes various interaction with dealer such as expectancy confirmation of various encounters during the purchase, dealers performance to ideal and the overall experiences with the purchase process influences customers satisfaction. The researcher tested whether customers' overall satisfaction with the dealer has significant influences towards their overall satisfaction in the compact segment car industry in Kerala and formulated the following hypothesis:

**H2: Overall satisfaction with the dealer positively influences overall customer satisfaction (OCS WITH DEALER→OCS).**

## **Hypothesis 3**

The researcher tested the third hypothesis as satisfied customers would have repurchase intention. Customer satisfaction is the most important factor in

creating repurchase intention (Anderson & Sullivan 1993). Bolton (1998) states that satisfied customers will buy the product from the same supplier. The researcher explains that repurchase intention is a consequence of overall customer satisfaction and hypothesized that overall customer satisfaction significantly influences towards their repurchase intention in the compact segment car industry in Kerala.

**H3: Overall customer satisfaction positively influences repurchase intention (OCS→RPI).**

#### **Hypothesis 4**

Positive word of mouth is a behavioral intention to recommend the product or service (Fornell & Wernerfelt, 1987). Satisfied customers talk about their experiences with products or services to their friends and colleagues, workers and others (Reichheld & Sasser, 1990). Studies on word of mouth state that there is a positive relation with customer satisfaction (Gotlieb et al 1994). For the study, the researcher tested whether overall customer satisfaction have significant influences towards word of mouth in the compact segment car industry in Kerala and formulated the following hypothesis:

**H4: Overall customer satisfaction positively influences word of mouth (OCS→WOM).**

## **Hypothesis 5**

The researcher hypothesised that overall customer satisfaction mediates Overall Satisfaction with Car, overall satisfaction with the dealer towards repurchase intention and word of mouth. It means, overall customer satisfaction transmitted the relation between independent and dependent variable (Alwin & Hauser, 1975). Most of the studies on customer satisfaction explain its role as significant mediator between the antecedent and consequences (Oliver 1980, Fornell et al, 1992, Szymanski & Henard 2001). For the study, the researcher tested the mediation role of overall customer satisfaction between the antecedents (Overall Satisfaction with Car and overall satisfaction with the dealer) and the consequences (repurchase intention and word of mouth) in the compact segment car industry in Kerala and formulated the following hypotheses with their sub-hypotheses:

**H5: Overall customer satisfaction has a mediating role between the antecedents (OCS WITH CAR and OCS WITH DEALER) and consequences (RPI and WOM).**

**H5a: Overall Customer Satisfaction mediates the relationship between Overall Satisfaction with Car to Repurchase Intention**

**H5b: Overall Customer Satisfaction mediates the relationship between Overall Satisfaction with Car to Word of Mouth**

**H5c: Overall Customer Satisfaction mediates the relationship between Overall satisfaction with the dealer to Repurchase Intention**

**H5d: Overall Customer Satisfaction mediates the relationship between Overall satisfaction with the dealer to Word of Mouth**

### **Hypothesis 6**

The researcher tested the moderation role of overall customer satisfaction in order to identify whether significant changes in the strength of the relationship between the antecedents and consequences. A detailed review on the past literature revealed that there is no acceptable study has reported to know the moderator effect of customer satisfaction between two variables. It can be expected that overall customer satisfaction moderates the relation if there is significant independent variables in the model that was not considered for the study. With this, the researcher tested the moderation role of overall customer satisfaction between the antecedents (Overall Satisfaction with Car and overall satisfaction with the dealer) and the consequences (repurchase intention and word of mouth) in the compact segment car industry in Kerala and formulated the following hypotheses with their sub-hypotheses:

**H6: Overall customer satisfaction moderates the relation between antecedents (OCS WITH CAR&OCS WITH DEALER) and consequences (RPI&WOM).**

**H6a: Overall Customer Satisfaction stronger the relationship between Overall Satisfaction with Car to Repurchase Intention and Word of Mouth**

**H6b: Overall Customer Satisfaction stronger the relationship between Overall Satisfaction with the Dealer to Repurchase Intention and Word of Mouth**

### **3.8 Variables and Operational Definitions**

**Cumulative Customer Satisfaction (CCS):** It is the judgement of a customer that the dealer and the car have provided an expected level of fulfilment based on the cumulative experiences throughout the product purchase and usage. It can be calculated by adding the customers' satisfaction ratings with different items in each dimensions related to the car and the dealer. There are 8 dimensions were developed and validated by the researcher for measuring cumulative customer satisfaction. The initial 3 dimensions are related with the Car (Cumulative Customer Satisfaction with the Car – CCS with Car) and remaining 5 dimensions related to the Dealer (Cumulative Customer Satisfaction with the Dealer – CCS with Dealer).

### **Dimensions of Cumulative Customer Satisfaction:**

1. Cumulative Customer Satisfaction with Performance: The performance of the car was determined on the basis of mileage, driving comfort, performance of the accessories, speed of the car and running condition.
2. Cumulative Customer Satisfaction with Technicalities: It is based on the engine quality, life of the engine, engine power, pickup capacity, safety feelings, and service requirements to the car.
3. Cumulative Customer Satisfaction with General: The spaciousness in the car, maintenance, design, aesthetics, resale value, brand image of the car and colours constitute the general experiences of the customer.
4. Cumulative Customer Satisfaction with Relationship: The relationship between customer and dealer was determined by the information provided at the time of purchase, information updates for the service, customer care of the outlet people, ambience of the showroom, credit terms and test drive facilities.
5. Cumulative Customer Satisfaction with Convenience: The convenience includes availability of service appointments, proximity of the outlet, approachability of service centres, and employees' engagement with the customer.
6. Cumulative Customer Satisfaction with After Sales Service: It was determined on the basis of availability of parts, cost of parts, service

charges, periodic check up from the seller and feedback from the customer after service.

7. **Cumulative Customer Satisfaction with Service Quality:** The customer rate service quality on the basis of the responses to complaints, attitude of the sales person, delivery time, and quality of service provided by the mechanic.
8. **Cumulative Customer Satisfaction with Perception:** It is the customers feeling about the value for money, dealer image and overall experience during the purchase of the car.

**Overall Customer Satisfaction (OCS):** It is a general evaluation of customer satisfaction experiences about the car purchase and usage. It can be evaluated by analysing the customers' satisfaction with the decision of buying the car, experiences with entire purchase process, satisfaction with various encounters and customers comparison of actual experiences with the ideal during the purchase and usage.

**Overall Satisfaction with the Dealer (OCS with Dealer):** The general evaluation of the customer about the dealer regarding their expectancy confirmation, performance to ideal and overall encounters during the purchase and usage of the product.

**Overall Satisfaction with the Car (OCS with Car):** The general evaluation of the customer about the car regarding their level of expectancy confirmation, performance to ideal and overall encounters during the usage of the car.

**Transaction Specific Satisfaction (TSS):** It is the judgement of a customer that each item has provided an expected level of fulfilment based on the specific experiences through the purchase process and usage. It can be identified as the responses of individual item of the determinants of cumulative customer satisfaction.

**Repurchase Intention (RPI):** The customers' willingness to purchase a car from the same dealer, an upgraded version from the same dealer, taking in to account his or her current level of satisfaction and likely circumstances in the future.

**Word of Mouth (WOM):** It is the extent a customer recommends the car and dealer to his near and dear, colleagues and relatives based on their level of satisfaction and likely circumstances in the future.

### **3.9: Instrument for the Study**

Earlier researchers on customer satisfaction has developed different satisfaction instrument that can be used for specific purpose, products and industries (Churchill 1979, Oliver 1997, Peter 1979, Gerbing & Anderson



1988). Some standard instruments like SERVQUAL, RATER, etc. developed by researchers are universally applicable with some adaptation but question the actual validity of the instrument as per cultural differences (Parasuraman et al 1985, 1991). Due to the unavailability of instrument that accommodates the cultural differences leads to the development of an instrument based on the requirements and cultural differences (Churchill 1979, Oliver 1997).

The holistic view of satisfaction/dissatisfaction means the customers' response of expectancy confirmation towards the product he used (Oliver & Bearden 1985, Swan & Trawick 1981). It means a customer says as satisfied/dissatisfied with certain items, it would be his subjective answer after considering the extent of expectancy confirmation/disconfirmation. The satisfaction or dissatisfaction with each determinant has to be tested in order to identify its role in the cumulative customer satisfaction. For the study, the researchers used seven scales for the final instrument. Among them, five scales are adapted from the literature and two scales are developed by the researcher.

A large number of studies on the antecedents of customer satisfaction are available in the literature (Chan et al 2001, Fornell 1992). Such studies are conducted in a specific region or with a specific product. These studies assume that customer satisfaction is context specific and very difficult to generalise with certain antecedents (Oliver 1997, Churchill 1979). By

evidencing this argument, it has explored the literature and listed out the antecedents. Then, the antecedents of customer satisfaction of the present population has developed through in-depth interview and compared with literature. On the basis of this, an instrument was drafted with 83 items as the antecedents of customer satisfaction. This drafted instrument is submitted for expert review in the industry and academia. Finally, two scales were developed and named as cumulative satisfaction with car (18 items under 3 dimensions) and cumulative satisfaction with the dealer (22 items under 5 dimensions).

The remaining adapted scales includes the scales used for ACSI, ECSI, UKCSI, SWICS (Fornell 1992, Oliver 1980, Johnson et al 2001, Bayol et al 2000) for identifying the overall satisfaction with car, overall satisfaction with dealer and overall customer satisfaction. The scale considered for the consequences of customer satisfaction, that is, repurchase intention (Anderson & Sullivan 1993, Liljander & Strandvik 1995, Ravald & Gronroos 1996, Chan et al 2001) and Word of Mouth (Fornell et al 1996, Soderlund 1998, Liljander & Strandvik 1995, Ravald & Gronroos 1996, Evans & Berman 1997, Bolton & Lemon 1999, Gustafsson et al 2005, Chan et al 2001) was adapted. Only relevant items in the scales are used for identifying the consequences of customer satisfaction (Kurusunluoglu 2011, Bowen & Chen 2001, Oliver

1999, Hartmann & Ibanez 2007). The details of the instrument and various items under each scale are explained below:

### **3.9.1 Scale I: Cumulative Satisfaction with Car**

Cumulative Satisfaction with car means the customers expectancy confirmation of various items with respect to the car he purchased. The major items that determine customers satisfaction with the car has considered as the items in the scale. This scale consists of three dimensions with 18 items that are listed below:

#### **3.9.1.1 Dimension I: Performance**

- Mileage
- Driving comfort
- Accessories
- Speed
- Running condition

#### **3.9.1.2 Dimension II: Technical**

- Engine quality
- Life of the engine
- Engine power
- Pickup capacity
- Safety feelings

- Service requirements to the car

### **3.9.1.3 Dimension III: General**

- Spaciousness
- Maintenance
- Design
- Aesthetics
- Resale Value
- Brand image of the car
- Colour

### **3.9.2 Scale I A: Overall Satisfaction with Car:**

It is the overall evaluation of customers' satisfaction with car. Through this, the researchers can identify the subjective response of customers' satisfaction regarding their usage of the car. The customers Overall Satisfaction with Car can be measured through the following items:

- How satisfied are you with the car?
- Rate the performance of your car with the ideal
- To what extent does the car meet your expectations

### **3.9.3 Scale II: Cumulative Satisfaction with Dealer**

Cumulative Satisfaction with the Dealer means the customers expectancy confirmation of various items with relating to the dealer during the purchase process. The 22 items in the Scale II has grouped in to five dimensions and listed as follows:

#### **3.9.3.1 Dimension 1: Relationship**

- Information provided at the time of purchase
- Information updates for the service
- Customer care of the outlet people
- Ambience of the showroom
- Credit terms
- Test drive facilities

#### **3.9.3.2 Dimension 2: Convenience**

- Availability of service appointments
- Proximity of the outlet
- Approachability of service centres
- Employees' engagement with customer

#### **3.9.3.3 Dimension 3: After Sales Service**

- Availability of parts
- Cost of parts
- Service charges

- Periodic check up from the seller
- Feedback from the customer after service

#### **3.9.3.4 Dimension 4: Service Quality**

- Response to complaints
- Attitude of the sales person
- Delivery time
- Quality of service provided

#### **3.9.3.5 Dimension 5: Perception**

- Value for money
- Dealer image
- Overall experience during the purchase

#### **3.9.4 Scale IIA: Overall Satisfaction with the Dealer:**

It is the overall evaluation of customers' satisfaction with dealer. The researchers identified customers' satisfaction with the dealer with the help of the following items:

- Rate your satisfaction with the purchase experience
- Compare the actual purchase experience with ideal
- To what extent does the purchase experience meet your expectation

#### **3.9.5 Scale III: Overall Customer Satisfaction**

It is the overall evaluation of customers' satisfaction with car purchase and usage experience. Through this, the researchers can identify the subjective response of customers regarding their entire purchase experience. The customers overall satisfaction experiences has measured through the following items:

- Satisfaction with the decision of buying the car
- Satisfaction with entire purchase experience
- Satisfaction with various encounters during the purchase process
- Satisfaction on actual experience with ideal during the purchase

#### **3.9.6 Scale IV: Word of Mouth**

It is the behavioural response of the customers after satisfaction or dissatisfaction. Satisfied customers usually endorse the same product or dealer to his friends and colleagues. Like, dissatisfied customers will not suggest the same to his friends and colleagues. Through this study, the researchers identified the customer satisfaction with the help of word of mouth. Following are the items used by the researchers for identifying the word of mouth.

- Recommend this car to friends
- Recommend this dealer to friends

### **3.9.7 Scale V: Repurchase Intention**

It is the extent to which at present, the customer would consider the same company and same outlet for replacing his car. In the case of durable product, repurchasing of the same product would be least possible. With this view, the researchers measured the Repurchase Intention instead of Repurchasing of the same product. Following are the items in the scale

- Consider the same company while replacing the car in future
- Consider the same outlet while replacing the car in future

### **3.10 Scope of the Study**

The scope of the study refers to the parameters in which the study would be operated. It defines the boundary of the study. Compact car segment is a major part of automobile car industry and universally there is no consensus definition for the segment. It makes the difficulty in defining the population of the study. The definition for compact segment is varies from region to region and researchers forced to select the population by accommodating these inconsistencies. As per the literature on the customer satisfaction, the influencers of satisfaction would vary depending on the context and time. It leads to confine the scope of this study in to an operationally defined population during a specific time period. So the study's scope has framed to compact segment car owners who purchased the same between 1<sup>st</sup> January



2011 to 31<sup>st</sup> December 2011 and the data collection has started one year after the purchase of the car, say 1<sup>st</sup> January 2013 onwards.

### **3.11 Design of the Study**

The design of the study is cross-sectional that aimed at finding out the happenings of a phenomenon, attitude, or issue by collecting the responses on a snap shot or cross section from the population. This design gives an overall image of the population as it stands at the time of the study. So the data collection becomes an important aspect of the study. Researchers have taken utmost vigilance to collect the accurate data. In order to get the reliable response, the population and sample frame has defined clearly before starting the data collection. The final instrument for the data collection has undergone reliability and validity before analysing the data. The scheme of the data collection has listed below:

#### **3.11.1 Population for the Study**

The automobile industry is a heterogeneous group with a span of segments. It is too difficult to choose the entire segments in the automobile industry as each segments being classified on the basis certain common needs such as price, safety, capacity and so on. Internationally, there is no standard classification for automobile industry but each region has its own classification.

Society of the Indian Automobiles Manufacturers (SIAM) is considered as the apex body for classifying and segmenting automobile cars in India with some homogeneous features. SIAM has revealed a new format for classification of cars in India. The new format sees cars being classified into Micro, Mini, Compact, C1, C2, D, E and F classes based on their engine size and dimensions. The new classification is based on Cubic Capacity and Length of the car. The following picture depicts the classification of cars in India on the basis of engine size and dimensions.

Chart 4

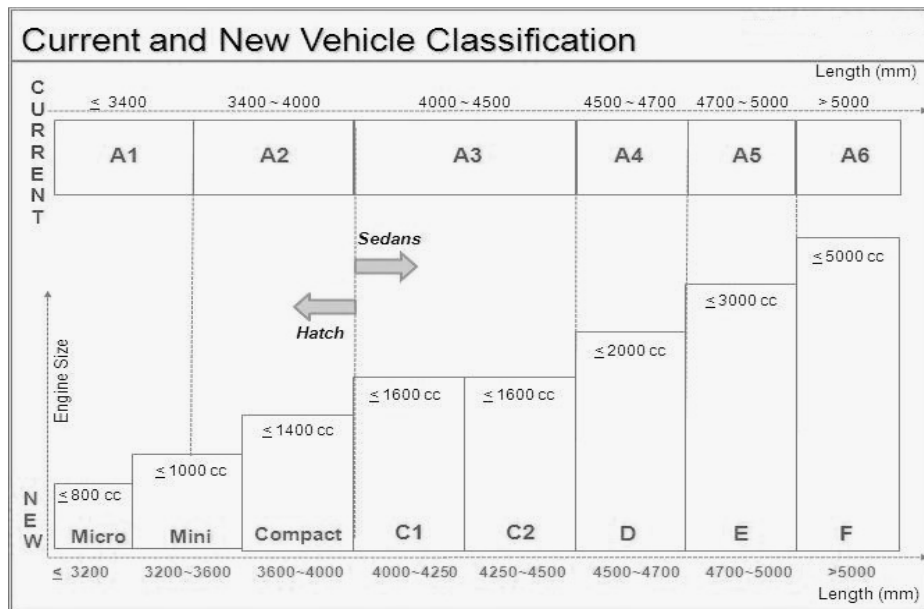
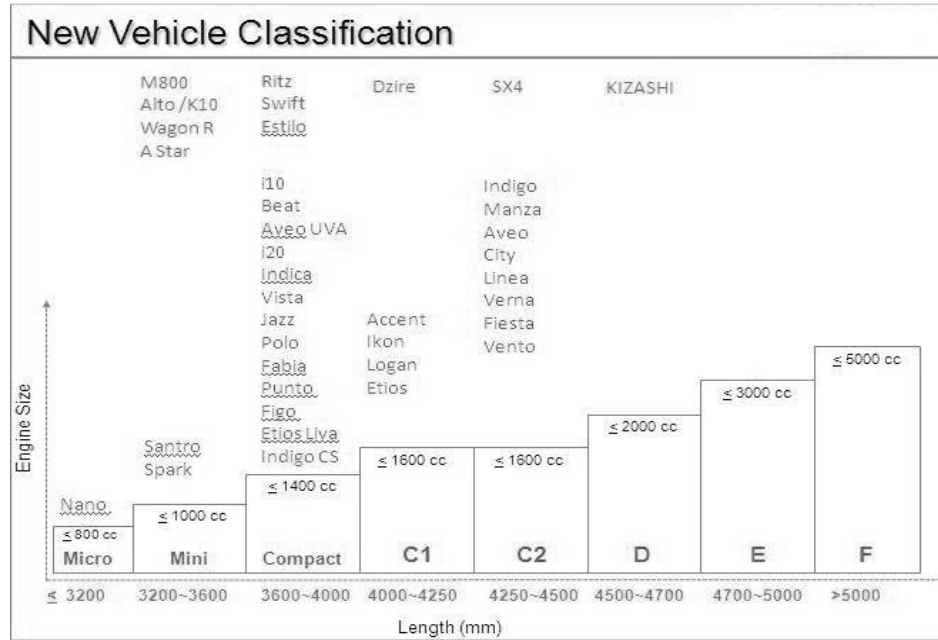


Chart 5



For the purpose of this study, the researchers selected the population as the compact segment cars users in Kerala. It can be realized that all specifications such as length of the car, engine power and displacement, safety features, etc. are seems to be common in this segment and population is more homogeneous within the group. A homogeneous population is essential for validating any conceptual model (Cooper & Schindler, 2008). The compact segment enjoys good market share and customers prefer this segment due to the price, size and economy tradeoffs (carazoo.com, 2011).

In order to collect the data, the customers who purchased a compact car as per the population during 1<sup>st</sup> January 2011 - 31<sup>st</sup> December 2011 would be

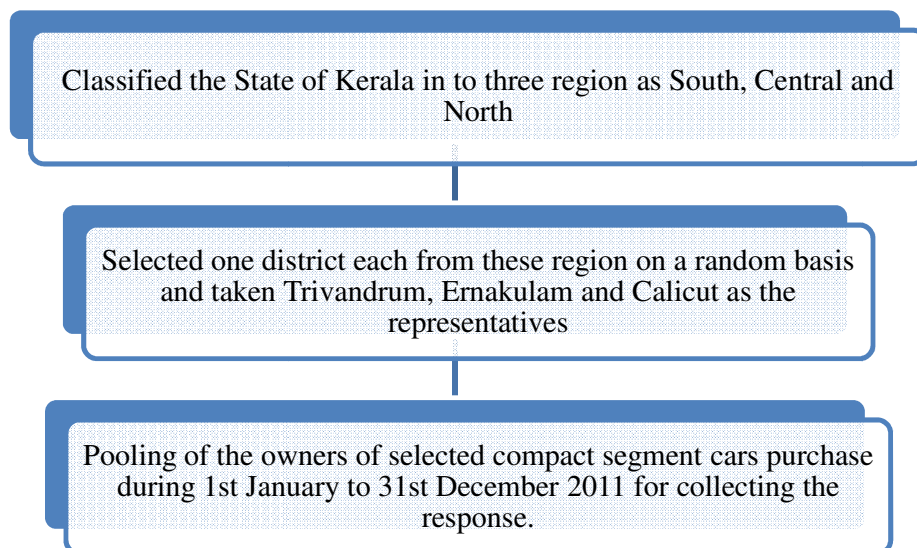
considered as the respondent. To facilitate recollection of their experience, it would be contacted after one year of their purchase. That is, the data collection would be started from 1<sup>st</sup> January 2013 onwards. The time gap between the population duration and data collection duration may not be in common interval. That is there is a possibility of collecting the data from a respondent who bought the car in 1<sup>st</sup> January 2011 and another respondent who bought the car in 31<sup>st</sup> December 2011 in a single day, say 5<sup>th</sup> January, 2013. This issue has been discussed with some eminent scholars in the field of consumer behaviour and marketing research, they suggested that as far as a research in social science is concerned, there is a possibility of such issues and the researcher cannot do any acceptable measures for the same. So it is better to collect the data from the sampling frame on a random basis, then the chance of such issues would be addressed up to an extent.

### **3.11.2 Sampling design**

A multi-stage/three stage sampling design has used for the study. It is the advanced version of cluster sampling. Under this method, the researchers considered the compact segment car owners of the state of Kerala as the population. The state of Kerala has divided in to South Kerala, Central Kerala and North Kerala, and selected each district from these regions as representative on random basis. Subsequently, Trivandrum, Ernakulum and Calicut are the representative districts of each region. By using Krejcie and

Morgan's (1970) Table for sampling size, the total number of sample size has decided. Out of the total registration of compact segment car users in Kerala during 1<sup>st</sup> January 2011 to 31<sup>st</sup> December 2011, a sample size of 399 has collected from each region (133 each). In the final stage of data collection, questionnaires are administered to the owners of compact segment cars. This method of sampling design can be termed as multi-stage/three-stage sampling. The first stage is division of the region in to three on the basis of area, second stage consists of selection of one representative district each from three regions and the final stage is grouping of compact segment car owners in the selected region for collecting the data. All stages in the study are done with sufficient justification. So this method became a multi-stage sampling design.

Chart 6: Multi-stage Sampling Design



### **3.12 Technique and Method of Data collection:**

Survey method has used for collecting the data and structured questionnaires has been administered for the same. For this, undisguised technique has considered in order to make awareness to the respondents about the purpose of the research.

### **3.13 Report of the Pilot Study**

The drafted questionnaire was administered to a convenient sample of 30 compact segment car owners who purchased the same one year prior to their response. The intention of collecting the response after one year of the purchase is to ensure that they are fully aware about their product and its maintenance before sharing their experiences (Oshikawa 1970). The respondents were able to recollect their purchase experience and responded easily to the instrument. The various criteria for the determination of reliability and validity of the instrument have listed in the following sub-heads.

#### **3.13.1 Reliability of the Instrument**

Reliability of the instrument is the extent to which results of an instrument is consistent over time and accurate representation of the total population that produces same result under similar methodology (Joppe 2000). Crocker and

Algina (1986) suggested that researchers have a responsibility for demonstrating the reliability of the instrument used for the study. The Split-Half Reliability and Cronbach's Alpha Coefficient were considered for measuring the reliability of the instrument.

### **3.13.2 The Item-Total Statistics**

The item analysis checks the unidimensionality of the instrument. This analysis estimate the reliability of the instrument by measuring the internal consistency of the items, the extent to which the items correlate well with the total score as well as the changes in Chronbach's alpha while removing each items in the scale (Moore & Benbasat 1991).

### **3.13.3 Validity of the Instrument**

It is very essential to ensure the validity of a measuring instrument. An instrument is said to be valid only if it measures what it is supposed to measure. So, validity simply means the extent to which any measuring instrument measures what it is intended to measure (Carmines & Zeller, 1974)

#### **3.13.3.1 Content Validity**

Bohrnstedt (1983) says that content validity can be ensured if the items representing the various constructs of an instrument are substantiated by a comprehensive literature support. It depicts the conceptual domain of the

instrument (Hair et al 1998). It is not on the basis of statistical figure but theoretical support. The items in the Scale I (Cumulative Satisfaction with the Car) and Scale II (Cumulative Satisfaction with the Dealer) have initially developed from literature. Then an in-depth interview is conducted for generating the influencers of customer satisfaction with 25 compact segment car users and 83 items were developed. These items were used for expert review. The experts short listed 40 items as the antecedents of customer satisfaction under two scales named Cumulative Satisfaction with Car and Cumulative Satisfaction with the Dealer. As the researchers undertaken the systematic approach for the development of Scale I and Scale II in order to finalize the measuring instrument, it can be concluded that the instrument has content validity.

#### **3.13.3.2 Face Validity**

Face validity is the subjective assessment of the correspondence between the individual items and the concept by expert judges (Hair et al., 1998). The drafted instrument was given to 5 customers of compact segment car and 5 academicians in consumer behaviour. Their suggestions were also accommodated and before finalising the instrument. So the instrument has face validity.



### **3.13.4 Exploratory Factor Analysis**

Factor analysis also used for validating the instrument by demonstrating that its constituent items loaded on the same factor and to drop proposed scale items that cross loaded on more than one factor (Marjorie , 2003).

#### **3.13.4.1 Kaiser-Meyer-Olkin Measure of Sampling Adequacy**

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is a statistic that indicates the proportion of variance in the variables that might be caused by underlying factors. It is a sampling adequacy measure and helps in determining that the factor is useful for further analysis (Kaiser 1970). It evaluate how strongly an item is correlated with other items in the correlation matrix and help researchers for assessing the sampling adequacy by examine the KMO result provided in the factor analysis. A Kaiser-Meyer-Olkin coefficient of .50 and above is considered adequate to move forward (Maxham & Netemeyer, 2003). The factors in the pilot instrument shows a KMO score above .50 and can be used for data collection. High value for the KMO measure indicates that a factor analysis of the variables can be possible and effective.

#### **3.13.4.2 Bartlett's test of sphericity**

Bartlett's test of sphericity provides information regarding whether items in the correlation matrix are sufficiently correlated, which indicates the items have some relationship and will support the purpose of the instrument (Pett et al, 2003). This is used to test the null hypothesis that the variables in the population correlation matrix are uncorrelated. It identifies whether the strength of the relationship among variables is strong (Raftery, A. 1993). The factor analysis would be possible only if the underlying items in the factor have good correlation.

#### **3.13.4.3 The Component Matrix and Total Variance Explained**

The component matrix shows the ability of the component/factor for representing each underlying item and 'Total Variance Explained' table shows the total variance explained by the factor that constitute all items (Gaur & Gaur 2010). The table, 'Component Matrix' and 'Total Variance Explained' shows that all underlying factors are capable of explaining enough variance in the respective loaded items.

#### **3.14 Details of Various Scales in the Pilot Instrument**

The following part gives the details of various reliability and validity criteria of each scale in the pilot instrument. The details of the analysis in

pilot study show that the instrument can be used for the study. The results of the analysis have listed below:

### **3.14.1 Scale I – Cumulative Satisfaction with Car**

#### **3.14.1.1 Reliability**

Split Half Reliability Statistics shows high correlation between Part 1 and Part 2. A correlation coefficient between forms of .864 shows high reliability of the instrument. . The Spearman-Brown Coefficient is .927 and the Cronbach's' alpha coefficient is .966. Guttman Split-Half Coefficient explains a good reliability of the instrument as .926. The above mentioned coefficient shows a good reliability of the scale developed for Product Satisfaction and can be acceptable.

Table 2

**Scale I (CCS with CAR) Reliability Statistics**

Cronbach's Alpha	Part 1	Value	.962
		N of Items	9 <sup>a</sup>
	Part 2	Value	.919
		N of Items	9 <sup>b</sup>
	Total N of Items		18
Correlation Between Forms			.864
Spearman-Brown Coefficient	Equal Length		.927
	Unequal Length		.927
Cronbach's Alpha (For total items)			.966
Guttman Split-Half Coefficient			.926

a. The items are: Mileage, Driving comfort, Accessories, Speed, Running condition, Engine quality, Life of the engine, Engine power, Pickup capacity.

b. The items are: Safety feeling, Service requirements to the car, Spaciousness, Maintenance, Design, Aesthetics, Resale value, Brand image of the car, Colour.

The item analysis checks the unidimensionality of the instrument. This analysis estimate the reliability of the instrument by measuring the internal consistency of the items, the extent to which the items correlate well with the total score as well as the changes in Chronbach's alpha while removing each items in the scale. The item analysis is used for measuring the internal consistency of the scale. In the scale I, the researchers noticed four items, say, accessories, service requirements to the car, design and colour have rather low item-total correlations. These items are reworded for final data collection but ensured the content validity (Moore & Benbasat 1991).

Table 3

Scale I: Item-Total Statistics (CCS with CAR)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Mileage	79.3000	414.976	.615	.966
Driving comfort	79.3000	385.872	.945	.962
Accessories	79.3667	433.757	.510	.967
Speed	79.5333	391.016	.906	.962
Running condition	79.5000	397.017	.893	.963
Engine quality	79.7667	393.909	.901	.962
Life of the engine	79.6667	407.057	.847	.963
Engine power	79.7000	389.941	.893	.962
Pickup capacity	79.5000	394.466	.879	.963
Safety feeling	80.3333	410.575	.813	.964
Service requirements to the car	80.4667	416.395	.594	.966
Spaciousness	80.1667	418.626	.812	.965
Maintenance	80.3667	413.413	.760	.965
Design	79.9000	406.093	.570	.968
Aesthetics	80.0000	407.862	.647	.966
Resale value	79.4667	372.740	.930	.962
Brand image of the car	79.3667	380.171	.900	.962
Colour	79.1000	415.059	.592	.96

6

### **3.14.1.2 Validity**

Through exploratory factor analysis, the researchers checked the underlying relation of the items in the scale. As the theoretical relation of items in the scale has analysed (content validity), the researchers now verified the statistical evidence to check the theoretical support. Through exploratory

factor analysis, items in the dimension of scale I has permitted to load in their respective component and considered as factors for further analysis.

#### Dimension 1: Performance

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .713 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 72.638 % representation to all underlying items.

Table 4

### Validity: Performance (Factor 1)

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.713
Bartlett's Test of Sphericity	Approx. Chi-Square	129.863	
	df	10	
	Sig.		.000

Component Matrix <sup>a</sup>	
	Component
	1
Mileage	.753
Driving comfort	.915
Accessories	.742
Speed	.917
Running condition	.914

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.632	72.638	72.638	3.632	72.638	72.638
2	.799	15.989	88.627			
3	.365	7.307	95.933			
4	.159	3.186	99.119			
5	.044	.881	100.000			

Extraction Method: Principal Component Analysis.

## Dimension 2: Technicalities

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .762 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 82.553 % representation to all underlying items.

Table 5

### Technicalities (Factor 2)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.762
Bartlett's Test of Sphericity	Approx. Chi-Square	231.940
	df	15
	Sig.	.000

Component Matrix <sup>a</sup>	
	Component
	1
Engine quality	.967
Life of the engine	.881
Engine power	.956
Pickup capacity	.955
Safety feeling	.904
Service requirements to the car	.772

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.953	82.553	82.553	4.953	82.553	82.553
2	.537	8.950	91.504			
3	.295	4.912	96.416			
4	.124	2.070	98.486			
5	.070	1.169	99.655			
6	.021	.345	100.000			

Extraction Method: Principal Component Analysis.

## Dimension 3: General

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .768 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance

Explained Table shows that the factor is capable of explaining 71.230 % representation to all underlying items.

Table 6

## General (Factor 3)

KMO and Bartlett's Test			Component Matrix <sup>a</sup>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.768			
Bartlett's Test of Sphericity	Approx. Chi-Square	188.178	Spaciousness		.808
	df	21	Maintenance		.902
	Sig.	.000	Design		.806
			Aesthetics		.904
			Resale value		.901
			Brand image of the car		.889
			Colour		.672

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.980	71.230	71.230	4.980	71.230	71.230
2	.728	10.401	81.630			
3	.649	9.208	90.838			
4	.320	4.568	95.407			
5	.149	2.131	97.538			
6	.115	1.644	99.182			
7	.053	.758	100.000			

Extraction Method: Principal Component Analysis.

### 3.14.2 Scale I A: Overall Satisfaction with Car

The scale I A is an adapted instrument of American Customer Satisfaction for identifying the overall customer satisfaction. (Fornell et al, 1996). This scale has world wide application and index like Swedish Customer Barometer, European Customer Satisfaction Index, etc. are based on this instrument. This scale has reworded and adapted for using the present study.

#### 3.14.2.1 Reliability

The three item scale possesses good reliability. The split half reliability is .873 and Spearman-Brown Coefficient is .939. A Cronbach's alpha



coefficient of .950 and Guttman Split-Half Coefficient of .832 supports that the pilot instrument has good reliability.

Table 7

**Overall Satisfaction with Car: Reliability Statistics (Factor 4)**

Cronbach's Alpha	Part 1	Value	.945
		N of Items	2 <sup>a</sup>
	Part 2	Value	1.000
		N of	1 <sup>b</sup>
	Total N of Items		3
Correlation Between Forms			.873
Spearman-Brown Coefficient	Equal Length		.932
	Unequal Length		.939
Cronbach's Alpha		N=	.950
Guttman Split-Half Coefficient			.832

a. The items are: Satisfaction with the car, Performance of this car with ideal car  
 b. The items are: Performance of this car with ideal car, Extend does this car meet

### **3.14.2.2 Validity**

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .656 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained table shows that the factor is capable of explaining 91.805 % representation to all underlying items.

Table 8

**SCALE I A: Overall Satisfaction with Car (Factor 4)**

KMO and Bartlett's Test		Component Matrix	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.656		Component
Bartlett's Test Approx. Chi-Square of Sphericity	101.181		1
df	3	Satisfaction with the car	.950
Sig.	.000	Performance of this car with ideal car	.985
		Extend does this car meet expectation	.939

Extraction Method: Principal Component Analysis  
3 components extracted.

Total Variance						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.754	91.805	91.805	2.754	91.805	91.805
2	.203	6.754	98.559			
3	.043	1.441	100.000			

Extraction Method: Principal Component Analysis.

### 3.14.3 Scale II – Cumulative Satisfaction with Dealer

#### 3.14.3.1 Reliability

The Split Half Reliability Statistics shows correlation between Part 1 and Part 2. The correlation coefficient between forms is .739 shows high reliability of the instrument. The Spearman-Brown Coefficient is .850 and the Cronbach's' alpha coefficient is .943. and Guttman Split-Half Coefficient is .834. The above mentioned coefficient shows a good reliability of the scale developed for Dealer Satisfaction and can be acceptable.

Table 9

**Scale II (CCS with Dealer) Reliability Statistics**

Cronbach's Alpha	Part 1	Value	.921
		N of Items	11 <sup>a</sup>
	Part 2	Value	.895
		N of Items	11 <sup>b</sup>
Total N of Items			22
Correlation Between Forms			.739
Spearman-Brown Coefficient	Equal Length		.850
	Unequal Length		.850
Cronbach's Alpha (For total items)			.943
Guttman Split-Half Coefficient			.834

a. The items are: Information provided at the time of purchase, Information updates for the service, Customer care of the outlet people, Ambience of the showroom, Credit terms, Test drive facilities, Availability of service appointments, Proximity of the outlet, Approachability of service centers, Employees engagement with customer, Availability of parts.

b. The items are: Cost of parts, Service charges, Periodic check up from the seller, Feedback from the customer after service, Response to complaints, Attitude of the sales person, Delivery time, Quality of service provided by the mechanic, Value for money, Dealer image, Overall experience during the purchase of this car.

In the item analysis of scale II, the researchers noticed some items (underlined items) possess comparatively less correlation with total correlation, but it shows good reliability of Chronbach's Alpha if Item Deleted. These items are reworded in the final instrument and ensured the content validity (Moore & Benbasat 1991).

Table 10

**Scale II: Item-Total Statistics (CCS with Dealer)**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Information provided at the time of purchase	85.4000	284.524	.749	.938
Information updates for the service	85.4667	287.568	.751	.938
Customer care of the outlet people	85.7000	281.734	.825	.937
Ambience of the showroom	85.8333	289.661	.609	.941
Credit terms	85.5667	290.116	.619	.941
Test drive facilities	85.8000	287.338	.595	.941
Availability of service appointments	85.5667	283.909	.840	.937
Proximity of the outlet	85.7333	293.099	.537	.942
Approachability of service centers	85.5000	293.776	.506	.943
Employees engagement with customer	85.8333	291.385	.694	.939
Availability of parts	85.5000	286.190	.718	.939
Cost of parts	86.2000	304.372	.426	.943
Service charges	86.0333	305.068	.485	.942
Periodic check up from the seller	85.9000	299.610	.529	.942
Feedback from the customer after service	85.9000	299.403	.695	.940
Response to complaints	86.2667	287.306	.665	.940
Attitude of the sales person	85.7667	290.806	.519	.943
Delivery time	86.0667	307.030	.435	.943
Quality of service provided by the mechanic	85.5333	302.120	.598	.941
Value for money	85.3333	279.471	.815	.937
Dealer image	85.1667	288.489	.780	.938
Overall experience during the purchase of this car	85.0333	294.447	.754	.939

### 3.14.3.2 Validity

Dimension 4: Relationship

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .731 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance

Explained Table shows that the factor is capable of explaining 74.531 % representation to all underlying items.

Table 11

## Relationship (Factor 5)

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.731	
Bartlett's Test of Sphericity	Approx. Chi-Square	193.973	
	df	15	
	Sig.	.000	

Component Matrix <sup>a</sup>		Component
		1
Information provided at the time of purchase		.850
Information updates for the service		.794
Customer care of the outlet people		.875
Ambience of the showroom		.906
Credit terms		.893
Test drive facilities		.858

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.472	74.531	74.531	4.472	74.531	74.531
2	.945	15.746	90.277			
3	.323	5.386	95.663			
4	.147	2.442	98.104			
5	.072	1.193	99.298			
6	.042	.702	100.000			

Extraction Method: Principal Component Analysis.

### Dimension 5: Convenience

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .623 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 73.210% representation to all underlying items.

Table 12

## Convenience (Factor 6)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.623
Bartlett's Test of Sphericity	Approx. Chi-Square	78.985
	df	6
	Sig.	.000

Component Matrix <sup>a</sup>	
	Component
	1
Availability of service appointments	.921
Proximity of the outlet	.913
Approachability of service centers	.845
Employees engagement with customer	.730

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.928	73.210	73.210	2.928	73.210	73.210
2	.739	18.468	91.678			
3	.224	5.609	97.286			
4	.109	2.714	100.000			

Extraction Method: Principal Component Analysis.

### Dimension 6: After Sales Service

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .817 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 71.928 % representation to all underlying items.

Table 12

## After sales service (Factor 7)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.817
Bartlett's Test of Sphericity	Approx. Chi-Square	92.071
	df	10
	Sig.	.000

Component Matrix <sup>a</sup>	
	Component
	1
Availability of parts	.694
Cost of parts	.862
Service charges	.852
Periodic check up from the seller	.903
Feedback from the customer after service	.912

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.596	71.928	71.928	3.596	71.928	71.928
2	.647	12.938	84.866			
3	.375	7.501	92.368			
4	.221	4.417	96.785			
5	.161	3.215	100.000			

Extraction Method: Principal Component Analysis.

### Dimension 7: Service Quality

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .742 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 72.890 % representation to all underlying items.

Table 14

## Service quality (Factor 8)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.742
Bartlett's Test of Sphericity	Approx. Chi-Square	61.225
	df	6
	Sig.	.000

Component Matrix <sup>a</sup>	
	Component
	1
Response to complaints	.861
Attitude of the sales person	.852
Delivery time	.787
Quality of service provided by the mechanic.	.910

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.916	72.890	72.890	2.916	72.890	72.890
2	.569	14.232	87.122			
3	.327	8.174	95.296			
4	.188	4.704	100.000			

Extraction Method: Principal Component Analysis.

### Dimension 8: Perception

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .684 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 79.655 % representation to all underlying items.



## Perception (Factor 9)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.684
Bartlett's Test of Sphericity	Approx. Chi-Square	44.792
	df	3
	Sig.	.000

Component Matrix <sup>a</sup>	
	Component
	1
Value for money	.876
Dealer image	.937
Overall experience during the purchase of this car	.863

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.390	79.655	79.655	2.390	79.655	79.655
2	.418	13.924	93.579			
3	.193	6.421	100.000			

Extraction Method: Principal Component Analysis.

### **3.14.4 Scale II A: Overall Satisfaction with Dealer**

The scale II A is an adapted instrument of American Customer Satisfaction for identifying the overall customer satisfaction. (Fornell et al, 1996). This is the same instrument used by the researchers for understanding the Overall Satisfaction with Car. This instrument is reworded and adapted for identifying the customers overall satisfaction with the dealer.

### **3.14.4.1 Reliability**

The three item scale possesses good reliability. The split half reliability is .857 and Spearman-Brown Coefficient is .930. A Cronbach's alpha coefficient of .900 and Guttman Split-Half Coefficient of .895 shows good reliability of the instrument.

Table 16

<b>Scale II A: Overall Satisfaction with Dealer Reliability Statistics (Factor 10)</b>			
Cronbach's Alpha	Part 1	Value	.833
		N of Items	2 <sup>a</sup>
	Part 2	Value	1.000
		N of Items	1 <sup>b</sup>
	Total N of Items		3
Correlation Between Forms			.857
Spearman-Brown Coefficient	Equal Length		.923
	Unequal Length		.930
Cronbach's Alpha		(N= 3)	.900
Guttman Split-Half Coefficient			.895

### **3.14.4.2 Validity**

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .754 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained table shows that the factor is capable of explaining 85.695% representation to all underlying items.

Table 17

**Factor 10: SCALE II A: Overall Satisfaction with Dealer**

KMO and Bartlett's Test		Component <sup>a</sup>	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.754		Component 1
Bartlett's Test of Sphericity	Approx. Chi-Square = 58.720		
	df = 3	Satisfaction with the purchase experience	.923
	Sig. = .000	Actual purchase experience with the ideal	.915
		Purchase experience meet the expectation	.939

Extraction Method: Principal Component Analysis. 3 components extracted.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.571	85.695	85.695	2.571	85.695	85.695
2	.250	8.330	94.025			
3	.179	5.975	100.000			

Extraction Method: Principal Component Analysis.

### 3.14.5 Scale III: OVERALL CUSTOMER SATISFACTION

Scale III is indented to identify the customers' overall satisfaction. Number of studies are available for evaluating customer overall satisfaction. Major international indexes are based on the standardised scale for overall satisfaction such as ACSI, ECSI and so on. Originally, the standardised scale consists of three items and the researchers added one more item in the scale that seems to be very important for checking customers' overall satisfaction (Kurusunluoglu 2011, Bowen & Chen 2001, Oliver 1999, Hartmann & Ibanez 2007). This adapted scale also enjoys enough reliability of .872 Cronbach's Alpha, Split-Half .665, Spearman-Brown Coefficient .798 and Guttman Split-Half Coefficient of .763.

### **3.14.5.1 Reliability**

Table 18

**Overall Customer Satisfaction: Reliability Statistics (Factor**

Cronbach's Alpha	Part 1	Value	.936
		N of Items	2 <sup>a</sup>
	Part 2	Value	.762
		N of Items	2 <sup>b</sup>
	Total N of Items		4
Correlation Between Forms			.665
Spearman-Brown	Equal Length		.798
Coefficient	Unequal Length		.798
Cronbach's Alpha			.872
Guttman Split-Half Coefficient			.763

### **3.14.5.2 Validity**

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .639 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 73.362 % representation to all underlying items.

Table 19

**SCALE III: OVERALL CUSTOMER SATISFACTION (Factor 11)**

KMO and Bartlett's Test			Component Matrix <sup>a</sup>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.639		Component	
Bartlett's Test of Sphericity	Approx. Chi-Square	78.851		1	
	df	6	Satisfaction with the decision of buying this car	.936	
	Sig.	.000	Satisfaction with entire purchase experience	.866	
			Satisfaction with various encounters during the purchase process	.804	
			Satisfaction on actual experience with ideal during the purchase	.813	
			Extraction Method: Principal Component Analysis.		
			a. 1 components extracted.		

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.934	73.362	73.362	2.934	73.362	73.362
2	.597	14.914	88.276			
3	.392	9.794	98.070			
4	.077	1.930	100.000			

Extraction Method: Principal Component Analysis.

The consequences or outcome of customer satisfaction would be identified with the help two standardized scales such as word of mouth and repurchase intention. The items in each scale have been developed from literature review. It has finalised two items in each scale and undergone all reliability and validity test (Kurusunluoglu 2011, Oliver 1999).

### **3.14.6 Scale IV: Word of Mouth**

The items in the scale such as recommendation of the dealer to friends and recommendation of the car to friends are considered as the behaviour response of a customer after experiencing the car purchase and usage. These items are based on literature and used for checking customers' word of mouth. The split-half reliability is .713, Cronbach's Alpha .832, Spearman-Brown Coefficient is .832 and Guttman Split-Half Coefficient is .832. The table

shows a good reliability of the instrument and the factor is able to explain 85.647 percentage of variance in the items under the scale. The KMO coefficient is .710 and Bartlett's Test of Sphericity is significant.

### **3.14.6.1 Reliability**

**Table 20**

**Scale IV: Word of Mouth, Reliability Statistics (Factor 12)**

Cronbach's Alpha	Part 1	Value	1.000
		N of Items	1 <sup>a</sup>
	Part 2	Value	1.000
		N of Items	1 <sup>b</sup>
	Total N of Items		2
Correlation Between Forms			.713
Spearman-Brown Coefficient	Equal Length		.832
	Unequal Length		.832
Cronbach's Alpha			.832
Guttman Split-Half Coefficient			.832

- a. The items are: Recommend this car to your friends  
 b. The items are: Recommend this dealer to your friends

### **3.14.6.2 Validity**

**Table 21**

**SCALE IV: CONSEQUENCES OF CUSTOMER SATISFACTION (WORD OF MOUTH)**  
 KMO and Bartlett's Test      Component Matrix<sup>a</sup>

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.710				
Bartlett's Test of Sphericity	Approx. Chi-Square	19.521		Component		
	df	1		1		
	Sig.	.000	Recommend this dealer to your friends		.925	
			Recommend this car to your friends		.925	

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.713	85.647	85.647	1.713	85.647	85.647
2	.287	14.353	100.000			

Extraction Method: Principal Component Analysis.

### **3.14.7 Scale V: Repurchase Intention:**

The extent to which at present, the customer would consider the same company and same outlet for replacing his car becomes the items in the repurchase intention scale. In the case of durable product, repurchasing of the same product would be least possible. With this view, the researchers measured the Repurchase Intention instead of Repurchasing of the same product (Reichheld & Sasser 1990). The items are generated from the literature and reworded so as to easily conceive by the respondents for answering each items. The Cronbach's Alpha reliability is .690, Spearman-Brown Coefficient is .696 and the Guttman Split-Half Coefficient is .690. The factor is able explain 76.69 percentage of variance in the underlying items. The KMO coefficient is .690 and Bartlett's Test of Sphericity is also significant.

### 3.14.7.1 Reliability

Table 22

Scale V: Repurchase Intention, Reliability Statistics (Factor 13)

Cronbach's Alpha	Part 1	Value	1.000
		N of Items	1a
	Part 2	Value	1.000
		N of Items	1b
	Total N of Items		2
Correlation Between Forms			.534
Spearman-Brown	Equal Length		.696
Coefficient	Unequal Length		.696
Cronbach's Alpha			.690
Guttman Split-Half Coefficient			.690

- a. The items are: Consider the same company while replacing your car in future  
 b. The items are: Consider the same outlet while replacing your car in future

### 3.14.7.2 Validity

Table 23

SCALE V: CONSEQUENCES OF CUSTOMER SATISFACTION (REPURCHASE INTENTION)

KMO and Bartlett's Test		Component <sup>a</sup>	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.690		
Bartlett's Test of Sphericity	Approx. Chi-Square	9.227	Component
	df	1	1
	Sig.	.002	Consider the same company while replacing your car in future
			.876
			Consider the same outlet while replacing your car in future
			.876

Extraction Method: Principal Component Analysis.  
 a. 1 components extracted.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.534	76.694	76.694	1.534	76.694	76.694
2	.466	23.306	100.000			

Extraction Method: Principal Component Analysis.

The final instrument was designed from the pilot study questionnaire includes seven valid scales. Among them, two scales such as cumulative satisfaction with car and cumulative satisfaction with the dealer were developed by the researchers and rests of the five scales are adapted from literatures. As the



pilot instrument is reliable and valid, the researchers used the instrument for the final data collection that consists of 54 items.

A two step approach is used for collecting the final data. First, the researchers qualified the respondent by understanding their profile and if they qualified to answer the instrument, it has been handed over to the respondents for filling up the instrument.

### **3.15 Data Collection and Validation of the Final Instrument**

The researcher collected 399 questionnaires for the study. It has ensured the representation of the area of the study and collected the response under three region of the state of Kerala as South, Central and North with 133 each. The respondents' background such as education and profession also considered before collecting the data for getting a wider representation.

#### **3.15.1 The scale I (Cumulative Satisfaction with the Car)**

The scale I (Product Satisfaction) of the final instrument shows a very good reliability as the Split-Half Coefficient is .948, Spearman Brown Coefficient is .973, Cronbach's Alpha is .976 and Guttman Split-Half Coefficient is .973. If the reliability coefficient of a scale is greater than .700, it can be concluded that the scale is reliable (Guar & Guar 2010, Cooper & Schindler, 2008).

### 3.15.1.1 Reliability

Table 24

**Reliability Statistics (Scale I: CCS with Car)**

Cronbach's Alpha	Part 1	Value	.954
		N of Items	9 <sup>a</sup>
	Part 2	Value	.952
		N of Items	9 <sup>b</sup>
	Total N of Items		18
Correlation Between Forms			.948
Spearman-Brown Coefficient	Equal Length		.973
		Unequal Length	.973
Cronbach's Alpha			.976
Guttman Split-Half Coefficient			.973

a. The items are: Mileage, Driving comfort, Accessories, Speed, Running condition, Engine quality, Life of the engine, Engine power, Pickup capacity.

b. The items are: Safety feeling, Service requirements to the car, Spaciousness, Maintenance, Design, Aesthetics, Resale value, Brand image of the car, Colour.

The Item-Total Statistics of the Scale I provide very good internal consistency of the data collected. It has noticed in the pilot testing of the Scale I, certain items are comparatively less Corrected Item-Total Correlation (Accessories, Service Requirements to the Car, Design and Colour). But after the final data collection, such problems of low correlation are addressed and the entire item in the scale has good correlation to the total score the scale. Apart, items removal in the scale would not make notable variance in the Cronbach's Alpha Coefficient. So it can be concluded that the scale I (Product Satisfaction) is a reliable instrument.

Table 25

**Item-Total Statistics (Scale I: CCS with**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Mileage	77.6767	281.757	.788	.974
Driving comfort	77.8847	277.876	.832	.960
Accessories	77.7669	282.948	.813	.974
Speed	77.8446	281.855	.849	.974
Running	78.2782	285.834	.817	.974
Engine quality	77.6416	280.215	.847	.974
Life of the	77.8145	279.840	.829	.974
Engine power	77.7293	279.710	.830	.973
Pickup capacity	77.7419	285.036	.807	.974
Safety feeling	77.8020	284.812	.827	.974
Service Requir.	78.3509	285.872	.817	.974
Spaciousness	77.7544	284.945	.794	.974
Maintenance	77.8421	281.837	.792	.974
Design	77.8145	280.840	.819	.938
Aesthetics	77.7419	281.252	.816	.974
Resale value	77.7719	281.086	.840	.974
Brand image	77.7820	281.000	.854	.974
Colour	78.3033	285.624	.803	.964

**3.15.1.2 Validity**

After collecting the final data, it has permitted to load items in the scale to their respective factors for measuring the validity. The details of the Confirmatory Factory Analysis for the Scale I (Product Satisfaction) have listed below.

Dimension 1: Performance

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy of the factor 1 (performance) is .859 and Bartlett's test of sphericity is significant. The

component matrix shows that the factor’s representation to individual items in the scale. The ‘Total Variance Explained’ table shows the result of convergent validity and the factor is able to explain 75.215% variance in the total variance of all the items.

Table 26

**FACTOR I: Performance**

KMO and Bartlett's Test			Component Matrix <sup>a</sup>		
Kaiser-Meyer-Olkin Measure of Sampling		.859			Component
Bartlett's Test of Sphericity	Approx. Chi-Square	1432.151			1
	df	10	Mileage		.833
	Sig.	.000	Driving comfort		.870
			Accessories		.871
			Speed		.887
			Running condition		.875

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.761	75.215	75.215	3.761	75.215	75.215
2	.485	9.703	84.917			
3	.331	6.617	91.534			
4	.233	4.667	96.202			
5	.190	3.798	100.000			

Extraction Method: Principal Component Analysis.

### Dimension 2: Technicalities

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .906 and Bartlett’s test of sphericity is significant. The component matrix shows that the factor’s representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 74.472 % representation to all underlying items.

Table 27

KMO and Bartlett's Test			Component Matrix <sup>a</sup>	
Kaiser-Meyer-Olkin Measure of Sampling		.906		Component
Bartlett's Test of Sphericity	Approx. Chi-Square	1839.361		1
	df	15	Engine quality	.884
	Sig.	0.000	Life of the engine	.857
			Engine power	.848
			Pickup capacity	.855
			Safety feeling	.872
			Service requirements to the car	.861

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
	1	4.468	74.472	74.472	4.468	74.472
2	.478	7.969	82.440			
3	.324	5.398	87.838			
4	.296	4.932	92.770			
5	.241	4.009	96.780			
6	.193	3.220	100.000			

Extraction Method: Principal Component Analysis.

### Dimension 3: General

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .925 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 72.894 % representation to all underlying items.

Table 28

**Factor III: General**

KMO and Bartlett's Test			Component Matrix <sup>a</sup>	
Kaiser-Meyer-Olkin Measure of Sampling		.925		Component
Bartlett's Test of Sphericity	Approx. Chi-Square	2220.471		1
	df	21	Spaciousness	.829
	Sig.	0.000	Maintenance	.842
			Design	.864
			Aesthetics	.857
			Resale value	.870
			Brand image of the car	.882
			Colour	.831

Extraction Method: Principal Component  
a. 1 components extracted.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.103	72.894	72.894	5.103	72.894	72.894
2	.533	7.610	80.504			
3	.386	5.508	86.012			
4	.286	4.088	90.099			
5	.272	3.884	93.983			
6	.218	3.112	97.095			
7	.203	2.905	100.000			

Extraction Method: Principal Component Analysis.

### 3.15.2 Scale I A (Overall Satisfaction with Car)

The scale I A (Overall Satisfaction with Car) of the final instrument shows a very good reliability as the Split-Half Coefficient is .872, Spearman Brown Coefficient is .939, Cronbach's Alpha is .912 and Guttman Split-Half Coefficient is .821.

### 3.15.2.1 Reliability

Table 29

#### **Reliability Statistics (Scale I A: Overall Satisfaction with Car)**

Cronbach's Alpha	Part 1	Value	.837
		N of Items	2 <sup>a</sup>
	Part 2	Value	1.000
		N of Items	1 <sup>b</sup>
	Total N of Items	3	
Correlation Between Forms			.872
Spearman-Brown Coefficient	Equal Length		.932
	Unequal Length		.939
Cronbach's Alpha			.912
Guttman Split-Half Coefficient			.821

a. The items are: Satisfaction with the car, Performance of this car with ideal car.

b. The items are: Performance of this car with ideal car, Extend does this car meet

### 3.15.2.2 Validity

Factor IV: Overall Satisfaction with Car

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .735 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 85.595 % representation to all underlying items.

Table 30

**Factor IV: Overall Satisfaction with Car**

KMO and Bartlett's Test			Component Matrix <sup>a</sup>	
Kaiser-Meyer-Olkin Measure of Sampling		.735		Component
Bartlett's Test of Sphericity	Approx. Chi-Square	885.319		1
	df	3	Satisfaction with the car	.899
	Sig.	.000	Performance of this car with ideal car	.928
			Extend does this car meet expectation	.948

Extraction Method: Principal Component  
a. 1 components extracted.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.568	85.595	85.595	2.568	85.595	85.595
2	.287	9.561	95.157			
3	.145	4.843	100.000			

Extraction Method: Principal Component Analysis.

### **3.15.3 Scale II (Cumulative Satisfaction with Dealer)**

The scale II (Satisfaction with Dealer) of the final instrument shows a very good reliability as the Split-Half Coefficient is .952, Spearman Brown Coefficient is .975, Cronbach's Alpha is .983 and Guttman Split-Half Coefficient is .974. All reliability coefficients are greater than the standard value of .700 and concluded that the scale is reliable.



### 3.15.3.1. Reliability

Table 31

#### **Reliability Statistics (Scale II: CCS with Dealer)**

Cronbach's Alpha	Part 1	Value	.963
		N of Items	11 <sup>a</sup>
	Part 2	Value	.972
		N of Items	11 <sup>b</sup>
Total N of Items			22
Correlation Between Forms			.952
Spearman-Brown Coefficient	Equal Length		.975
	Unequal Length		.975
Cronbach's Alpha			.983
Guttman Split-Half Coefficient			.974

a. The items are: Information provided at the time of purchase, Information updates the service, Customer care of the outlet people, Ambience of the showroom, Credit terms, Test drive facilities, Availability of service appointments, Proximity of the outlet, Approachability of service centers, Employees engagement with customer, Availability of

b. The items are: Cost of parts, Service charges, Periodic check up from the seller, Feedback from the customer after service, Response to complaints, Attitude of the person, Delivery time, Quality of service provided by the mechanic, Value for money, Dealer image, Overall experience during the purchase of this car.

The Item-Total Statistics of the Scale II (Dealer Satisfaction) provide very good internal consistency of the data collected. It has noticed during the pilot testing of the Scale II, certain items are comparatively less Corrected Item-Total Correlation. But after the final data collection, such problems are resolved and every item in the scale got very good correlation to the total scores the scale. Apart, items removal in the scale would not change much in the Cronbach's Alpha Coefficient. So it can be concluded that the scale I (Product Satisfaction) is a reliable instrument.

Table 32

Item-Total Statistics (Scale II: CCS with Dealer)				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Information provided at the time of purchase	95.8847	455.555	.821	.982
Information updates for the service	95.8496	455.440	.826	.982
Customer care of the outlet people	95.9424	454.140	.814	.982
Ambience of the showroom	95.9398	455.926	.807	.983
Credit terms	95.9624	452.001	.871	.982
Test drive facilities	96.3033	457.172	.787	.983
Availability of service	95.8697	449.003	.862	.973
Proximity of the outlet	95.7393	455.696	.809	.982
Approachability of service centers	95.9825	456.972	.820	.982
Employees engagement with	96.2907	457.935	.812	.982
Availability of parts	95.8296	452.418	.860	.982
Cost of parts	96.0125	451.766	.842	.982
Service charges	95.8421	454.550	.817	.910
Periodic check up from the seller	95.9799	454.000	.877	.982
Feedback from the customer after	96.3684	453.585	.838	.982
Response to complaints	95.8622	449.652	.846	.982
Attitude of the sales person	95.9549	452.712	.849	.982
Delivery time	95.9373	453.772	.887	.982
Quality of service provided by the	96.3258	451.919	.857	.982
Value for money	95.7018	448.778	.890	.923
Dealer image	96.0276	450.806	.891	.982
Overall experience during the purchase of this car	96.3409	451.672	.891	.982

### 3.15.3.2. Validity

#### Dimension 4: Relationship

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .909 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 74.998 % representation to all underlying items.

Table 33

**Factor V: Relationship**

KMO and Bartlett's Test			Component Matrix <sup>a</sup>	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.909		Component
Bartlett's Test of Sphericity	Approx. Chi-Square	1876.205		1
	df	15	Information provided at the time of purchase	.864
	Sig.	0.000	Information updates for the service	.871
			Customer care of the outlet people	.849
			Ambience of the showroom	.853
			Credit terms	.911
			Test drive facilities	.847

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.500	74.998	74.998	4.500	74.998	74.998
2	.428	7.136	82.134			
3	.352	5.866	88.000			
4	.315	5.250	93.250			
5	.223	3.717	96.967			
6	.182	3.033	100.000			

Extraction Method: Principal Component Analysis.

### Dimension 5: Convenience

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .790 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 76.475 % representation to all underlying items.

Table 34

**Factor VI: Convenience**

KMO and Bartlett's Test			Component Matrix <sup>a</sup>	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.790		Component
Bartlett's Test of Sphericity	Approx. Chi-Square	994.741		1
	df	6	Availability of service appointments	.883
	Sig.	.000	Proximity of the outlet	.855
			Approachability of service centers	.898
			Employees engagement with customer	.861

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.059	76.475	76.475	3.059	76.475	76.475
2	.438	10.950	87.425			
3	.304	7.606	95.031			
4	.199	4.969	100.000			

Extraction Method: Principal Component Analysis.

### Dimension 6: After Sales Service

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .873 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 78.389 % representation to all underlying items.

Table 35

**Factor VII: After Sales Service**

KMO and Bartlett's Test			Component Matrix <sup>a</sup>	
Kaiser-Meyer-Olkin Measure of Sampling	.873			Component
Bartlett's Test of Sphericity	Approx. Chi-Square	1631.368		1
	df	10	Availability of parts	.879
	Sig.	0.000	Cost of parts	.881
			Service charges	.873
			Periodic check up from the seller	.921
			Feedback from the customer after service	.872

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.919	78.389	78.389	3.919	78.389	78.389
2	.405	8.101	86.490			
3	.309	6.183	92.673			
4	.208	4.159	96.832			
5	.158	3.168	100.000			

Extraction Method: Principal Component Analysis.

Dimension 7: Service Quality

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .848 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 81.885 % representation to all underlying items.

Table 36

**Factor VIII: Service Quality**

KMO and Bartlett's Test			Component Matrix <sup>a</sup>	
Kaiser-Meyer-Olkin Measure of Sampling	.848			Component
Bartlett's Test of Sphericity	Approx. Chi-Square	1260.317		1
	df	6	Response to complaints	.882
	Sig.	.000	Attitude of the sales person	.902
			Delivery time	.935
			Quality of service provided by the mechanic	.899

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.275	81.885	81.885	3.275	81.885	81.885
2	.311	7.768	89.653			
3	.253	6.326	95.979			
4	.161	4.021	100.000			

Extraction Method: Principal Component Analysis.

## Dimension 8: Perception

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .769 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 88.573 % representation to all underlying items.

**Table 37**

Factor IX: Perception						
KMO and Bartlett's Test			Component Matrix <sup>a</sup>			
Kaiser-Meyer-Olkin Measure of Sampling		.769			Component	
Bartlett's Test of Sphericity	Approx. Chi-Square	1011.381			1	
	df	3	Value for money		.938	
	Sig.	.000	Dealer image		.944	
			Overall experience during the purchase of this car		.941	
Extraction Method: Principal Component Analysis.						
a. 1 components extracted.						
Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.657	88.573	88.573	2.657	88.573	88.573
2	.180	6.011	94.584			
3	.162	5.416	100.000			
Extraction Method: Principal Component Analysis.						

### **3.15.4 Scale II A (Overall Satisfaction with Dealer)**

Scale IIA is indented to identify the customers' overall satisfaction with Dealer. The scale used for identifying the American Customer Satisfaction Index is adapted to measure the customers' satisfaction with the dealer. The standardised scale consists of three items and the researchers reworded the

same for the present context. The reliability coefficients are highly significant and acceptable.

### **3.15.4.1 Reliability**

Table 38

<b>Reliability Statistics (Scale IIA: OCS with</b>			
Cronbach's Alpha	Part 1	Value	.841
		N of Items	2 <sup>a</sup>
	Part 2	Value	1.000
		N of Items	1 <sup>b</sup>
	Total N of Items		3
Correlation Between Forms			.789
Spearman-Brown Coefficient	Equal Length		.882
	Unequal Length		.893
Cronbach's Alpha			.889
Guttman Split-Half Coefficient			.763

a. The items are: Satisfaction with the purchase experience, Actual purchase experience with the ideal.  
 b. The items are: Actual purchase experience with the ideal, Purchase experience meet the expectation.

### **3.15.4.2 Validity**

Factor X: Overall Satisfaction with Dealer

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .749 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 82.086 % representation to all underlying items.

Table 39

**Factor X: Overall Satisfaction with Dealer**

KMO and Bartlett's Test			Component Matrix <sup>a</sup>	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.749		Component
Bartlett's Test of Sphericity	Approx. Chi-Square	685.840		1
	df	3	Satisfaction with the purchase experience	.899
	Sig.	.000	Actual purchase experience with the ideal	.911
			Purchase experience meet the expectation	.908

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.463	82.086	82.086	2.463	82.086	82.086
2	.286	9.530	91.617			
3	.251	8.383	100.000			

Extraction Method: Principal Component Analysis.

### **3.15.5 Scale III: OVERALL CUSTOMER SATISFACTION**

The scale III (Overall Customer Satisfaction) of the final instrument shows a very good reliability as the Split-Half Coefficient is .837, Spearman Brown Coefficient is .911, Cronbach's Alpha is .930 and Guttman Split-Half Coefficient is .911. It has noticed that the items in the scale is adapted from the American Customer Satisfaction Index and added one more item to the scale that the researchers feel highly significant for evaluating the customers overall satisfaction. As the reliability coefficient of the scale is greater than the standard value of .700, the researchers concluded that instrument is reliable (Guar & Guar 2010).



### **3.15.5.1 Reliability**

Table 40

#### **Reliability Statistics (Scale III: Overall Customer Satisfaction)**

Cronbach's Alpha	Part 1	Value	.892
		N of Items	2 <sup>a</sup>
	Part 2	Value	.888
		N of Items	2 <sup>b</sup>
Total N of Items		4	
Correlation Between Forms			.837
Spearman-Brown Coefficient	Equal Length		.911
	Unequal Length		.911
Cronbach's Alpha			.930
Guttman Split-Half Coefficient			.911

a. The items are: Satisfaction with the decision of buying this car, Satisfaction with entire purchase experience.

b. The items are: Satisfaction with various encounters during the purchase process, Satisfaction on actual experience with ideal during the purchase.

### **3.15.5.2 Validity**

Factor XI: Overall Customer Satisfaction

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .810 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 82.753 % representation to all underlying items.

Table 41

Factor XI: Overall Customer Satisfaction							
KMO and Bartlett's Test			Component Matrix <sup>a</sup>				
Kaiser-Meyer-Olkin Measure of Sampling	Approx. Chi-Square	.810		Component			
Bartlett's Test of Sphericity	df	1336.524		1			
	Sig.	.000	6	Satisfaction with the decision of buying this car			
				Satisfaction with entire purchase experience			
				Satisfaction with various encounters during the purchase process			
				Satisfaction on actual experience with ideal during the purchase			
				.908			
				.914			
				.890			
				.926			
Extraction Method: Principal Component							
a. 1 components extracted.							
Total Variance Explained							
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	3.310	82.753	82.753	3.310	82.753	82.753	
2	.318	7.948	90.701				
3	.232	5.802	96.502				
4	.140	3.498	100.000				
Extraction Method: Principal Component Analysis.							

### **3.15.6 Scale IV: Word of Mouth**

The scale IV (Word of Mouth) of the final instrument shows a very good reliability as the Split-Half Coefficient is .810, Spearman Brown Coefficient is .895, Cronbach's Alpha is .895 and Guttman Split-Half Coefficient is .895. The adapted scale is highly reliable and the collected data is useful for data analysis.

### **3.15.6.1. Reliability**

Table 42

#### **Reliability Statistics (Scale IV: Word of Mouth)**

Cronbach's Alpha	Part 1	Value	1.000
		N of Items	1 <sup>a</sup>
	Part 2	Value	1.000
		N of Items	1 <sup>b</sup>
	Total N of Items		2
Correlation Between Forms			.810
Spearman-Brown Coefficient	Equal Length		.895
	Unequal Length		.895
Cronbach's Alpha			.895
Guttman Split-Half Coefficient			.895

a. The items are: Recommend this car to your friends

b. The items are: Recommend this dealer to your friends

### **3.15.6.2 Validity**

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .500 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 90.508 % representation to all underlying items.

Table 43

**Factor XII: Word of Mouth**

KMO and Bartlett's Test		Component Matrix <sup>a</sup>	
Kaiser-Meyer-Olkin Measure of Sampling	.500		Component
Bartlett's Test of Sphericity	423.531		1
		1 Recommend this car to your friends	.951
		Recommend this dealer to your friends	.951
Sig.	.000		

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.810	90.508	90.508	1.810	90.508	90.508
2	.190	9.492	100.000			

Extraction Method: Principal Component Analysis.

**3.15.7 Scale V: Repurchase Intention**

The scale V (Repurchase Intention) of the final instrument shows a very good reliability as the Split-Half Coefficient is .880, Spearman Brown Coefficient is .936, Cronbach's Alpha is .936 and Guttman Split-Half Coefficient is .936.

The reliability table shows very good reliability.

### **3.15.7.1 Reliability**

Table 44

<b>Reliability Statistics (Scale V: Repurchase Intention)</b>			
Cronbach's Alpha	Part 1	Value	1.000
		N of Items	1 <sup>a</sup>
	Part 2	Value	1.000
		N of Items	1 <sup>b</sup>
	Total N of Items		2
Correlation Between Forms			.880
Spearman-Brown Coefficient	Equal Length		.936
	Unequal Length		.936
Cronbach's Alpha			.936
Guttman Split-Half Coefficient			.936

a. The items are: Consider the same company while replacing your car in future

b. The items are: Consider the same outlet while replacing your car in future

### **3.15.7.2 Validity**

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .500 and Bartlett's test of sphericity is significant. The component matrix shows that the factor's representation to individual items in the scale. The Total Variance Explained Table shows that the factor is capable of explaining 93.998 % representation to all underlying items.

Table 45

**Factor XIII: Repurchase Intention**

KMO and Bartlett's Test			Component Matrix <sup>a</sup>	
Kaiser-Meyer-Olkin Measure of Sampling		.500		Component
Bartlett's Test of Sphericity	Approx. Chi-Square	590.237		1
	df	1	1 Consider the same company while replacing your car in future	.970
	Sig.	.000	2 Consider the same outlet while replacing your car in future	.970

Extraction Method: Principal Component  
a. 1 components extracted.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.880	93.998	93.998	1.880	93.998	93.998
2	.120	6.002	100.000			

Extraction Method: Principal Component Analysis.

### **3.16 Contribution of the study:**

#### **3.16.1 Contribution to Literature:**

1. There would be a model framework for quantifying and evaluating the customer satisfaction in a specific industry
2. It can explain the cause and consequences of customer satisfaction in compact segment car industry
3. The mediation and moderation role of customer satisfaction could be explained

### **3.16.2 Contribution to Industry:**

1. The satisfaction model can be used as a tool for satisfying the customer in automobile industry (Compact Segment).
2. This model helps the marketer of automobile to diagnose the reason for satisfaction/dissatisfaction, and can make effective decisions.

### **3.17 Assumptions of the study:**

1. If the organization focuses on its most demanding customers and/or most demanding market expectations, it is likely to exceed all other customers and expectations
2. Consumer satisfaction starts from the point where a person decided to be a customer of a product or services to the ultimate consumption and experience of that product.
3. Consumer satisfaction can be calculated by adding the various stages gone by a consumer from the point he decided to be a customer to the ultimate consumption and experience of that product.
4. We can't calculate the customer satisfaction without considering the experience of the augmented activities such as acquiring information, comparison of alternatives, selection of outlets, etc. undertaken by the customer for the ultimate experience or usage of the product or services.

### **3.18 Conclusion:**

The empirical evaluation of cumulative approach to customer satisfaction is relatively a new approach in the field of consumer behaviour. Earlier studies have given more insight to the overall and transaction specific approach to customer satisfaction. This study includes all three approach and developed an instrument for cumulative customer satisfaction in the context of Kerala with compact segment car users. The model that consists of transaction, cumulative and overall customer satisfaction was empirically validated and the instrument developed for cumulative customer satisfaction can be useful for identifying the variations in customer satisfaction. The decision makers can use the instrument for improving the customer satisfaction in the compact segment car industry of Kerala.

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# *Chapter 4*

## *DATA ANALYSIS AND INTERPRETATION*

### **4.1 Introduction:**

This chapter deals with the analysis of data collected for the study. There are six hypothesis are tested and detailed explanation were made before taking decisions on the basis of the test results. A cumulative customer satisfaction model was also framed with significant items under antecedents, and its effect through overall customer satisfaction towards the consequences. The researchers collected data from 399 compact segment car owners in Kerala. It has ensured the representation of the area of the study and collected the response under three regions from the state of Kerala as South, Central and North with equal sample sizes.

### **4.2 Sample Profile:**

There are 399 response were collected from three region with 133 each. The compact segment cars considered for the study are Ritz, Swift, Estilo, i10, Beat, Aveo UVA, i20, Indica, Vista, Jazz, Polo, Fabia, Punto, Figo, Etios LIVA and Indigo CS. The researchers give special attention to ensure the

representation from each brand even though the responses were collected without any prejudice. But some brands like Jazz and Aveo UVA are least penetrated in the Kerala market and so, the representation is comparatively low. Out of the 399 response, i20 accounts maximum (41), followed by swift (40), i10 (37), Figo (34), Etios LIVA (31) and so on. The details of the responses from three regions with respect to customers' present car have listed below.

Table 46

Present Car * Region Crosstabulation						
		Region			Total	
		North	Central	South		
Present Car	Ritz	Count	13	4	9	26
		% of Total	3.3%	1.0%	2.3%	6.5%
	Swift	Count	10	18	12	40
		% of Total	2.5%	4.5%	3.0%	10.0%
	Estilo	Count	12	6	11	29
		% of Total	3.0%	1.5%	2.8%	7.3%
	i10	Count	14	12	11	37
		% of Total	3.5%	3.0%	2.8%	9.3%
	Beat	Count	6	10	11	27
		% of Total	1.5%	2.5%	2.8%	6.8%
	Aveo UVA	Count	6	2	6	14
		% of Total	1.5%	.5%	1.5%	3.5%
	i20	Count	10	18	13	41
		% of Total	2.5%	4.5%	3.3%	10.3%
	Indica	Count	6	2	4	12
		% of Total	1.5%	.5%	1.0%	3.0%
	Vista	Count	8	7	9	24
		% of Total	2.0%	1.8%	2.3%	6.0%
	Jazz	Count	2	9	1	12
		% of Total	.5%	2.3%	.3%	3.0%
	Polo	Count	6	11	6	23
		% of Total	1.5%	2.8%	1.5%	5.8%
	Fabia	Count	6	6	7	19
		% of Total	1.5%	1.5%	1.8%	4.8%
	Punto	Count	5	4	5	14
		% of Total	1.3%	1.0%	1.3%	3.5%
	Figo	Count	15	8	11	34
		% of Total	3.8%	2.0%	2.8%	8.5%
Etios LIVA	Count	7	14	10	31	
	% of Total	1.8%	3.5%	2.5%	7.8%	
Indigo CS	Count	7	2	7	16	
	% of Total	1.8%	.5%	1.8%	4.0%	
Total		Count	133	133	133	399
		% of Total	33.3%	33.3%	33.3%	100.0%

At northern part of Kerala, most of the respondent using Figo (15), followed by i10 (14), and Ritz (13). The central region was dominated by Swift (18) and i20 (18) followed by Etios LIVA (14). In the case of southern part of Kerala, most of the respondents using i20 (13) followed by Swift (12). The combined result of entire analysis states that i20 (10%), Swift (10%), i10 (9%), Figo (9%) and Etios Liva (8%) are the most dominating compact segment cars in Kerala and accounts around 40% of the total response.

The respondents' educational qualification and profession at three region state that most of them are post graduates and graduates. At northern region, there are 45 postgraduates followed by 38 graduates. Majority of the respondents are business man (55) and private sector employees (41). At central region, there are 75 postgraduates followed by 27 graduates. There are 43 people doing business and 34 people are working under private sector. The details of the southern region shows that there are 61 respondents are postgraduates followed by 39 graduates, and 61 doing business and 39 respondents working as private sector employees.

Table 47

Educational Qualification * Profession * Region Crosstabulation											
Count											
Region	Educational Qualification		Profession						Total		
			Student	Private sector employees	Government sector employees	Business	Job at foreign country	Teachers		Others	
North	Educational Qualification	>sslc		0	0	16	0	0	0	16	
		sslc		0	0	11	2	1	0	14	
		pdc		3	1	11	2	1	0	18	
		degree		15	1	12	3	6	1	38	
		post graduation		22	2	4	2	15	0	45	
		others		1	0	1	0	0	0	2	
		Total			41	4	55	9	23	1	133
Central	Educational Qualification	>sslc	0	0	0	2	0	1	0	3	
		sslc	0	0	0	11	1	0	0	12	
		pdc	0	0	1	13	2	0	0	16	
		degree	0	13	0	8	3	0	3	27	
		post graduation	1	21	5	9	2	22	15	75	
		others									
		Total		1	34	6	43	8	23	18	133
South	Educational Qualification	>sslc		0	0	20	0	0	0	20	
		sslc		0	0	9	1	0	0	10	
		pdc		0	1	12	2	1	0	16	
		degree		17	0	11	2	6	0	36	
		post graduation		21	2	8	1	15	2	49	
		others		1	0	1	0	0	0	2	
		Total			39	3	61	6	22	2	133
Total	Educational Qualification	>sslc	0	0	0	38	0	1	0	39	
		sslc	0	0	0	31	4	1	0	36	
		pdc	0	3	3	36	6	2	0	50	
		degree	0	45	1	31	8	12	4	101	
		post graduation	1	64	9	21	5	52	17	169	
		others	0	2	0	2	0	0	0	4	
		Total		1	114	13	159	23	68	21	399

Out of the total respondents, there are post graduates (169), followed by graduates (101), PDC or plus two (50) and so on. Most of the respondents are business people (159) followed by private sector job (114), and teachers (68). It can be concluded that these groups are the major customers of compact segment cars in Kerala.

The major part of the respondents feels Swift and i20 were the most ideal car in the compact segment. Out of the 133 responses from northern region, 44

people consider Swift as the most ideal car in the group that was followed by i20 (29), Ritz (13) and Figo (12). The car owners at central region feels that Swift is the ideal car (39) followed by i20 (28), Etios LIVA (14), Figo (13) and Polo (12). The trend at southern region also the same and 43 respondents likes Swift followed by 29 people likes i20.

Table 48

<b>Most ideal car in this group * Region Crosstabulation</b>						
Count		Region			Total	%
		North	Central	South		
Most ideal car in this group	Ritz	13	6	9	28	7.02
	Swift	44	39	43	126	31.58
	Estilo	1	0	2	3	0.75
	i10	1	6	2	9	2.26
	Beat	1	0	2	3	0.75
	i20	29	28	29	86	21.55
	Vista	7	6	8	21	5.26
	Polo	5	12	5	22	5.51
	Fabia	6	6	7	19	4.76
	Punto	3	1	4	8	2.01
	Figo	12	13	9	34	8.52
	Etios LIVA	7	14	10	31	7.77
	Indigo CS	4	2	3	9	2.26
<b>Total</b>		133	133	133	399	100

The table result states that the most ideal car in the compact segment is swift (31.58%), followed by i20 (21.55%). Around 53% of the respondents feel that Swift and i20 as their favourite car.

Through a region specific analysis, it has noticed that most of the respondents purchased the compact segment car for private use. At northern region, 99

customers are purchased for private use followed by for family member (17). There are 117 customers from central region and 105 customers from southern region purchased the car for private use.

**Table 39**

<b>Intention behind purchasing this car * Region</b>						
Count		Region			Total	%
		North	Central	South		
Intention behind purchasing this car	private use	99	117	105	321	80.45
	taxi use	1	0	0	1	0.25
	family members	17	13	15	45	11.28
	office use	16	3	13	32	8.02
<b>Total</b>		<b>133</b>	<b>133</b>	<b>133</b>	<b>399</b>	<b>100</b>

The table result shows that around 80% total respondents used this car for private purpose followed by 11% for family members and 8% for office use. It can be concluded that the main intention for the purchase a compact segment car is for private use.

Around 92% of the respondents says that someone influenced them for purchasing the car. Out of these, friends influenced more (27%), followed by siblings (23%), life partner (16%) and so on. The details of the influencers for the purchase of their car has tabled below.

Table 40

Anyones influence on buying this car * Relation with the influencer for buying this car Crosstabulation											
			Relation with the influencer for buying this car							Total	
			No relation	Life Partner	Kin	Friends	Colleagues	Relatives	Siblings		Others
Anyones influence on buying this car	yes	Count	0	62	35	107	5	3	91	62	365
		% of Total	0.0%	15.5%	8.8%	26.8%	1.3%	.8%	22.8%	15.5%	91.5%
	no	Count	34	0	0	0	0	0	0	0	34
		% of Total	8.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.5%
Total		Count	34	62	35	107	5	3	91	62	399
		% of Total	8.5%	15.5%	8.8%	26.8%	1.3%	.8%	22.8%	15.5%	100.0%

It can be inferred from the table result that the customers' purchase of a compact segment car was influenced by their near and dear. The scope for individual decision for purchasing of a car from this segment is very low and the nearby people play a major role for the purchase decision.

The major customer groups of compact segment cars belong to the age bracket of 30-40. Around 53% of the respondents lay on this age group. The most likely car of this group is i20 followed by swift and beat. The preferences of car in each age category have listed in the following table.

Table 51

<b>Present Car * Age Crosstabulation</b>						
			Age new			Total
			up to 30	31-40	41 above	
Present Car	Ritz	Count	3	16	7	26
		% of Total	.8%	4.0%	1.8%	6.5%
	Swift	Count	6	21	13	40
		% of Total	1.5%	5.3%	3.3%	10.0%
	Estilo	Count	5	12	12	29
		% of Total	1.3%	3.0%	3.0%	7.3%
	i10	Count	3	13	21	37
		% of Total	.8%	3.3%	5.3%	9.3%
	Beat	Count	2	20	5	27
		% of Total	.5%	5.0%	1.3%	6.8%
	Aveo UVA	Count	1	8	5	14
		% of Total	.3%	2.0%	1.3%	3.5%
	i20	Count	4	31	6	41
		% of Total	1.0%	7.8%	1.5%	10.3%
	Indica	Count	0	7	5	12
		% of Total	0.0%	1.8%	1.3%	3.0%
	Vista	Count	1	10	13	24
		% of Total	.3%	2.5%	3.3%	6.0%
	Jazz	Count	0	9	3	12
		% of Total	0.0%	2.3%	.8%	3.0%
	Polo	Count	4	7	12	23
		% of Total	1.0%	1.8%	3.0%	5.8%
	Fabia	Count	6	8	5	19
		% of Total	1.5%	2.0%	1.3%	4.8%
	Punto	Count	2	8	4	14
		% of Total	.5%	2.0%	1.0%	3.5%
	Figo	Count	1	18	15	34
		% of Total	.3%	4.5%	3.8%	8.5%
Etios LIVA	Count	0	17	14	31	
	% of Total	0.0%	4.3%	3.5%	7.8%	
Indigo CS	Count	1	5	10	16	
	% of Total	.3%	1.3%	2.5%	4.0%	
Total		Count	39	210	150	399
		% of Total	9.8%	52.6%	37.6%	100.0%

The above listed tables and the discussion of its results show that the respondents are demographically and geographically represented and their response could be useful for testing the hypothesis. As the researcher doesn't



notice any significant difference in the sampling profile at three regions, the hypotheses were tested by combining the total responses.

#### **4.3 Partial Least Squares:**

The concept of partial least squares (PLS) was introduced by Hermann Wold in his paper Principal Component Analysis (Wold 1966). The PLS is a path modelling technique without any assumptions about the distribution of the data and can work with even small sample size (Chin & Newstead 1999). The PLS is used to determine the values of latent variables in the model for predictive purpose (Chin 1998). The literature on PLS modelling discussed several criteria for validating a measurement model. Through a critical review on the literature, the researchers decided to consider four basic criterions for validating the proposed model (Bagozzi 1979, Churchill 1979 & Peter 1981). They are internal consistency, average variance extracted, discriminant validity and T value. Brief explanations of these four basic criterions are listed below:

##### **4.3.1 Measurement Criteria under PLS-SEM:**

**The Internal Consistency:** The Composite reliability and Cronbach's alpha shows the internal consistency of the constructs used in the model. A construct is said to have sufficient reliability if the value of alpha is more than 0.7(Chin 1998). Nunally (1978) suggested that the benchmark for the

decision rule of internal consistency of both the composite reliability and Cronbach's alpha is 0.7 and above. Some researchers states that composite reliability is the better predictor of internal consistency than the Cronbach's alpha because the existent items number in each scale was not influences the composite reliability and it uses item loadings extracted from the causal model analysed (Barclay et al. 1995). The researchers considered both Cronbach's alpha and Composite reliability for deciding the internal consistency of the test result.

**Average Variance Extracted (AVE):** If the constructs having an AVE value greater than 0.5 are said to have convergent validity or unidimensionality (Anderson & Gerbing 1988, Chin & Newstead 1999). AVE was originally proposed by Fornell and Larcker (1981). AVE is an attempt to measure the amount of variance that a latent variable component captures from its indicators. Fornell and Larcker (1981) suggested that this measure can also be interpreted as a measure of reliability for the latent variable component score. Ideally, AVE should be greater than 0.50 meaning that 50% or more variance of the indicators should be accounted for.

**Discriminant Validity:** If the AVEs of each of the latent variable is greater than the square of the correlations between the two latent variables together considered as discriminant validity and reliability of the construct ((Barclay et al, 1995, Chin et al, 2003). It order to get discriminant validity, the shared

variance between the latent variable and its indicators should be larger than the variance shared with other latent variables (Hulland, 1999).

**T-value:** The PLS path modelling does not rely on distributional assumption and the direct inference of statistical tests of the model fit and the model parameters would not be available (Henseler & Fassott, 2010). As a solution to this, the bootstrapping technique was recommended. This is a non-parametric technique for estimating the standard errors of the model parameters (Efron & Tibshirani, 1993, Chin 2010). The result of the bootstrapping would generate the 't' statistic. The 't' statistic shows the significance of the path in the outer and inner model. The 't' value should be greater than 1.96 so as to ensure the significance of the path in the model (Vinzi et al, 2010).

#### **4.4 Hypothesis:**

The researchers proposed six hypotheses for the study. The anticipated influences of various antecedents, consequences of customer satisfaction were hypothesised. Beside, the mediation and moderation effect of overall customer satisfaction towards the consequences, such as repurchase intention and word of mouth also hypothesised in the study. They are as follows:

**H1: Overall Satisfaction with Car positively influences overall customer satisfaction.**

**H2: Overall satisfaction with the dealer positively influences overall customer satisfaction.**

**H3: Overall customer satisfaction positively influences repurchase intention.**

**H4: Overall customer satisfaction positively influences word of mouth.**

**H5: Overall customer satisfaction has a mediating role between the antecedents and consequences.**

**H5a: Overall Customer Satisfaction mediates the relationship between Overall Satisfaction with Car to Repurchase Intention**

**H5b: Overall Customer Satisfaction mediates the relationship between Overall Satisfaction with Car to Word of Mouth**

**H5c: Overall Customer Satisfaction mediates the relationship between Overall satisfaction with the dealer to Repurchase Intention**

**H5d: Overall Customer Satisfaction mediates the relationship between Overall satisfaction with the dealer to Word of Mouth**

**H6: Overall customer satisfaction has a moderating role between antecedents and consequences**

**H6a: Overall Customer Satisfaction stronger the relationship between Overall Satisfaction with Car to Repurchase Intention and Word of Mouth**

**H6b: Overall Customer Satisfaction stronger the relationship between Overall Satisfaction with the Dealer to Repurchase Intention and Word of Mouth**

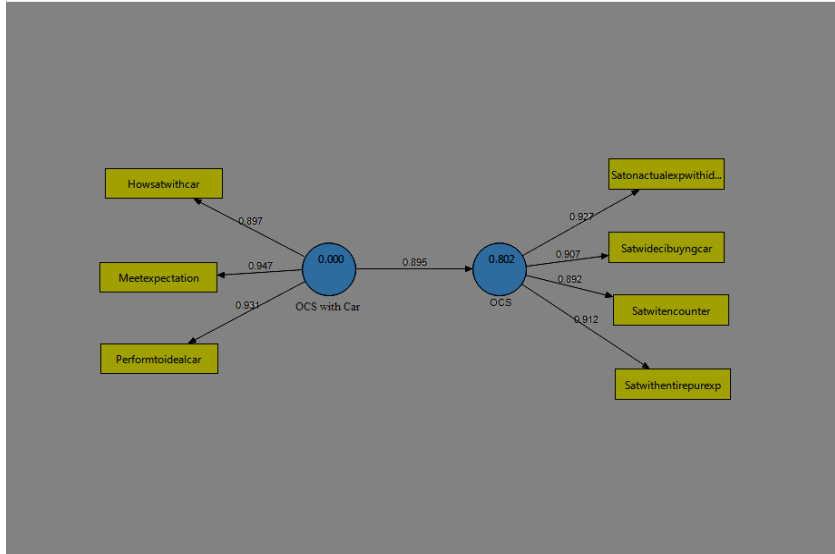
#### **4.5 Testing of Hypothesis**

***Hypothesis 1: Overall Satisfaction with Car positively influences overall customer satisfaction***

H1 is the alternative hypothesis stated to identify the null hypothesis that Overall Satisfaction with Car has no influence to overall customer satisfaction. As per the literature, overall customer satisfaction is the general evaluation of a customer during the purchase process. That means, the customer Overall Satisfaction with Car would have a role in the overall customer satisfaction that include Overall Satisfaction with Car as well as overall satisfaction with the dealer.

The measurement model for testing the first hypothesis stated that Overall Satisfaction with Car influences overall customer satisfaction significantly.

Chart 7: Hypothesis 1



**Discriminant validity at indicator level:**

The discriminant validity at indicator level table shows the loadings of each item in the outer model towards Experience with Car and Overall Customer Satisfaction. The entire items in the model are loaded to their own latent variable at a value greater than 0.7. None of the path has cross loaded to any other latent variable in the model more than its own latent variable. Beside, each path in the outer model is significant as the 't' statistic of entire path is greater than 1.96 .

Table 52

LOADINGS OF ITEM & T STATISTICS				
SL.No.	ITEMS	OCS	OCS with Car	T Stat.
1	Howsatwithcar	0.5438	0.7474	10.8603
2	Meetexpectation	0.5772	0.7966	9.9356
3	Performtoidealcar	0.612	0.7808	13.8542
4	Satonactualexpwithideal	0.7774	0.5892	4.5671
5	Satwidecibuyngcar	0.7568	0.5551	7.0589
6	Satwitencounter	0.7423	0.5664	2.4466
7	Satwithentirepurexp	0.7619	0.5466	11.5587

The measurement criteria for the decision rule of the hypothesis such as AVE, Composite Reliability, and Cronbach's Alpha of both items (satisfaction with the car and satisfaction with the dealer) shows good reliability. The result states that satisfaction with car has an AVE (0.8559), Composite Reliability (0.9468), Cronbach's Alpha (0.9156) and overall customer satisfaction has an AVE (0.8275), Composite Reliability (0.9505), and Cronbach's Alpha (0.9304), which is greater than the standard value as per literature.

Table 53

AVE and Reliability			
	AVE	Composite Reliability	Cronbachs Alpha
OCS	0.8275	0.9505	0.9304
OCS with Car	0.8559	0.9468	0.9156

The following table shows the discriminant validity of the hypothesised relation in the model as the AVE of each latent variable is greater than the square of the correlation between the two latent variables. Apart, the influences of satisfaction with the car to overall customer satisfaction is

significant as 't' statistic of the path is greater than the standard value of 1.96 (t=25.5496, t>1.96; p<0.01).

Table 54

Discriminant Validity & Significance of the Path								
	AVE 1	AVE 2	r	r <sup>2</sup>	AVE 1>r <sup>2</sup>	AVE 2>r <sup>2</sup>	Discrimin.	T Statistics
OCS with Car-->OCS	0.8559	0.8275	0.7955	0.6328	sig.	sig.	Yes	25.5496

The results of the analysis (model and table) states that satisfaction with the car influences overall customer satisfaction. The decision criteria such as AVE, composite reliability, Cronbach's alpha and 't' statistic of the outer model and inner model supports to accept the alternative hypothesis. On the basis of this, the researchers concluded that satisfaction with the car influences (r= 0.895) to overall customer satisfaction and the overall customer satisfaction as a dependent variable accommodates 80.2% (R<sup>2</sup>=0.802) variance in the customer satisfaction with the car. So the researchers safely rejected the null hypothesis and concluded that satisfaction with the car influences overall customer satisfaction.

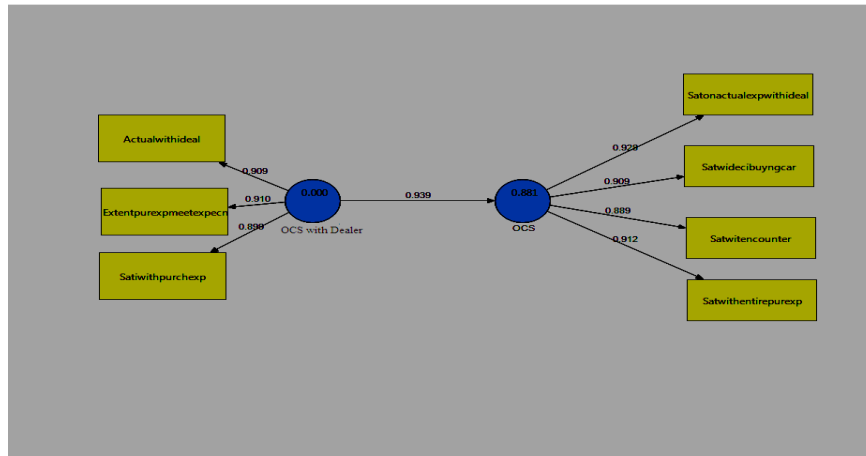
***Hypothesis 2: Overall Satisfaction with the Dealer positively influences overall customer satisfaction.***

The second hypothesis was stated to identify the null hypothesis that satisfaction with the dealer has no influence to overall customer satisfaction.



It is expected that satisfaction with the dealer is an integral part of overall customer satisfaction as like satisfaction with the car.

Chart 8: Hypothesis 2



**Discriminant validity at indicator level:**

The measurement model shows favourable discriminant validity at indicator level as each item are loaded towards their own latent variable such as OCS WITH DEALER and OCS at a value greater than 0.7. None of the path has cross loaded to any other latent variable in the model more than its own latent variable. Entire path in the outer model also significant as the 't' statistic of each path is greater than 1.96 .

Table 55

LOADINGS OF ITEM & T STATISTICS				
Sl. No.	Items	OCS	SATDLR	T Stat.
1	Actualwithideal	0.5377	0.7092	23.9618
2	Extentpurexpmeetexpectn	0.5696	0.7098	16.3441
3	Satiwithpurchexp	0.544	0.799	14.7378
4	Satonactualexpwithideal	0.728	0.4923	14.7285
5	Satwidecibuyngecar	0.7088	0.5593	12.8159
6	Satwitencounter	0.7891	0.5205	13.1392
7	Satwithentirepurexp	0.7124	0.5421	16.5977

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for the testing of second hypothesis such as AVE, Composite Reliability, and Cronbach’s Alpha of both the items (satisfaction with the dealer and overall customer satisfaction) show good reliability. The result states that satisfaction with dealer has an AVE (0.8208), Composite Reliability (0.9322), Cronbach’s Alpha (0.8909) and overall customer satisfaction has an AVE (0.8275), Composite Reliability (0.9505), and Cronbach’s Alpha (0.9304), all of them are greater than the standard value as per literature.

Table 56

AVE and Reliability			
	AVE	Composite Reliability	Cronbachs Alpha
OCS	0.8275	0.9505	0.9304
OCS with Dealer	0.8208	0.9322	0.8909

The discriminant validity of the hypothesised relation in the model is significant as the AVE of each latent variable is greater than the square of the correlation between the two latent variables. The influences of satisfaction

with the dealer to overall customer satisfaction is significant as 't' statistic of the path is greater than the standard value of 1.96.

Table 57

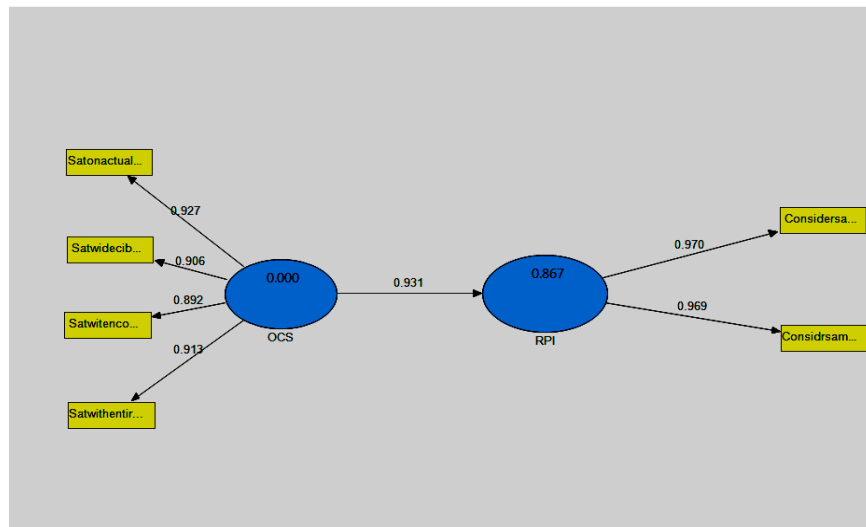
Discriminant Validity & Significance of the Path								
	AVE 1	AVE 2	r	r <sup>2</sup>	AVE 1>r <sup>2</sup>	AVE 2>r <sup>2</sup>	Discrimina	T Statistics
OCS with Dealer->OCS	0.8208	0.8275	0.8389	0.7038	sig.	sig.	Yes	33.6954

The above mentioned analysis states that satisfaction with the dealer influences overall customer satisfaction. The AVE, composite reliability, Cronbach's alpha and 't' statistic of the model supported to accept the alternative hypothesis. The researchers concluded that satisfaction with the dealer influences (r= 0.939) to overall customer satisfaction and the overall customer satisfaction accommodates 88.1% ( $R^2=0.881$ ) variance in the customer satisfaction with the dealer. So the researchers safely rejected the null hypothesis and concluded that satisfaction with the dealer influences overall customer satisfaction significantly.

***Hypothesis 3: Overall Customer Satisfaction positively influences Repurchase Intention.***

The third hypothesis was stated to identify the null hypothesis that overall customer satisfaction has no influence to repurchase intention. The result shows that OCS highly influences RPI.

Chart 9: Hypothesis 3



**Discriminant validity at indicator level:**

There is a good discriminant validity at indicator level as each item are loaded towards their own latent variable such as OCS and RPI at a value greater than 0.7. None of the path has cross loaded to any other latent variable in the model more than its own latent variable. Entire path in the outer model also significant as the 't' statistic of each path is greater than 1.96 .

Table 58

LOADINGS OF ITEM & T STATISTICS				
Sl. No.	Items	OCS	RPI	T STAT.
1	Considersameoutlet	0.5323	0.82	56.5742
2	Considrsamcompny	0.564	0.8191	30.9153
3	Satonactualexpwithideal	0.7774	0.4855	12.6064
4	Satwidecibuyngcar	0.7562	0.4644	10.9929
5	Satwitencounter	0.7416	0.5001	9.7482
6	Satwithentirepurexp	0.763	0.4234	13.8019

The AVE, Composite Reliability, Cronbach’s Alpha of overall customer satisfaction and repurchase intention shows good reliability. The result states that overall customer satisfaction has an AVE (0.8275), Composite Reliability (0.9505), and Cronbach’s Alpha (0.9304), and repurchase intention has an AVE (0.8388), Composite Reliability (0.8842), and Cronbach’s Alpha (0.8831), all of them are greater than the standard value as per literature.

Table 59

AVE and Reliability			
	AVE	Composite Reliability	Cronbachs Alpha
OCS	0.8275	0.9505	0.9304
RPI	0.8388	0.8842	0.8831

The discriminant validity of the hypothesised relation in the model is significant as the AVE of overall customer satisfaction and repurchase intention is greater than the square of the correlation between these two latent variables. The influences of overall customer satisfaction towards repurchase intention is significant as ‘t’ statistic of the path is greater than the standard value of 1.96 (t=27.925).

Table 60

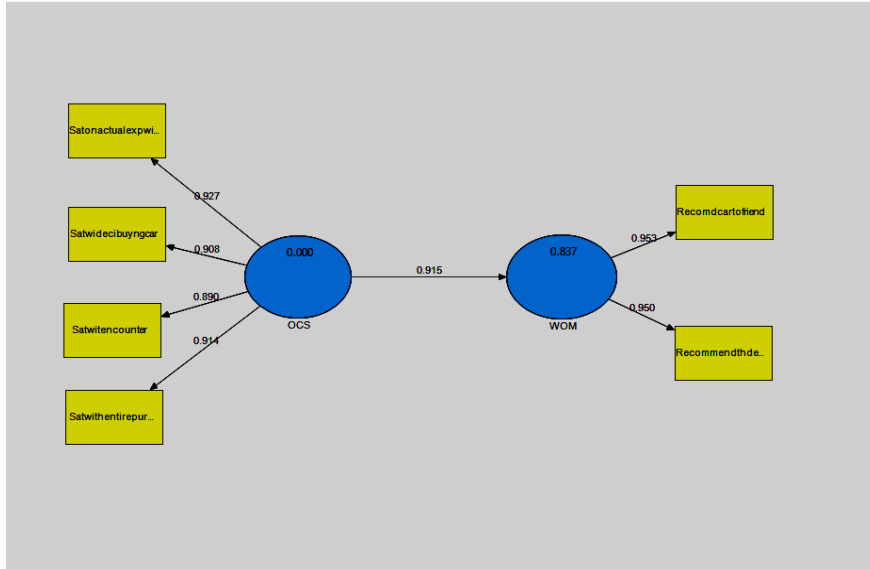
Discriminant Validity & Significance of the Path								
	AVE 1	AVE 2	r	r <sup>2</sup>	AVE 1 > r	AVE 2 > r	Discriminant	T Statistics
OCS -> RPI	0.8275	0.8388	0.831	0.6906	sig.	sig.	Yes	27.925
			(t > 1.65; P < 0.05 and if t > 2; p < 0.01)					

The results of the third hypothesis states that overall customer satisfaction influences repurchase intention. The decision rules such as AVE, composite reliability, Cronbach's alpha and 't' statistic of the measurement model supported to accept the alternative hypothesis. So, the researchers accepted that overall customer satisfaction influences (r=0.931) to repurchase intention and the repurchase intention accommodates 86.7% ( $R^2=0.867$ ) variance in the overall customer satisfaction. So the researchers safely rejected the null hypothesis and concluded that overall customer satisfaction influences repurchase intention significantly.

***Hypothesis 4: Overall Customer Satisfaction positively influences Word of Mouth.***

The fourth hypothesis was stated to test the null hypothesis that overall customer satisfaction has no influence to word of mouth. The result shows that overall customer satisfaction highly influences word of mouth.

Chart 10: Hypothesis 4



**Discriminant validity at indicator level:**

All indicators are loaded to their own latent variable such as overall customer satisfaction and word of mouth at a value more than 0.7. It shows that the outer level model has discriminant validity and each path of the outer model is significant as the 't' statistic is greater than 1.96.

Table 61

LOADINGS OF ITEM & T STATISTICS				
Sl. No.	Items	OCS	WOM	T STAT.
1	Recomdcartofriend	0.5278	0.7628	25.249
2	Recommendthdealer	0.5332	0.7599	28.4747
3	Satonactualexpwithideal	0.737	0.567	7.2681
4	Satwidecibuyngcar	0.7182	0.5401	5.8364
5	Satwitencounter	0.7454	0.5139	10.0182
6	Satwithentirepurexp	0.7236	0.4469	11.1036

The reliability table shows that the AVE, Composite Reliability, Cronbach's Alpha of overall customer satisfaction and word of mouth possess sufficient reliability. The overall customer satisfaction has an AVE (0.8275), Composite Reliability (0.9505), and Cronbach's Alpha (0.9304), and word of mouth has an AVE (0.9051), Composite Reliability (0.9502), and Cronbach's Alpha (0.8951), are greater than the standard value.

Table 62

<b>AVE and Reliability</b>			
	AVE	Composite Reliability	Cronbachs Alpha
OCS	0.8275	0.9505	0.9304
WOM	0.9051	0.9502	0.8951

The hypothesised relation in the model (OCS→WOM) is significant as the AVE of overall customer satisfaction and word of mouth is greater than the square of the correlation between these two latent variables. The influence of overall customer satisfaction towards word of mouth is significant as 't' statistic of the path is greater than the standard value of 1.96 (t=28.2596).

Table 63

<b>Discriminant Validity &amp; Significance of the Path</b>								
	AVE 1	AVE 2	r	r <sup>2</sup>	AVE 1 > r <sup>2</sup>	AVE 2 > r <sup>2</sup>	Discriminant	T Statistics
OCS -> WOM	0.8275	0.9051	0.8369	0.7004	sig.	sig.	Yes	28.2596
			(t > 1.65; P < 0.05 and if t > 2; p < 0.01)					

Through the analysis of the fourth hypothesis, the researchers identified that overall customer satisfaction influences word of mouth significantly. The AVE, composite reliability, Cronbach's alpha is acceptable as the actual



(table) value is greater than the standard value. The 't' statistic of the outer model and inner model is significant and supported to accept the alternative hypothesis. The researchers accepted that overall customer satisfaction influences (r=0.915) to word of mouth and the word of mouth accommodates 83.7% ( $R^2=0.837$ ) variance in the overall customer satisfaction. So the researchers safely rejected the null hypothesis and concluded that overall customer satisfaction influences word of mouth.

#### **4.6 The Mediation role of Overall Customer Satisfaction:**

Mediation is a theoretical concept states that an intervening variable is an indicative measure of the process through which an independent variable is thought to impact a dependent variable (Iacobucci et al 2007). Through this study, the researchers attempt to assess the extent to which the effect of the antecedents on the consequences is direct or indirect through the overall customer satisfaction as a mediator. There are two antecedents and two consequences for customer satisfaction were conceptualized in the study. The two antecedents are satisfaction with the car and satisfaction with the dealer. The two consequences are repurchase intention and word of mouth. The mediation role of customer satisfaction has checked with individual antecedents and consequences separately.

***H5: Overall Customer Satisfaction Mediates the Overall Satisfaction with Car, overall satisfaction with the dealer to repurchase intention and word of mouth.***

A third variable is said to function as a mediator to the extent that it accounts the relation between predictor and the criterion. A variable is function as a mediator when it meets the conditions such as variation in levels of the independent variable significantly account for variation in the presumed mediator, variations in the mediator significantly accounts for variations in the dependent variable, and when the mediation path is controlled, a previously significant relation between the independent and dependent variation is no longer significant. If the direct path (independent variable to dependent variable) is zero, we can say that the mediator variable fully mediates the relation and if the direct path shows an incremental change and not zero, the conclusion would be the partial mediation of the mediator variable (Baron & Kenney, 1986).

Sobel (1982) gives an approximate test of significance for the indirect effect of the independent variable on the dependent variable through the mediator. This test is based on 't' statistic that provides a method to determine whether the changes in the effect of the independent variable, after including the mediator in the model, is shows a significant change and therefore whether the

mediation effect is statistically significant between the independent and dependent variable. It can be calculated as follows:

The following formulas are involved in the calculation of values for a Sobel test for the significance of mediation:

*Error Function:*

$$\text{erf}(x) = \frac{2}{\sqrt{\pi}} \int_0^x e^{-t^2} dt.$$

*Normal distribution cumulative distribution function (CDF):*

$$F(x; \mu, \sigma^2) = \frac{1}{2} \left[ 1 + \text{erf} \left( \frac{x - \mu}{\sigma\sqrt{2}} \right) \right],$$

where  $\mu$  is the mean,  $\sigma$  is the standard deviation, and *erf* is the error function.

*Sobel test statistic:*

$$z = \frac{ab}{\sqrt{(b^2\text{SE}_a^2) - (a^2\text{SE}_b^2)}}$$

where  $a$  is the regression coefficient for the relationship between the independent variable and the mediator,  $b$  is the regression coefficient for the relationship between

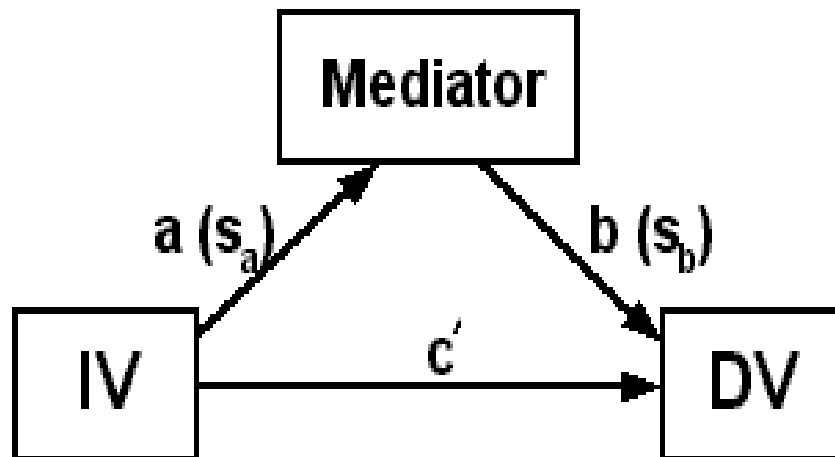
the mediator and the dependent variable,  $SE_a$  is the standard error of the relationship between the independent variable and the mediator, and  $SE_b$  is the standard error of the relationship between the mediator variable and the dependent variable.

Nowadays, numbers of online calculators are available to check the Sobel test. This calculator uses the Sobel test to identify whether a mediator variable significantly carries the influence of an independent variable to a dependent variable. The users can supply the necessary parameter value to get the Sobel test result. For the study, researchers used 'Statistics Calculators' from [www.danielsoper.com](http://www.danielsoper.com).

**Parameter values required to conduct Sobel test:**

Following parameters are required to run the Sobel test. These parameters are to be generated through 'PLS Algorithm' and 'Bootstrapping' from smartPLS package. They are as follows:

Chart 11: Format of Mediation



The above mentioned conceptual model shows various paths such as  $IV \rightarrow DV$ ,  $IV \rightarrow \text{Mediator}$  and  $\text{Mediator} \rightarrow DV$ . Here, 'c' is the direct effect between independent variable and dependent variable, 'a' is the path between independent variable to mediator and 'b' is the path between the mediator to dependent variable. The standard error of IV to Mediator is denoted as  $(S_a)$  and Mediator to DV as  $(S_b)$ . The effect of 'c' has to be checked without the presents of mediation in the model. After this, the mediation variable is introduced and the change in the path 'c' has to be noted. Then the mediated model is tested through bootstrapping to know the standard error and path coefficient of IV to Mediator and Mediator to DV. In order to calculate the Sobel statistic, we need to get these values as the parameters of the test and

can easily generate through PLS. These parameters are used with ‘statistics calculators’ to test the significance of the mediation effect.

***H5a: OCS mediates OCS WITH CAR to RPI***

**Table 64**

Items	Coefficients	t Statistic
OCS with CAR→RPI	0.879	9.689
OCS with CAR→RPI (M)	0.230	2.342
OCS with CAR→OCS	0.895	
OCS→RPI	0.725	
OCS with CAR→OCS (SE)	0.0194	
OCS→RPI (SE)	0.0865	

***Sobel test statistic: 8.24651294***

***One-tailed probability: 0.0***

***Two-tailed probability: 0.0***

The result of the Sobel test coefficient is greater than 1.96, and the probability value is significant. So, it can be concluded that the changes in the ‘t’ statistic (OCS WITH CAR→RPI, t=9.689) between the independent variable to dependent variable after introducing the mediation variable (OCS WITH CAR→RPI(M) t=2.342) is significant and the researchers concluded that there is a mediation in the model. Before introducing the mediation in the model,

the direct path coefficient between independent variable to dependent variable is 0.879. Even though, after introducing the mediation variable in the model, the direct path coefficient has reduced to 0.230 but the 't' statistic of the path is still significant as 't'=2.343, which is greater than 1.96. So the researchers concluded that overall customer satisfaction partially mediates satisfaction with the car to repurchase intention.

***H5b: OCS mediates OCS WITH CAR to WOM***

Table 65

Items	Coefficients	t Statistic
OCS with CAR→WOM	0.838	4.375
OCS with CAR→WOM (M)	0.094	1.071
OCS with CAR→OCS	0.895	
OCS→WOM	0.831	
OCS with CAR→OCS (SE)	0.0188	
OCS→WOM (SE)	0.0740	

***Sobel test statistic: 10.92976511***

***One-tailed probability: 0.0***

***Two-tailed probability: 0.0***

The mediation role of overall customer satisfaction between satisfaction with the car and word of mouth is significant. The result of the Sobel test

coefficient is greater than 1.96, and the probability value is significant. So, it can be concluded that the changes in the 't' statistic (OCS with Car→WOM, t=4.375) between the independent variable to dependent variable after introducing the mediation variable (OCS with Car→WOM(M) t=1.071) is not significant and the researchers concluded that there is full mediation in the model. Before introducing the mediation in the model, the direct path coefficient between independent variable to dependent variable is 0.838. After introducing the mediation variable in the model, the direct path coefficient has reduced to 0.094 and the 't' statistic of the path is not significant as 't'=1.071, which is lesser than 1.96. So the researchers concluded that overall customer satisfaction fully mediates satisfaction with the car to word of mouth.

***H5c: OCS mediates OCS WITH DEALER to RPI***

**Table 66**

Items	Coefficients	t Statistic
OCS with DEALER→RPI	0.604	8.189
OCS with DEALER→RPI (M)	0.256	1.488
OCS with DEALER→OCS	0.639	
OCS→RPI	0.619	
OCS with DEALER→OCS (SE)	0.0143	
OCS→RPI (SE)	0.1551	



***Sobel test statistic: 3.97515059***

***One-tailed probability: 0.00003517***

***Two-tailed probability: 0.00007033***

The test results show that overall customer satisfaction mediates satisfaction with the dealer to repurchase intention. The Sobel test coefficient is 3.97515059, which is greater than 1.96 and the probability value is less than 0.01. So, it can be inferred that after introducing the mediation variable in the model, the 't' statistic (OCS with Dealer→RPI,  $t=8.189$ ) of the direct path between independent variable and dependent variable (OCS with dealer→RPI(M),  $t=1.488$ ) is not significant and the researchers concluded that there is a mediation in the hypothesised model. After introducing the mediation variable in the model, the direct path coefficient has changed from 0.604 to 0.256 and the 't' statistic of the path is not significant ( $t=0.1551$ ). Hence, the researchers concluded that overall customer satisfaction fully mediates satisfaction with dealer to repurchase intention.

***H5d: OCS mediates OCS WITH DEALER to WOM***

**Table 67**

Items	Coefficients	t Statistic
OCS with DEALER→WOM	0.890	5.741
OCS with DEALER→WOM (M)	0.263	1.665
OCS with DEALER→OCS	0.939	
OCS→WOM	0.668	
OCS with DEALER→OCS (SE)	0.0136	
OCS→WOM (SE)	0.1560	

***Sobel test statistic: 4.27383980***

***One-tailed probability: 0.00000961***

***Two-tailed probability: 0.00001921***

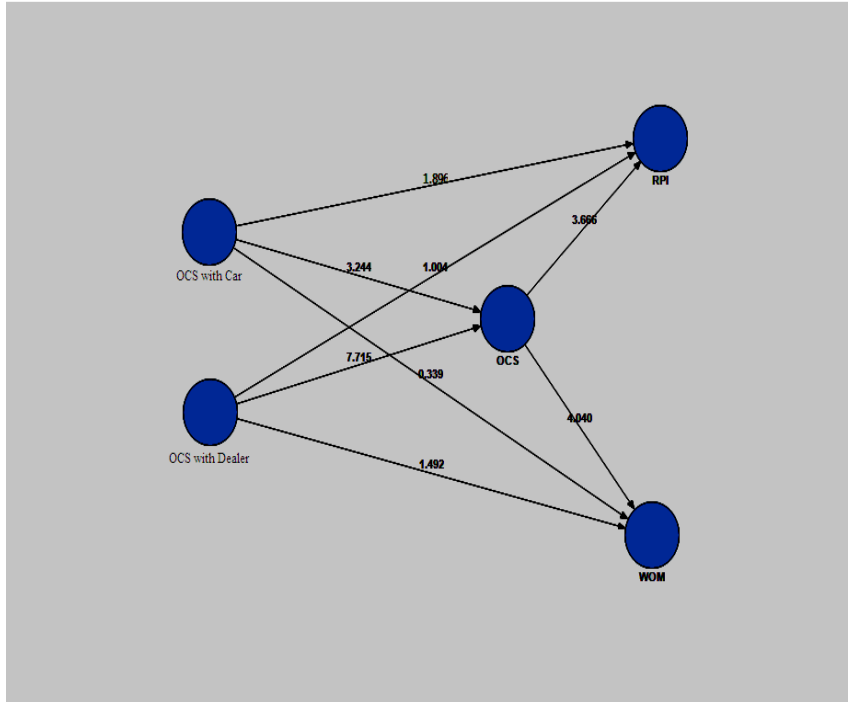
The mediation role of overall customer satisfaction between satisfaction with the dealer and word of mouth is significant. The result of the Sobel test coefficient is greater than 1.96, and the probability value is significant at 1% level. Hence, it can be concluded that the changes in the 't' statistic (OCS WITH DEALER→WOM, t=5.741) between the independent variable to dependent variable after introducing the mediation variable (OCS WITH CAR→WOM(M) t=1.665) is not significant and the researchers concluded

that there is full mediation in the model. Before introducing the mediation in the model, the direct path coefficient between independent variable to dependent variable is 0.890. After introducing the mediation variable in the model, the direct path coefficient has reduced to 0.263 and the 't' statistic of the path is not significant as  $t=1.665$ , which is lesser than 1.96. So the researchers concluded that overall customer satisfaction fully mediates satisfaction with the dealer to word of mouth.

#### **4.7 Combined Analysis of Mediation**

After testing the mediation role of overall customer satisfaction with each antecedent, the researchers decided to test the significance of various paths by consolidating all direct and mediated influence in the model. The result of the model analysis can be compared with the result of the individual test of the mediation effect of overall customer satisfaction between various antecedents and consequences. Then the researchers tested the mediation role of overall customer satisfaction between both antecedents and consequences simultaneously. The results as follows:

Chart 12: Combined Analysis of Mediation



**Discriminant validity at indicator level:**

The table result shows that entire items in the outer model have loaded to their respective latent variables such as OCS WITH CAR, OCS WITH DEALER, OCS, RPI and WOM. It states that the outer model has good convergent validity because entire items are loaded to their own latent variable at a value greater than 0.7. None of the path has cross loaded to any other latent variable. Beside, each path in the outer model is significant as the 't' statistic of entire path is greater than 1.96 .

Table 68

LOADINGS OF ITEMS & T STATISTICS							
Sl. No.	Items	OCS	RPI	SATCAR	SATDLR	WOM	T stat.
1	Actualwithideal	0.6777	0.6727	0.6711	0.7505	0.6416	20.8404
2	Considersameoutlet	0.5345	0.81	0.696	0.5456	0.6112	52.0948
3	Considrsamcompny	0.5879	0.809	0.6889	0.5878	0.6763	37.2085
4	Extentpurexpmeetexpecn	0.6001	0.6665	0.6372	0.7503	0.6858	11.5481
5	Howsatwithcar	0.6338	0.6265	0.738	0.625	0.5897	13.6163
6	Meetexpectation	0.6669	0.6501	0.7864	0.6804	0.6108	10.8343
7	Performtoidealcar	0.5787	0.6822	0.7704	0.68	0.6424	14.0528
8	Recomdcartofriend	0.5732	0.5358	0.6383	0.6884	0.7924	28.7458
9	Recommndthdealer	0.6976	0.6718	0.6352	0.6848	0.7903	42.8345
10	Satiwithpurchexp	0.6836	0.6381	0.6276	0.7372	0.6096	12.6923
11	Satonactualexpwithideal	0.7674	0.5744	0.6792	0.5238	0.559	16.1409
12	Satwidecibuyngcar	0.7475	0.6638	0.645	0.6991	0.67	18.4307
13	Satwitencounter	0.7304	0.6777	0.6563	0.6608	0.6439	17.9649
14	Satwithentirepurexp	0.753	0.6872	0.6366	0.6819	0.6768	22.496

The measurement criteria for the mediation model such as AVE, Composite Reliability, and Cronbach's Alpha of each construct shows good reliability. The result of the analysis shows that satisfaction with car has an AVE (0.8559), Composite Reliability (0.9468), Cronbach's Alpha (0.9156), and satisfaction with the dealer has an AVE (0.8208), Composite Reliability (0.9322), and Cronbach's Alpha (0.8909). It also shows that the overall customer satisfaction has an AVE (0.8275), Composite Reliability (0.9505), Cronbach's Alpha (0.9304). The consequences of customer satisfaction of the study such as repurchase intention has an AVE (0.94), Composite Reliability (0.9691), Cronbach's Alpha (0.9361) and word of mouth shows an AVE (0.9051), Composite Reliability (0.9502), Cronbach's Alpha (0.8951), that shows an acceptable coefficient for the model as per the literature.

Table 69

AVE and Reliability			
	AVE	Composite Reliability	Cronbachs Alpha
OCS	0.8275	0.9505	0.9304
RPI	0.94	0.9691	0.9361
SATCAR	0.8559	0.9468	0.9156
SATDLR	0.8208	0.9322	0.8909
WOM	0.9051	0.9502	0.8951

The following table shows that all latent variables have good discriminant validity as the AVE of each latent variable is greater than the square of the correlation between the two latent variables. The result states that overall customer satisfaction fully mediates satisfaction with the car and satisfaction with the dealer to repurchase intention and word of mouth. Beside, the direct influences of satisfaction with the car and satisfaction with the dealer to its consequences is not significant because the 't' value is less than the standard value, that is, less than 1.96.

Table 70

Discriminant Validity & Significance of the Path							
	AVE 1	AVE 2	r	r <sup>2</sup>	AVE 1 > AVE 2	Discr.	Statistics
OCS -> RPI	0.8275	0.94	0.8309	0.69039481	sig.	sig.	Yes 3.7906
OCS -> WOM	0.8275	0.9051	0.8148	0.66389904	sig.	sig.	Yes 4.2501
OCS with Car -> OCS	0.8559	0.8275	0.7952	0.63234304	sig.	sig.	Yes 3.4978
OCS with Car -> RPI	0.8559	0.94	0.7793	0.60730849	sig.	sig.	Yes 1.3421
OCS with Car -> WOM	0.8559	0.9051	0.7375	0.54390625	sig.	sig.	Yes 0.3336
OCS with Dealer -> OCS	0.8208	0.8275	0.8386	0.70324996	sig.	sig.	Yes 8.2959
OCS with Dealer -> RPI	0.8208	0.94	0.8043	0.64689849	sig.	sig.	Yes 1.0629
OCS with Dealer -> WOM	0.8208	0.9051	0.7899	0.62394201	sig.	sig.	Yes 1.5066

The results of the analysis from the model and tables shows that overall customer satisfaction fully mediates satisfaction with the car and satisfaction with the dealer to repurchase intention and word of mouth. The direct influence of the antecedents and consequences are not significant. So the researchers concluded that overall customer satisfaction fully mediate the satisfaction with the car and the satisfaction with the dealer towards the consequences of customer satisfaction such as repurchase intention and word of mouth significantly. So the individual and combined analysis of the mediation effect of overall customer satisfaction between antecedents and consequences states that there is a significant mediation of overall satisfaction in the model.

#### **4.8 Discussion on Mediation:**

The hypothesized mediation role of overall customer satisfaction between its antecedents and consequences shows that there is a significant mediation. Each antecedents and consequences were checked separately and the following table shows the consolidated result of the analysis. The column 'hypothesis' shows various mediation role of overall customer satisfaction between the antecedents and consequences. The 't' statistic states the significance of the direct path (independent variable to dependent variable) before and after introducing the mediation variable to the model and calculated through bootstrapping. The Sobel test explain the significant of the

mediation effect of overall customer satisfaction between antecedents and consequences.

**Table 71**

Hypothesis		Path Coefficient		t Statistic		Sobel Test		Decision
		Before Med.	After Med.	Before Med.	After Med.	Result	Sig.	
H5a	OCS with Car->OCS->RPI	0.879	0.23	9.689	2.342	8.2465129	0	Partial
H5b	OCS with Car->OCS->WOM	0.838	0.094	4.375	1.071	10.929765	0	Full
H5c	OCS with Dealer->OCS->RPI	0.604	0.256	8.189	1.488	3.9751506	0.00007033	Full
H5d	OCS with Dealer->OCS->WOM	0.89	0.263	5.741	1.665	4.2738398	0.00001921	Full
				Sig.>1.96		Sig.>1.96		

The hypotheses OCS with CAR→OCS→RPI (H5a) show only a partial mediation of overall customer satisfaction between satisfaction with the car and repurchase intention. The ‘t’ statistic before mediation is 9.689 which is far better than the new ‘t’ statistic after introducing the mediation variable in the model. Rest of the three hypotheses shows full mediation of OCS between antecedents and consequences because the changes in the ‘t’ statistic after introducing the mediation variable in the model is not significant, that is, less than 1.96. Beside, the Sobel test result shows that the entire four hypotheses were significant and the combined analysis of all direct and mediated path in the model also states that mediated path is significant and direct path is not significant. Hence, the researchers accepted the alternative hypothesis and



concluded that overall customer satisfaction does mediate its antecedents and consequences significantly.

#### **4.9 Moderation role of Overall Customer Satisfaction**

**H6: Overall customer satisfaction has a moderating role between antecedents and consequences.**

The moderator variable affects the direction and strength of the relationship between a dependent variable and an independent variable (Judd and Kenny 2010). It explains the condition in which a particular effect of a variable would increase, decrease or change the strength and direction of a relationship (Mohr et al, 2005). The researchers hypothesised that overall customer satisfaction has a moderating role towards the consequences.

Baron and Kenny (1986) have suggested the conceptual and analytical framework for testing the moderation effect in the model. The exogenous and endogenous variable would be connected with a causal path. The impact of the exogenous or predictor variable, the influences of the moderator variable, and the impact of the interaction or product of both predictor and moderator would be modeled together towards the endogenous or outcome variable. If the test result shows a significant path between the interaction variable and endogenous, it can be concluded that there is a moderation effect between these two variables and vice versa.

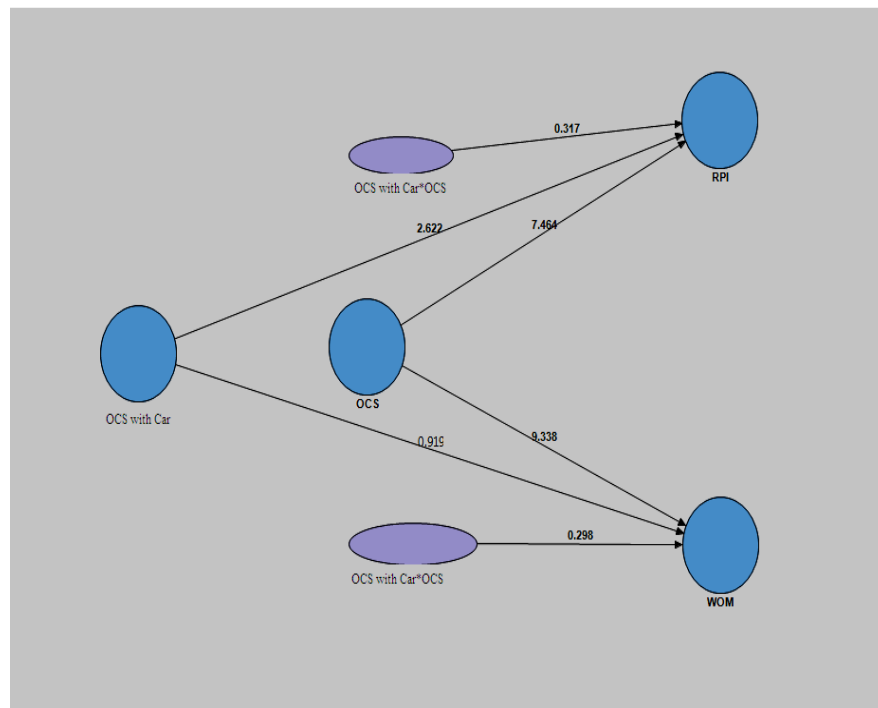
In order to interpret the moderating effects in the model, the direct relations of the exogenous and the moderator variable as well as the relation of the interaction term with the endogenous variable are to be examined. The hypothesis on the moderating effect would be supported if the interaction path coefficient is significant. The path coefficient of the interaction term shows the extent which the exogenous variable's influence on the endogenous variable changes based on the moderating variable (Henseler & Fassott, 2010, Homburg & Giering 2001, Chin & Dibbern 2010).

There are contradictory views regarding the testing of moderation effect when the mediation effect has proved (MacKinnon et al. 2002, Frazier et al. 2004, Rose et al. 2004). The earlier notion was that if a hypothesised mediation effect is disconfirmed, then the same variable is tested for the moderation effect and vice versa. The recent studies states that even though the mediation effect was proved, the moderation effect of the hypothesised path can also be tested depends on the researchers' substantive theory and appropriate operationalization (Kraemer et al. 2002). The present study is intended to develop a cumulative customer satisfaction instrument for compact segment car users, researcher decided to check the moderation role of overall customer satisfaction between the antecedents and consequences.

***H6a: Overall Customer Satisfaction stronger the relationship between Overall Satisfaction with Car to Repurchase Intention and Word of Mouth***

The moderating model has six causal paths that lead to the outcome variable of repurchase intention and word of mouth. The customer satisfaction with the car as a predictor, the overall customer satisfaction as a moderator, and the interaction or product of these two has directed to check the moderating effect on repurchase intention and word of mouth. The moderation hypothesis would be supported if the interaction is significant.

Chart 13: Hypothesis 6a, Moderation



The result of the analysis shows that overall customer satisfaction doesn't moderate the relation between satisfaction with the car to repurchase intention and word of mouth. The moderation path of OCS to RPI (0.333) and

OCS to WOM (0.313) is not significant as the 't' statistic is less than the standard value as per the literature.

**Discriminant validity at indicator level:**

The model hypothesised to test the moderation effect of OCS to RPI (OCS WITH CAR\*OCS) and OCS to WOM (OCS WITH CAR\*OCS). The table result shows that entire items in the outer model were loaded to their respective latent variables such as MODERATOR 1 (interaction to RPI), MODERATOR2 (interaction to WOM), OCS WITH CAR, OCS, RPI and WOM. It states that the outer model has good convergent validity because entire items are loaded to their latent variable at a value greater than 0.7. The interaction variable (moderator 1 and moderator 2) accounts the items of overall customer satisfaction and satisfaction with the car. So the product of the moderator and predictor variables such as overall customer satisfaction and satisfaction with the car were loaded to both interaction variables such as moderator1 and moderator2. None of the path has cross loaded to any other latent variable. Beside, each path in the outer model is significant as the 't' statistic of entire path including the items under moderator variable is greater than 1.96 .

Table 72

LOADINGS OF ITEM & T STATISTICS							
	OCS	RPI	OCS with Car	Mediation1	Mediation2	WOM	T Statistics
Considersameoutlet	0.3093	0.7699	0.456	-0.6435	-0.642	0.3994	77.3907
Considrsamcompny	0.3958	0.7691	0.3489	-0.6016	-0.5998	0.4364	56.7127
Howsatwithcar	0.3938	0.3865	0.8983	-0.6154	-0.6136	0.3497	39.4551
Howsatwithcar*Satonactuale	-0.5195	-0.4932	-0.5185	0.7643	0.7656	-0.4844	9.1284
Howsatwithcar*Satonactuale	-0.5195	-0.4932	-0.5185	0.7643	0.7656	-0.4844	9.1584
Howsatwithcar*Satwidecibuy	-0.4863	-0.4333	-0.4461	0.7668	0.7728	-0.4532	6.4245
Howsatwithcar*Satwidecibuy	-0.4863	-0.4333	-0.4461	0.7668	0.7728	-0.4532	7.4606
Howsatwithcar*Satwitencoun	-0.5087	-0.4849	-0.5593	0.766	0.768	-0.5023	8.1376
Howsatwithcar*Satwitencoun	-0.5087	-0.4849	-0.5593	0.766	0.768	-0.5023	8.5212
Howsatwithcar*Satwithentire	-0.4818	-0.4454	-0.4929	0.7697	0.7763	-0.4691	9.2812
Howsatwithcar*Satwithentire	-0.4818	-0.4454	-0.4929	0.7697	0.7763	-0.4691	8.0413
Meetexpectation	0.3268	0.4101	0.9463	-0.6519	-0.6506	0.3709	35.0225
Meetexpectation*Satonactua	-0.6016	-0.5861	-0.6086	0.8027	0.7982	-0.5614	8.0701
Meetexpectation*Satonactua	-0.6016	-0.5861	-0.6086	0.8027	0.7982	-0.5614	8.2202
Meetexpectation*Satwidecibu	-0.5488	-0.502	-0.5488	0.7968	0.7986	-0.5063	8.3089
Meetexpectation*Satwidecibu	-0.5488	-0.502	-0.5488	0.7968	0.7986	-0.5063	8.9669
Meetexpectation*Satwitenco	-0.5201	-0.5218	-0.6135	0.7845	0.7805	-0.5101	7.9476
Meetexpectation*Satwitenco	-0.5201	-0.5218	-0.6135	0.7845	0.7805	-0.5101	8.3206
Meetexpectation*Satwithenti	-0.529	-0.4887	-0.5934	0.8187	0.82	-0.4917	8.7906
Meetexpectation*Satwithenti	-0.529	-0.4887	-0.5934	0.8187	0.82	-0.4917	9.2441
Performtoidealcar	0.3618	0.4422	0.9302	-0.6835	-0.6827	0.4024	36.2694
Performtoidealcar*Satonactua	-0.6219	-0.61	-0.6147	0.8272	0.8221	-0.5782	10.037
Performtoidealcar*Satonactua	-0.6219	-0.61	-0.6147	0.8272	0.8221	-0.5782	9.2877
Performtoidealcar*Satwidecibu	-0.5381	-0.4905	-0.5197	0.8204	0.8218	-0.4944	8.0541
Performtoidealcar*Satwidecibu	-0.5381	-0.4905	-0.5197	0.8204	0.8218	-0.4944	8.4836
Performtoidealcar*Satwitenco	-0.5138	-0.5161	-0.5834	0.794	0.7893	-0.4803	8.0807
Performtoidealcar*Satwitenco	-0.5138	-0.5161	-0.5834	0.794	0.7893	-0.4803	7.8687
Performtoidealcar*Satwithenti	-0.529	-0.4958	-0.5626	0.808	0.809	-0.5026	8.6624
Performtoidealcar*Satwithenti	-0.529	-0.4958	-0.5626	0.808	0.809	-0.5026	9.4795
Recomdcartofriend	0.4827	0.3714	0.4983	-0.6074	-0.6062	0.9527	52.1498
Recommendthdealer	0.4576	0.3317	0.3953	-0.6041	-0.604	0.95	63.363
Satonactualexpwithideal	0.9272	0.4778	0.2392	-0.645	-0.6436	0.257	37.3855
Satwidecibuyngcar	0.9072	0.4238	0.405	-0.6203	-0.6194	0.3301	39.2154
Satwitencounter	0.8906	0.4376	0.3162	-0.6071	-0.6068	0.3039	38.296
Satwithentirepurexp	0.9133	0.4472	0.3966	-0.5854	-0.5845	0.4369	40.97

### **The Reliability Criteria:**

The measurement criteria of the hypothesised moderation model such as AVE, Composite Reliability, and Cronbach's Alpha of each construct shows good reliability. The result of the analysis shows that the moderator 1 has an AVE (0.6297), composite reliability (0.9533), Cronbach's Alpha (0.9466), moderator 2 has an AVE (0.6301), composite reliability (0.9533), Cronbach's Alpha (0.9466), overall customer satisfaction has an AVE (0.8275), Composite Reliability (0.9505), Cronbach's Alpha (0.9304), satisfaction with car has an AVE (0.8559), Composite Reliability (0.9468), Cronbach's Alpha (0.9156). The consequences of customer satisfaction of the study such as repurchase intention has an AVE (0.94), Composite Reliability (0.9691), Cronbach's Alpha (0.9361) and word of mouth shows an AVE (0.9051), Composite Reliability (0.9502), Cronbach's Alpha (0.8951), that shows an acceptable coefficient for the model as per the literature.

Table 73

<b>AVE and Reliability</b>			
	AVE	Composite	Cronbachs
OCS	0.8275	0.9505	0.9304
RPI	0.94	0.9691	0.9361
OCS with Car	0.8559	0.9468	0.9156
OCS with Car * OCS (M1)	0.6297	0.9533	0.9466
OCS with Car * OCS (M2)	0.6301	0.9533	0.9466
WOM	0.9051	0.9502	0.8951

The following table shows the discriminant validity and significance of the inner path in the measurement model. The inclusion of moderator as a latent variable to check the moderating role of overall customer satisfaction toward repurchase intention and word of mouth states that the moderation effect is not significant. Even though, the moderator as a latent variable shows good discriminant validity and reliability, its influence as a moderator of overall customer satisfaction to repurchase intention ( $t=0.333$ ) and word of mouth ( $t=0.313$ ) is not significant, because the ‘t’ statistic of the specified path is less than the standard value of 1.96.

**Table 74**

Discriminant Validity & Significance of the Path								
	AVE 1	AVE 2	r	r <sup>2</sup>	AVE 1>r <sup>2</sup>	AVE 2>r <sup>2</sup>	Discriminant	T Statistics
OCS -> RPI	0.8275	0.94	0.8309	0.6904	sig.	sig.	Yes	7.5392
OCS -> WOM	0.8275	0.9051	0.8148	0.6639	sig.	sig.	Yes	8.9729
OCS with Car -> RPI	0.8559	0.94	0.7793	0.6073	sig.	sig.	Yes	2.5689
OCS with Car -> WOM	0.8559	0.9051	0.7375	0.5439	sig.	sig.	Yes	0.8683
OCS with Car * OCS -> RPI	0.6297	0.94	-0.6422	0.4124	sig.	sig.	Yes	0.3255
OCS with Car * OCS -> WOM	0.6301	0.9051	-0.636	0.4045	sig.	sig.	Yes	0.3103

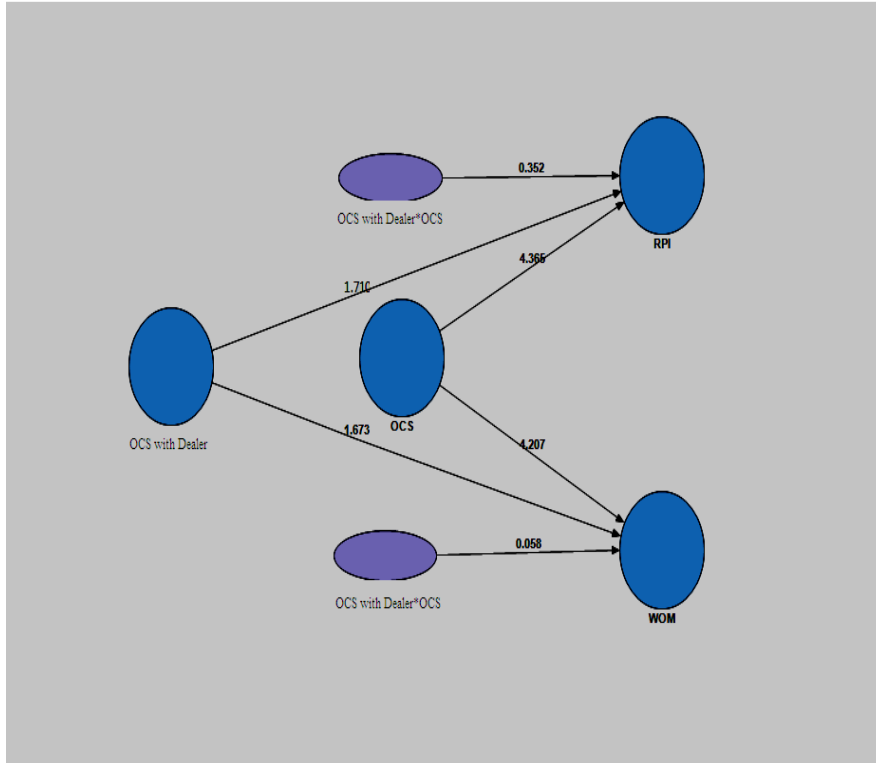
The results of the analysis state that there is no significant moderation role for overall customer satisfaction to change the repurchase intention (‘t’  $0.333 < 1.96$ , not significant) and word of mouth (‘t’  $0.313 < 1.96$ , not significant). So with the help of model and other relevant table output, the researchers concluded that the hypothesis, overall customer satisfaction has a moderating role between satisfaction with the car to repurchase intention and word of mouth is not significant.

***H6b: Overall Customer Satisfaction stronger the relationship between Overall Satisfaction with the Dealer to Repurchase Intention and Word of Mouth***

The hypothesised model include six path that carry the relation with OCS WITH DEALER to RPI, OCS WITH DEALER to WOM, OCS to RPI, OCS to WOM, Moderation to RPI and Moderation to WOM. The customer satisfaction with the dealer as a predictor, the overall customer satisfaction as a moderator, and the interaction or product of these two has directed to check the moderating effect on repurchase intention and word of mouth. The moderation effect of OCS to RPI and OCS to WOM doesn't shows a significant influence as the 't' statistic of both the path is less than the standard value of 1.96.



Chart 14: Hypothesis 6b, Moderation



**Discriminant validity at indicator level:**

The model hypothesised to test the moderation effect of OCS to RPI (OCS WITH DEALER\*OCS) and OCS to WOM (OCS WITH DEALER\*OCS). The table result shows that entire items in the outer model were loaded to their respective latent variables such as MODERATOR 1 (interaction to RPI), MODERATOR2 (interaction to WOM), OCS WITH DEALER, OCS, RPI and WOM. The result states that the outer model shows good convergent validity as entire items were loaded to their latent variable at a value greater than 0.7.

The interaction variable (moderator 1 and moderator 2) accounts the items of overall customer satisfaction and satisfaction with the dealer. So the product of the moderator and predictor variables such as overall customer satisfaction and satisfaction with the dealer were loaded to both interaction variables such as moderator1 and moderator2. None of the path has cross loaded to any other latent variable. Beside, each path in the outer model is significant as the 't' statistic of entire path including the items under moderator variable is greater than 1.96 .

Table 75

LOADINGS OF ITEM & T STATISTICS							
	OCS	RPI	OCS with Dealer	Mediation1	Mediation2	WOM	T Stat.
Actualwithideal	0.4376	0.5327	0.9112	-0.6215	-0.6216	0.3016	40.4513
Actualwithideal*Satonactualexpwi	-0.5716	-0.5482	-0.566	0.8467	0.8435	-0.5205	8.1844
Actualwithideal*Satonactualexpwi	-0.5716	-0.5482	-0.566	0.8467	0.8435	-0.5205	9.7323
Actualwithideal*Satwidedibuyngca	-0.5773	-0.5304	-0.5596	0.8177	0.8175	-0.5294	8.5475
Actualwithideal*Satwidedibuyngca	-0.5773	-0.5304	-0.5596	0.8177	0.8175	-0.5294	8.7458
Actualwithideal*Satwitencounter	-0.5335	-0.514	-0.5273	0.7485	0.7462	-0.5074	7.1669
Actualwithideal*Satwitencounter	-0.5335	-0.514	-0.5273	0.7485	0.7462	-0.5074	8.2349
Actualwithideal*Satwithentirepure	-0.554	-0.5165	-0.5601	0.8042	0.8046	-0.5171	8.6275
Actualwithideal*Satwithentirepure	-0.554	-0.5165	-0.5601	0.8042	0.8046	-0.5171	10.2419
Considersameoutlet	0.3093	0.9701	0.3899	-0.6325	-0.6322	0.3994	69.6165
Considrsamcompn	0.3958	0.9689	0.4634	-0.6195	-0.6189	0.4363	64.9403
Extentpurexpmeetexpecn	0.3694	0.4265	0.9105	-0.6296	-0.63	0.3458	32.353
Extentpurexpmeetexpecn*Satonact	-0.5697	-0.53	-0.5756	0.8298	0.8274	-0.5213	7.3752
Extentpurexpmeetexpecn*Satonact	-0.5697	-0.53	-0.5756	0.8298	0.8274	-0.5213	7.8996
Extentpurexpmeetexpecn*Satwided	-0.5737	-0.5328	-0.5708	0.8202	0.8193	-0.5073	8.591
Extentpurexpmeetexpecn*Satwided	-0.5737	-0.5328	-0.5708	0.8202	0.8193	-0.5073	8.4992
Extentpurexpmeetexpecn*Satwiten	-0.5509	-0.5257	-0.5405	0.7905	0.7893	-0.5295	7.241
Extentpurexpmeetexpecn*Satwiten	-0.5509	-0.5257	-0.5405	0.7905	0.7893	-0.5295	8.4705
Extentpurexpmeetexpecn*Satwithe	-0.5412	-0.5109	-0.5496	0.7697	0.7701	-0.5184	7.6268
Extentpurexpmeetexpecn*Satwithe	-0.5412	-0.5109	-0.5496	0.7697	0.7701	-0.5184	9.4518
Recomdcartofriend	0.4827	0.4714	0.4484	-0.6326	-0.6326	0.9524	53.0989
Recommndthdealer	0.3576	0.3319	0.345	-0.5915	-0.5917	0.9503	69.7683
Satiwithpurchexp	0.3435	0.4982	0.7962	-0.6378	-0.6374	0.3696	30.8817
Satiwithpurchexp*Satonactualexpwi	-0.5761	-0.5291	-0.5849	0.8223	0.8234	-0.5238	10.6832
Satiwithpurchexp*Satonactualexpwi	-0.5761	-0.5291	-0.5849	0.8223	0.8234	-0.5238	9.5762
Satiwithpurchexp*Satwidedibuyngca	-0.542	-0.4698	-0.5436	0.7802	0.784	-0.5052	8.0965
Satiwithpurchexp*Satwidedibuyngca	-0.542	-0.4698	-0.5436	0.7802	0.784	-0.5052	6.7947
Satiwithpurchexp*Satwitencounter	-0.556	-0.5365	-0.5658	0.7933	0.7944	-0.5345	8.8137
Satiwithpurchexp*Satwitencounter	-0.556	-0.5365	-0.5658	0.7933	0.7944	-0.5345	7.8877
Satiwithpurchexp*Satwithentirepur	-0.5186	-0.46	-0.5409	0.7998	0.8039	-0.4761	7.8837
Satiwithpurchexp*Satwithentirepur	-0.5186	-0.46	-0.5409	0.7998	0.8039	-0.4761	7.8306
Satonactualexpwithideal	0.9272	0.4778	0.3921	-0.6646	-0.6647	0.357	38.4826
Satwidedibuyngcar	0.9072	0.4238	0.4589	-0.6679	-0.6676	0.33	42.3871
Satwitencounter	0.8906	0.4377	0.421	-0.5944	-0.5946	0.4039	40.7454
Satwithentirepurexp	0.9133	0.3472	0.3417	-0.5937	-0.5934	0.4368	44.1676

The measurement criteria of the hypothesised moderation model such as AVE, Composite Reliability, and Cronbach's Alpha of each construct shows good reliability. The result of the analysis shows that the moderator 1 has an AVE (0.6438), composite reliability (0.9559), Cronbach's Alpha (0.9496), moderator 2 has an AVE (0.6438), composite reliability (0.9559), Cronbach's

Alpha (0.9496), overall customer satisfaction has an AVE (0.8275), Composite Reliability (0.9505), Cronbach's Alpha (0.9304), satisfaction with dealer has an AVE (0.8208), Composite Reliability (0.9322), Cronbach's Alpha (0.8909). The consequences of customer satisfaction of the study such as repurchase intention has an AVE (0.94), Composite Reliability (0.9691), Cronbach's Alpha (0.9361) and word of mouth shows an AVE (0.9051), Composite Reliability (0.9502), Cronbach's Alpha (0.8951), that shows an acceptable coefficient for the model as per the literature.

**Table 76**

<b>AVE and Reliability</b>			
	AVE	Composite	Cronbachs
OCS	0.8275	0.9505	0.9304
RPI	0.94	0.9691	0.9361
OCS with Dealer	0.8208	0.9322	0.8909
OCS with Dealer * OCS (M1)	0.6438	0.9559	0.9496
OCS with Dealer * OCS (M2)	0.6438	0.9559	0.9496
WOM	0.9051	0.9502	0.8951

The following table shows the discriminant validity and significance of the inner path in the measurement model. The inclusion of moderator as a latent variable to check the moderating role of overall customer satisfaction toward repurchase intention and word of mouth states that the moderation effect is not significant. Even though, the moderator as a latent variable shows good discriminant validity and reliability, its influence as a moderator of overall

customer satisfaction to repurchase intention ( $t=0.331$ ) and word of mouth ( $t=0.056$ ) is not significant, because the ‘t’ statistic of the interaction path for identifying the moderation effect of OCS is less than the standard value of 1.96 as per the literature.

**Table 77**

Discriminant Validity & Significance of the Path							
	AVE 1	AVE 2	r	r <sup>2</sup>	AVE 1>r <sup>2</sup>	AVE 2>r <sup>2</sup>	Discrim. T Stat.
OCS -> RPI	0.8275	0.94	0.8309	0.6904	Sig.	Sig.	Yes 4.3182
OCS -> WOM	0.8275	0.9051	0.8148	0.6639	Sig.	Sig.	Yes 4.2652
OCS with Dealer -> RPI	0.8208	0.94	0.8043	0.6469	Sig.	Sig.	Yes 1.6443
OCS with Dealer -> WOM	0.8208	0.9051	0.79	0.6241	Sig.	Sig.	Yes 1.6897
OCS with Dealer * OCS (M1) -> RPI	0.6438	0.94	-0.6458	0.4171	Sig.	Sig.	Yes 0.3496
OCS with Dealer * OCS (M2) -> WOM	0.6438	0.9051	-0.6437	0.4143	Sig.	Sig.	Yes 0.0604

The results of the analysis state that there is no significant moderation role for overall customer satisfaction to change the repurchase intention (‘t’  $0.331 < 1.96$ , not significant) and word of mouth (‘t’  $0.056 < 1.96$ , not significant). So with the help of model and other relevant table output, the researchers concluded that the hypothesis, overall customer satisfaction has a moderating role between satisfaction with the dealer to repurchase intention and word of mouth is not significant.

The above stated analysis on the moderation role of overall customer satisfaction between the antecedents and consequences states that even though the outer model is acceptable, the inner model that explains the moderation effect cannot be acceptable. The ‘t’ statistic that measure the significance of

the effect is less than the standard value of 1.96 that force to not accept the specific path in the model (moderation path). So the researchers concluded that the hypothesis of overall customer satisfaction has a moderating role to the antecedents and consequence is not significant.

#### **4.10 Validation of Cumulative Customer Satisfaction Model**

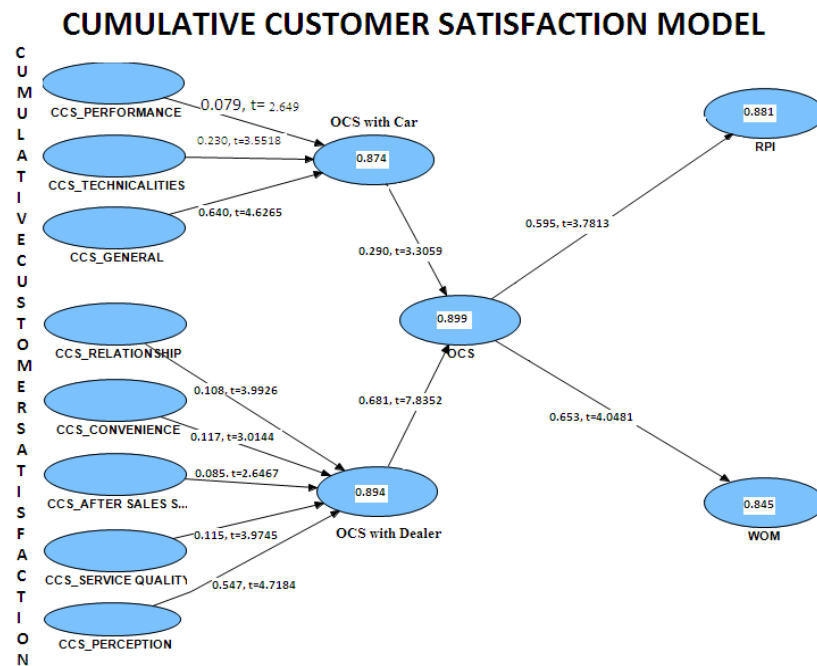
The cumulative customer satisfaction model proposed by the researchers includes car specific and dealer specific cumulative satisfaction that ends with the consequences of customer satisfaction such as repurchase intention and word of mouth. There are 18 items under three dimension leads to cumulative customer satisfaction with the car and another 22 items under five dimension leads to cumulative customer satisfaction with the dealer. The details of the analysis as follows:

##### **Final Model**

The measurement criteria of the cumulative customer satisfaction model such as AVE, Composite Reliability, and Cronbach's Alpha of each latent variable such as *ccs\_performance*, *ccs\_technicalities*, *ccs\_general*, Overall Satisfaction with Car, *ccs\_relationship*, *ccs\_convenience*, *ccs\_after sales service*, *ccs\_service quality*, *ccs\_perception*, overall satisfaction with the dealer, overall customer satisfaction, repurchase intention and word of mouth found to be reliable and acceptable as per the literature. The model exhibits the path

weights of each latent variable. In order to validate the cumulative customer satisfaction model, the researchers consolidated the items in the scale I (cumulative satisfaction with the car, 18 items) under three dimensions and scale II (cumulative satisfaction with the dealer, 22 items) under five dimensions that constitute cumulative customer satisfaction.

Chart 15: Cumulative Customer Satisfaction Model



The validated model stated that entire items under cumulative satisfaction with the dealer and cumulative satisfaction with the car influences overall customer satisfaction (OCS) to produce repurchase intention (RPI) and word of mouth (WOM) to the customer.

The latent variables such as *ccs\_performance*, *ccs\_technicalities* and *ccs\_general* influence the cumulative satisfaction with the car significantly. The path coefficient of *cca\_performance* and Overall Satisfaction with the Car is 0.079, is significant at 5% level as the 't' statistic is 2.649 which is greater than 1.96. The other latent variables such as *ccs\_technicalities* ( $r= 0.230$ ,  $t=3.5518$ ) and *ccs\_general* ( $r=0.640$ ,  $t=4.6265$ ) also influences significantly to Overall Satisfaction with the Car at 5% level. The Overall Satisfaction with Car accounts 87.4% ( $R^2 = 0.874$ ) variance of the independent variables such as *ccs\_performance*, *ccs\_technicalities* and *ccs\_general*.

The influencers of cumulative satisfaction with the dealer such as *ccs\_relationship* ( $r=0.108$ ,  $t= 3.9926$ ), *ccs\_convenience* ( $r=0.117$ ,  $t=3.0144$ ), *ccs\_after sales service* ( $r=0.085$ ,  $t=2.6467$ ), *ccs\_service quality* ( $r=0.115$ ,  $t=3.9745$ ), and *ccs\_perception* ( $r=0.547$ ,  $t=4.7184$ ) shows a good significance at 5% level. The cumulative satisfaction with the car accounts 89.4% ( $R^2=0.894$ ) variance of its independent variables such as *ccs\_relationship*, *ccs\_convenience*, *ccs\_after sales service*, *ccs\_service quality* and *ccs\_perception*.

The overall satisfaction with the car ( $r=0.290$ ,  $t=3.3059$ ) and overall satisfaction with the dealer ( $r=0.681$ ,  $t=7.8352$ ) becomes the better predictor of overall customer satisfaction that explain 89.9% ( $R^2 = 0.899$ ) variance of its independent variable.



### **Discriminant Validity at Indicator Level:**

The table result shows the loadings of each item in the outer model towards ccs\_performance, ccs\_technicalities, ccs\_general, Overall Satisfaction with Car, ccs\_relationship, ccs\_convenience, ccs\_after sales service, ccs\_service quality, ccs\_perception, overall satisfaction with the dealer, overall customer satisfaction, repurchase intention and word of mouth. Some of the items in the outer model are loaded at a value less than 0.7 but greater than 0.65. But the cross loading of such items to other latent variable are far lesser than the loading of its own latent variable. Beside, the sample size is 399 which are generally considered as large sample size, these types of lesser loadings can be expected and it should ensure that the same item was not loaded to any other latent variable. But the outer model is significant as the 't' statistic of entire path is greater than 1.96 .



of each construct shows good reliability. The result of the analysis shows that ccs\_after sales service has an AVE (0.7839), Composite Reliability (0.9477), and Cronbach's Alpha (0.931), ccs\_convenience has an AVE (0.7647), Composite Reliability (0.9286), and Cronbach's Alpha (0.8973), ccs\_general has an AVE (0.7288), Composite Reliability (0.9495), and Cronbach's Alpha (0.9379), OCS has an AVE (0.8275), Composite Reliability (0.9505), and Cronbach's Alpha (0.9304), ccs\_perception has an AVE (0.8857), Composite Reliability (0.9588), and Cronbach's Alpha (0.9355), ccs\_performance has an AVE (0.7521), Composite Reliability (0.9381), and Cronbach's Alpha (0.9175), ccs\_relationship has an AVE (0.7499), Composite Reliability (0.9473), and Cronbach's Alpha (0.9332), RPI has an AVE (0.94), Composite Reliability (0.9691), and Cronbach's Alpha (0.9361), Overall Satisfaction with Car has an AVE (0.8559), Composite Reliability (0.9468), and Cronbach's Alpha (0.9156), overall satisfaction with the dealer has an AVE (0.8209), Composite Reliability (0.9322), and Cronbach's Alpha (0.8909), ccs\_service quality has an AVE (0.8188), Composite Reliability (0.9476), and Cronbach's Alpha (0.9261), ccs\_technicalities has an AVE (0.7447), Composite Reliability (0.9459), and Cronbach's Alpha (0.9314) and WOM has an AVE (0.9051), Composite Reliability (0.9502), and Cronbach's Alpha (0.8951) . All these result shows an acceptable coefficient for the model as per the literature.

Table 79

<b>AVE and Reliability</b>			
	<b>AVE</b>	<b>Composite</b>	<b>Cronbachs</b>
CCS_AFTER SALES SERVICE	0.7839	0.9477	0.931
CCS_CONVENIENCE	0.7647	0.9286	0.8973
CCS_GENERAL	0.7288	0.9495	0.9379
OCS	0.8275	0.9505	0.9304
CCS_PERCEPTION	0.8857	0.9588	0.9355
CCS_PERFORMANCE	0.7521	0.9381	0.9175
CCS_RELATIONSHIP	0.7499	0.9473	0.9332
RPI	0.94	0.9691	0.9361
OCS with Car	0.8559	0.9468	0.9156
OCS with Dealer	0.8209	0.9322	0.8909
CCS_SERVICE QUALITY	0.8188	0.9476	0.9261
CCS_TECHNICALITIES	0.7447	0.9459	0.9314
WOM	0.9051	0.9502	0.8951

**The Discriminant Validity at Inner Path:**

The model also shows a good discriminant validity as the AVE of each latent variable is greater than the square of the correlation between the two latent variable and the 't' statistic shows that the inner path in the model is significant at 5% level.

**Table 80**

Discriminant Validity & Significance of the Path								
	AVE 1	AVE 2	r	r <sup>2</sup>	AVE 1>r <sup>2</sup>	AVE 2>r <sup>2</sup>	Discrim.	T Stat.
CCS_AFTER SALES SERVICE ->OCS with Dealer	0.7839	0.8209	0.7523	0.5660	Sig.	Sig.	Yes	2.6467
CCS_CONVENIENCE -> OCS with Dealer	0.7647	0.8209	0.7442	0.5538	Sig.	Sig.	Yes	3.0144
CCS_GENERAL -> OCS with Car	0.7288	0.8559	0.7804	0.6090	Sig.	Sig.	Yes	4.6265
OCS -> RPI	0.8275	0.94	0.7809	0.6098	Sig.	Sig.	Yes	3.7813
OCS -> WOM	0.8275	0.9051	0.7648	0.5849	Sig.	Sig.	Yes	4.0481
CCS_PERCEPTION -> OCS with Dealer	0.8857	0.8209	0.7857	0.6173	Sig.	Sig.	Yes	4.7184
CCS_PERFORMANCE ->OCS with Car	0.7521	0.8559	0.7366	0.5426	Sig.	Sig.	Yes	1.649
CCS_RELATIONSHIP -> OCS with Dealer	0.7499	0.8209	0.7415	0.5498	Sig.	Sig.	Yes	3.9926
OCS with Car -> OCS	0.8559	0.8275	0.7451	0.5552	Sig.	Sig.	Yes	3.3059
OCS with Car -> RPI	0.8559	0.94	0.7292	0.5317	Sig.	Sig.	Yes	2.0181
OCS with Car -> WOM	0.8559	0.9051	0.6875	0.4727	Sig.	Sig.	Yes	0.3524
OCS with Dealer -> OCS	0.8209	0.8275	0.7886	0.6219	Sig.	Sig.	Yes	7.8352
OCS with Dealer -> RPI	0.8209	0.94	0.7542	0.5688	Sig.	Sig.	Yes	1.0571
OCS with Dealer -> WOM	0.8209	0.9051	0.7397	0.5472	Sig.	Sig.	Yes	1.4796
CCS_SERVICE QUALITY -> OCS with Dealer	0.8188	0.8209	0.7577	0.5741	Sig.	Sig.	Yes	3.9745
CCS_TECHNICALITIES -> OCS with Car	0.7447	0.8559	0.7581	0.5747	Sig.	Sig.	Yes	3.5518

The result of the analysis shows that entire path in the cumulative customer satisfaction model is significant as the validation criterion as per the literature is acceptable. So the researchers concluded that all items in the cumulative customer satisfaction is significant for customer satisfaction and the proposed model could be useful for ensuring cumulative customer satisfaction of compact segment car users in Kerala.

#### **4.11 Conclusion:**

This chapter dealt with the testing of six hypotheses of the study and validation of cumulative customer satisfaction model for the compact segment car market in Kerala. The first four hypothesis were tested the influences of overall satisfaction with the car towards overall customer satisfaction, overall satisfaction with the dealer towards overall customer satisfaction, the influences of overall customer satisfaction towards repurchase intention and word of mouth. All hypotheses were significant at 5% level and the researchers accepted the alternative hypothesis. The fifth hypothesis tested the mediation role of overall customer satisfaction between the antecedents and consequences. The mediation effect was tested separately with individual antecedents and a combined analysis also made for the simultaneous effects of the mediation role of overall customer satisfaction between both antecedents and consequences. The result was significant at 5% level and the researchers concluded that overall customer satisfaction mediates the antecedents towards consequences significantly. The sixth hypothesis proposed the moderation role of overall customer satisfaction between the antecedents and consequences. The results shows that the moderation path of overall customer satisfaction is not significant and failed to conclude that overall customer satisfaction has a moderating role between antecedents and consequences.

The proposed cumulative customer satisfaction model was significant as the measurement criterion of the model was acceptable as per the literature. The items under cumulative satisfaction with the car and cumulative satisfaction with the dealer were influenced significantly to overall customer satisfaction that mediates the antecedents towards consequences significantly. The cumulative customer satisfaction model shows that if the customer has satisfaction with the car and satisfaction with the dealer, there would be repurchase intention and word of mouth.

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## *Chapter 5*

# *DISCUSSION OF FINDINGS AND RECOMMENDATION*

### **5.1 Introduction:**

The customer satisfaction has remarkable influences for channelizing managerial decision making. Even though the customer satisfaction has been studied by several scholars, this concept is highly sensitive to varying cultural differences and the customers' preference might be changed as per this cultural variation (Oliver & Swan 1989). Past studies states that customer satisfaction is context specific and decision taken in one situation cannot be used to another location (Anderson et al, 1994). Satisfaction models developed by scholars can be used to know the overall satisfaction level (Fornell et al 1992, Chan et al 2001) but cannot give lights to the reason for their satisfaction.

### **5.2 Summary of Survey Results:**

The basic intention for the study was to frame a cumulative customer satisfaction model for compact segment car market in Kerala. The model proposed through the study can be used to assess the level and the causes of



variation in customer satisfaction. This model would be helpful to the decision makers to assess and modify their customers' satisfaction. The major items that determine the car users' satisfaction was combined with consequences of customer satisfaction such as repurchase intention and word of mouth. Before validating the model, it has tested the influences of various antecedents towards overall customer satisfaction and its impact on consequences. Six hypotheses were proposed during the study and all of them were tested with appropriate statistical tools. The statistical inferences were made at 5% level of significance. In order to test each hypothesis, construct level influences towards their latent variables also tested and the significance was ensured.

The hypotheses were tested with the statistical package SmartPLS. Each hypothesis was modeled with their constructs and the validity of the model was estimated on the basis of measurement criterion such internal consistency, Average Variance Extracted (AVE), discriminant validity and t-statistic. It is a highly useful method to test the hypothesis as the simultaneous influences of entire construct towards their latent variable, and between latent variable can be accommodated during the analysis.

The result of the analysis shows that most dominating compact segment cars are i20, Swift, i10, Figo and so on. Around 40% of the compact segment car market was dominated by these cars. Major customers of compact segment

cars are business people, private sector employees and teachers (85%). Apart, most of the users are belongs to the age group of 30-40. Around 52% of the compact segment car users belongs to this age group and around 37% of the users are belongs to the age of 41 and above. It means the upper level youth (age of 30 and above) highly prefer compact segment car.

An analysis of the educational qualification states that 42% of respondents are post graduates and 25% are graduates. It means, the customers of compact segment cars are highly educated and such customers might have the practice of critical review of the product performance that would reflect their satisfaction evaluation. So the marketers of these cars should be cautious while dealing with the customers.

The customers of compact segment cars in Kerala say that Swift is the most ideal car in the segment that was followed by i20. Around 53% of the customers consider Swift and i20 as the standard car. These two brands dominate the compact segment market significantly.

The customers' intention for the purchase of a compact segment car is for private use. Around 80% of the respondents used this car for their private use. It enlightens the manufacturers of compact segment cars to ensure maximum comfort to the customers while using their private car. The purchase of a compact segment car was influenced by friends, siblings, life partner and so

on. Around 90% of the respondents say that the purchase of their car was influenced by their near and dear. The marketers of such compact segment car should taken care of this findings as they have to direct the promotion policies not only to customer but also their near to people so as to make an influence for purchasing the compact segment car.

### **5.3 Discussion of Hypothesis Results:**

The results of the tested hypothesis were significant except the sixth hypothesis that proves overall customer satisfaction doesn't moderates the antecedents and consequences significantly. The following table shows various hypotheses and their result that was followed by a detailed discussion of the findings of the study.

Table 85

Sl. No.	Hypothesis	Result
1	H1: Overall Satisfaction with the car positively influences overall customer satisfaction.	Supported
2	H2: Overall Satisfaction with the dealer positively influences overall customer satisfaction.	Supported
3	H3: Overall customer satisfaction positively influences repurchase intention.	Supported
4	H4: Overall customer satisfaction positively influences word of mouth.	Supported
5	H5: Overall customer satisfaction has a mediating role between the antecedents and consequences.	Supported
	H5a: Overall Customer Satisfaction Mediates the Overall Satisfaction with Car to the Repurchase Intention.	Supported
	H5b: Overall Customer Satisfaction Mediates the Overall Satisfaction with Car to Word of Mouth.	Supported
	H5c: Overall Customer Satisfaction Mediates the Overall Satisfaction the Dealer to Repurchase Intention.	Supported
	H5d: Overall Customer Satisfaction Mediates the Overall Satisfaction with Dealer to Word of Mouth.	Supported
6	H6: Overall customer satisfaction has a moderating role between antecedents and consequences.	Not supported
	H6a: Overall Customer Satisfaction stronger the relationship between Overall Satisfaction with Car to Repurchase Intention and Word of Mouth	Not supported
	H6b: Overall Customer Satisfaction stronger the relationship between Overall Satisfaction with the Dealer to Repurchase Intention and Word of Mouth	Not supported

The customer satisfaction derives from satisfaction with the product and satisfaction with the encounter during the product purchase. The satisfaction with the car influences customers' overall satisfaction but not ensure complete satisfaction. The researchers categorized two types of satisfaction, satisfaction with the car and satisfaction with the dealer that ensures total satisfaction.

The first hypothesis was stated to test that overall satisfaction with the car influences overall customer satisfaction. The result was significant and researchers concluded that there is a significant positive influence of overall

satisfaction with the car to overall customer satisfaction. This result supports the literature that satisfaction was determined by the overall performance of the product (Churchill & Suprenant 1982). Before purchasing the car, the customer would have several expectations that should be confirmed during the usage of the product. As the researchers collected the response after one year of their car purchase, the customers were able to reply by accommodating their expectancy confirmation about their product. Oliver and Linda (1981) report on the expectancy confirmation as the base of customer satisfaction also support the result of this hypothesis. So the customers' expectancy confirmation about the car has direct influence on his overall satisfaction.

During the purchase process, a customer has to interact with the dealer. As the compact segment car demands high involvement, the customer's purchase process becomes a long process. Throughout the purchase process, the customer encounters with the dealer for various service-related aspects such as information about the car, credit terms, etc. The customer's satisfaction with the dealer determines their experiences during the purchase process. The result of the second hypothesis states that satisfaction with the dealer influences overall customer satisfaction significantly. It supports the study conducted by Fisk and Young (1985) that states the experiences of customer during the purchase process lead to process satisfaction and such purchase experience must influence the level of satisfaction (LaTour & Peat 1979). The test

result of the second hypothesis states that satisfaction with the dealer influences overall customer satisfaction and the marketers should be cautious while dealing with the customers.

The result of the third hypothesis shows that overall customer satisfaction influences repurchase intention to customers. The satisfied customer will repurchase the product and the car is a durable product, he may have repurchase intention. The result supports the findings of Oliver (1997) and Bitner (1990) that the satisfied customer will approach the same dealer for future purchase. The overall customer satisfaction accounts both overall satisfaction with the car and overall satisfaction with the dealer. If the customer is satisfied with the car and not with the dealer, he might have a repurchase intention of the same car or upgraded version of any car produced by the company (Bolton 1998) in future that generates future revenue and reduces transaction cost (Reichheld & Sasser 1990) to the manufacturer. When the customer is satisfied with the dealer and not with the car, he might have consider the same dealer in future purchase because he might have loyal to the same dealer or service provider (Anderson & Narus, 1990).

Satisfied customers will spread positive word of mouth. The result of the fourth hypothesis states that satisfied customers recommend the dealer and the product to their near and dear. Reichheld and Sasser (1990), Frenzen and Nakamoto (1993) states that satisfied customers always talk about the

experiences to their friends and colleagues. These literatures also supported that the satisfied customers of compact segment cars in Kerala will spread good word of mouth.

The fifth hypotheses explain that overall customer satisfaction mediates the antecedents and consequences. It means the antecedents such as overall satisfaction with the car and overall satisfaction with the dealer cannot directly predict the consequences like repurchase intention and word of mouth. If a customer has overall customer satisfaction, that becomes the influences of overall satisfaction with the car and overall satisfaction with the dealer. This result supported the study conducted by Bolton and Drew (1991) and Srivastava et al. (1998) that claims customer satisfaction mediates the antecedents to consequences.

The mediation effect of individual antecedents and consequences are tested to get the level of mediation of overall customer satisfaction with each path. It can be noted that overall customer satisfaction mediates satisfaction with the car to repurchase intention. But the mediation is partial because the direct path after introducing the mediation variable is significant. Hence, the overall customer satisfaction partially mediates the satisfaction with car and repurchases intention. But the path significance (t statistic) is comparatively low after introducing the mediator in the model. The combined analysis with entire antecedents and consequences highlights that the mediation effect is not

significant at 5% level. Even though, it can be understood that overall customer satisfaction mediates overall satisfaction with the car to repurchase intention significantly.

The overall customer satisfaction mediates overall satisfaction with the car to word of mouth significantly. The result of the analysis shows complete mediation. The direct path coefficient after introducing the mediator variable is not significant as the 't' statistic is less than the standard value. The Sobel test result explains that there is a significant mediation for overall customer satisfaction between satisfaction with the car and word of mouth.

The result of the hypothesis (H5c) reveals that overall customer satisfaction completely mediates satisfaction with the dealer to repurchase intention. The direct path (OCS with Dealer → RPI) is not significant after introducing the mediator variable in the model. The Sobel test shows that there is a significant mediation.

There is a mediation of overall customer satisfaction between satisfaction with the dealer and word of mouth. The 't' statistic is not significant after introducing the mediation variable. The Sobel test result shows that there is a significant mediation between satisfaction with the dealer and word of mouth.

The result of the mediation was vouched with literature and studies such as Bolton and Drew (1991), Szymanski and Henard (2001) shows that customer



satisfaction mediates the antecedents and consequences. The result of the mediation analysis shows that the hypothesised antecedents are fully mediated through the overall customer satisfaction towards repurchase intention and word of mouth.

The moderation effect of customer satisfaction between the antecedents and consequences are least analysed in the literature. The results of the moderator analysis show that overall customer satisfaction doesn't significantly moderate the antecedents and consequences. The hypothesis was not supported. It explain that overall customer satisfaction only accommodates the influences of overall satisfaction with the car and overall satisfaction with the dealer and does not change the effect of influences to repurchase intention and word of mouth. These findings strengthen the validity of the cumulative customer satisfaction model proposed through the study as the decision makers should focus the items listed under cumulative satisfaction with the car and cumulative satisfaction with the dealer in order to ensure cumulative customer satisfaction to their customer.

The proposed cumulative customer satisfaction model includes cumulative customer satisfaction with the car and dealer. Cumulative customer satisfaction with the car positively influences his overall satisfaction. This hypothesis explains that the customers' satisfaction with the car has a direct influence to the overall satisfaction. The researchers used 18 items under

three dimensions as the determinants of cumulative customer satisfaction with the car. The items in the scale I include the features of the car that was designed and modified by the manufacturers. It can be proposed that if the customer is satisfied with these 18 items, there would be a cumulative customer satisfaction with the car. It can be calculated by adding the response score of customers towards these 18 items scale (Scale I in the study). If a customer gives a response near to 7 in seven point scale, he is satisfied with the car and so, he has cumulative customer satisfaction with the car. By adding the ordinal response, the decision makers will get a score between 18 to 126 (18 items, score may be 1 to 7 for each item, minimum would be  $18 \times 1$ , maximum would be  $18 \times 7$ ) that shows the strength of customers' cumulative satisfaction with the car. If the score is near to 18, he is least satisfied and if the score is near to 126, he is most satisfied with the car. If the decision makers, especially manufacturers of the car see a score near to 18, they can identify which items were rated low and high by the customer. With this, he can modify that feature so as to ensure cumulative customer satisfaction with the car.

The customer satisfaction with dealer includes the customer's encounter during the purchase experiences. It mainly depends on marketers or dealers' specific items that customers give consideration for their satisfaction with the dealer. Researchers validated 22 items under five dimensions that customer

should be satisfied to ensure cumulative customer satisfaction with the dealer. These 22 items were arranged with a 7 point scale in the instrument. The range of the cumulative customer satisfaction with the dealer is 22-154 (22 items, score may be 1 to 7 for each item, minimum would be  $22 \times 1$ , maximum would be  $22 \times 7$ ). If the customer gives a score near to 22, he is least satisfied and if the score is near to 154, he is most satisfied with the dealer. The marketers or dealers of the car have to play a significant role as they are dealing with the customers. The decision makers such as dealers or marketers of the car get a score near to 22, they can identify the items least rated by the customer. By focusing on such items, they can improve cumulative customer satisfaction with the dealer.

The cumulative customer satisfaction model can be operationalised by collecting the cumulative satisfaction with the car and cumulative satisfaction with the dealer through the instrument designed in the study. The users have to add the ordinal response of the items in the scale that gives a cumulative satisfaction score. The score would be in between 40 to 280 depends on the level of customer satisfaction (total number of items in both the scale is 40, which was multiplied by the ordinal response that would be in between 1 to 7). If the score is near to 40, the customer would be least satisfied and if it is near to 280, the customer would be most satisfied. As the item specific responses were collected, the users can diagnose the items cause to least satisfaction and

most satisfaction. The decision makers can modify such items causes least satisfaction to its customers in order to ensure cumulative customer satisfaction that becomes a better predictor of repurchase intention and word of mouth.

#### **5.4 Recommendations**

Through the critical review of the literatures, data analysis and discussion of findings, the researchers were able to make some recommendation to the industry. The recommendations were channelized to manufacturers and dealers as both have identical role to satisfy the compact segment car owners. The manufacturers of compact segment cars should ensured that the product features are capable enough to protect their market share from competitors. The dealers have direct contact with the customers that ensure the smooth operation of their car. So both manufacturers and dealers have to take care of the following recommendations:

1. The findings of the study states that most of customers of compact segment cars are highly educated and such customers might have detailed evaluation of encounters with the product and dealers. The dealers should be care while interacting with such customers.
2. The promotional activities might be direct to not only the actual customer but also the near and dear such as friends, family members,

colleagues, etc. The analysis of the research states that 90% of the compact segment car purchase was influenced by the nearby people of the customers.

3. Business people and private sector employees are the major customer group of compact segment cars. These customers belong to 'busy group' and aren't ready to spend much time for the maintenance of their car. So, the manufacturers and dealers have to ensure that their product demands less maintenance compared to competitors.
4. The various attributes deciding the performance of the car such as mileage, driving comfort, accessories, speed and running condition of the car should be qualitatively positioned with the product. Customers are highly sensitive with the performance of their car.
5. As the research in engineering and technology brings innovation in the technical side of the compact car, it is the manufacturer who has to converge themselves for the most modern techniques in their car. The competition in the compact segment car is not confined to domestic, but internationally recognized players are dealing with these cars. So the manufacturer should have some uniqueness in their car.
6. Customers are highly sensitive to the space, maintenance, design, etc. of their car. They demand more comfort with less price. So the

manufacturers should be cautious about the customers' requirement and equip such general features in the car.

7. Most of the users of compact segment cars stem from an age group of 30 and above. They are highly focused on the safety feelings, resale value, maintenance, etc. of their car. The manufacturer should mind these aspects while designing the car.
8. The dealers of compact segment car should maintain good relationship with its customers. They have provided information genuinely, updates them and doesn't try to enjoy the lack of awareness of the customer to persuade them for purchasing the car. These customers would recognize and review their experiences that will affect the future customer preferences for the dealer and product.
9. The customers favor convenience always. The purchase of their car, its services, proximity to the service centres, etc. determines a person to be the customer of a car. They prefer such manufacturers having enough showrooms around him as the troubles with the car would be redressed very easily. So the manufacturers and dealers ensure the convenience to its customers.
10. The survival of any organization is based on after sales service. After purchasing the car, the customer should get enough support from its manufacturers and dealers so as to use the product smoothly. The

spares of the car should be available easily with fewer prices. There are some manufacturers who sell the product at competent price but charging exorbitant price to its spares. It is unethical and customers might be turn to spread negative word of mouth about the product.

11. The customers complained should be responded timely. If a customer approach the dealer for certain service, he should be treated well and the dealer make him feel that the problems would be redressed soon. The trust should be exhibited while dealing with the customers. The loose talk, high pitch voice, laughing at the time of explaining complaints by the customer, etc. should be avoided and the employees of the organization should consider the customer with full happiness.
12. Even though the dealer and the manufacturer of the compact segment car show full commitment, the customer perception about them may be varied. As per this study, it can be noticed that, if the dealer and the manufacturer provide their maximum than the competitor, the customer perception would be favorable and he will recommend the car to his friends and colleagues.

### **5.5 Scope for further research:**

The cumulative customer satisfaction model developed by the researcher has been validated in compact segment car market. It has been demonstrated that this model would be a useful tool for ensuring cumulative customer

satisfaction with the most competing market segment, the compact segment market. The further research required for expanding the applicability of the model has listed below:

1. It is suggested that this model may be administered in other automobile segment such as small car segment, premium segment, etc. with certain rewording and customization of the instrument. For this, another research is required to model validation.
2. This model can be used to the industries experiencing high customer involvement during the purchase process with required customization. There would be industry specific variation in purchase involvement. So a separate research is required with different industry.
3. The model would be useful for benchmarking the companies and dealers in respect of cumulative customer satisfaction and can compare for achieving customer satisfaction. The customers' expectations might be differ in various culture and socio economic background. So a research accommodating all these aspects would be more useful.
4. Further research can be undertaken to study the differences of organizations competency level for getting customer satisfaction.



## **5.6 Conclusion:**

This research was started with the main intention of developing a cumulative customer satisfaction model to assess the source and effect of customer satisfaction in compact segment car market. An instrument was developed through literature review, personal interview and expert opinion. The statistical validity of the instrument was ensured. By using this instrument, survey was conducted with compact segment car owners of Kerala. Various hypotheses were tested and the results compared with literature. Through the research it is concluded that the model developed is capable of assessing the level of customer satisfaction with its causes and effect. The manufacturers and marketers of compact segment cars can use this model as a reference for satisfying its customers. A new player in the compact segment car industry in Kerala can use this model to understand the customers' expectation so as to arrange the product and dealers for grabbing the market share and ensuring customer satisfaction. The academicians and scholars can use the model, and the instrument based on this model to critically review and assess customers' preferences during the purchase of a highly involved product such as compact segment cars.

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# *APPENDICES*

## **INSTRUMENT FOR THE STUDY**

This is an instrument designed for collecting the response of car users regarding their satisfaction. As an owner of Compact segment car, you are in a unique position to comment on this research. Based on your experience during the purchase process, I humbly request you to provide information in order to complete the research smoothly. The responses collected through this instrument would be kept confidential and used for academic purpose only.

### **Personal Profile**

- Name :
- Age :
- Educational qualification :
- Profession :
- Marital Status :
- Which brand of car using now? :
- When did you purchase this car? :
- Do you have any other car? : Yes  No
- If yes, how many? :
- Did you replace your old car  
for purchase this car : Yes  No
- What is the intention behind purchasing this car?
- Private use
  - Taxi use
  - Family members
  - Office use
  - Others

Is there anyone's influence on you to buy this car?

Yes  No

If yes, please mention your relation :

Please mention the number of kilometer covered till the date:

In your view, what is the most ideal car in this group? :

### **Scale I: CCS with Car**

I. Rate your level of satisfaction with the car in the light of the following attributes?

Sl. No	Attributes	1	2	3	4	5	6
<b>PERFORMANCE</b>							
1	Mileage						
2	Driving comfort						
3	Accessories						
4	Speed						
5	Running condition						
<b>TECHNICALITIES</b>							
6	Engine quality						
7	Life of the engine						
8	Engine power						
9	Pickup capacity						
10	Safety feelings						
11	Service requirements to the car						
<b>GENERAL</b>							
12	Spaciousness						
13	Maintenance						
14	Design						
15	Aesthetics						
16	Resale Value						
17	Brand image of the car						
18	Colour						

### Scale I A: OCS with Car

Sl. No	Attributes	Low	2	3	4	5	6	High
1	How satisfied are you with the car?							
2	Rate the performance of your car with the ideal?							
3	To what extent does the car meet your expectations?							

### Scale II: CCS with Dealer

II. Rate your level of satisfaction with the dealer in the light of the following attributes?

Sl. No	Attributes	Highly Dissatisfied	2	3	4	5	6	Highly Satisfied
<b>RELATIONSHIP</b>								
1	Information provided at the time of purchase							
2	Information updates for the service							
3	Customer care of the outlet people							
4	Ambience of the showroom							
5	Credit terms							
7	Test drive facilities							
<b>CONVENIENCE</b>								
8	Availability of service appointments							
9	Proximity of the outlet							
10	Approachability of service centers							
11	Employees engagement with customer							
<b>AFTER SALES SERVICE</b>								
12	Availability of parts							
13	Cost of parts							
14	Service charges							
15	Periodic check up from the seller							

16	Feedback from the customer after service							
<b>SERVICE QUALITY</b>								
17	Response to complaints							
18	Attitude of the sales person							
19	Delivery time							
20	Quality of service provided by the mechanic.							
<b>PERCEPTION</b>								
21	Value for money							
22	Dealer image							
23	Overall experience during the purchase of this car							

### **Scale IIA: OCS with Dealer**

Sl. No	Attributes	Low	2	3	4	5	6	High
1	Rate your satisfaction with the purchase experience							
2	Compare the actual purchase experience with ideal							
3	To what extent does the purchase experience meet your expectation							

### **Scale III: Overall Customer Satisfaction**

Sl. No	Attributes	Highly Dissatisfied	2	3	4	5	6	Highly Satisfied
1	Rate your satisfaction with the decision of buying this car							
2	Rate your satisfaction with entire purchase experience							
3	Rate your satisfaction with various encounters during the purchase process							
4	Rate your satisfaction on actual experience with ideal during the purchase							

### **Scale IV: Word of Mouth**

Sl. No	Attributes	Not Recommend	2	3	4	5	6	Highly Recommend
1	Will you recommend this car to your friends							
2	Will you recommend this dealer to your friends							

### **Scale V: Repurchase Intention**

Sl. No	Attributes	Not Consider	2	3	4	5	6	Highly Consider
3	Will you consider the same company while replacing your car in future							
4	Will you consider the same outlet while replacing your car in future							

**Results of In-depth Interview with 25 compact segment car users in Kerala**

I. Can you detail the factors that you considered while choosing a specific outlet/retailer for the purchase of your car?

1. Proximity, after sales service
2. Proximity
3. Value for money
4. feed backs from the users, Information provided at the time of purchase
5. Proximity to the service centre, Fast Delivery, Value for money
6. Service Quality , Accessibility, Response to complaints
7. Convenience, Availability of parts, Cost of parts
8. Customer Relations and recommendations from peer groups
9. Service quality, Employees engagement with customer
10. years of experience, proximity, good will, personal relations
11. Credit facility, Service, Customer care of the outlet people
12. Nearer for service of the car, Overall experience
13. After sale service, nearby location, Overall experience
14. Availability of service centers, easy delivery, Test drive facilities
15. Service charges, Periodic check up from the seller
16. proximity Ambience of the showroom, Feedback from the customer after service

17. after sales service, gift, Overall experience during the purchase of this car
18. speedy delivery, opinions, genuineness, offers, nearness
19. after sales services, Dealer image, Overall experience
20. Easy post purchase serviceability and proximity
21. Trust, Approachability of service centers
22. Availability of service appointments, Value for money
23. Proximity Information updates for the service
24. Availability, Service, access, Perception, Overall experience
25. Accessibility Credit terms, Attitude of the sales person

II. Can you list out the factors you considered for purchasing this specific car brand among alternatives?

1. Service facilities, mileage, look, and A/c, Maintenance
2. Economy, Boot Space, Resale Value
3. Driving comfort
4. After sale services, service charges and resale value
5. Engine Quality, Affordable mileage, Luggage space and leg space  
,Proximity to the service centre
6. Reliability, Aesthetics, Resale Value
7. Trust
8. Reliability and service throughout the country

9. Look, technical quality
10. Mileage, fuel efficiency, price, size, cars functionalities, engine performance
11. Price, mileage, availability
12. Mileage, Resale value, Design
13. Price - Economical
14. Affordable Price, Mileage, Maintenance, Popularity, Size, Availability and cost of spares, resale value.
15. Driving comfort, Brand image of the car
16. Safety, comfort, stability, Speed, Spaciousness
17. Performance, money value ,brand image, Colour
18. Price, performance, safety, style, durability, maintenance, space, Reliability
19. Price, fuel efficiency, Engine quality, Brand image of the car, Colour
20. Brand name, reliability, low cost of running, Service requirements to the car
21. Brand Loyalty, Accessories, Life of the engine, Safety feelings
22. better styling & features at a comparatively lower price
23. Best Resale Value, Maintenance, Mileage.
24. Brand image, safety, design, Engine power
25. Credibility, Running condition, Pickup capacity



## **LIST OF PAPERS PUBLISHED**

### **Paper Published:**

- Hamza,V.K. & Zakkariya K.A. (2012). Determinants of cognitive dissonance and its relative importance to consumer product purchase. *EXCEL International Journal of Multidisciplinary Management Studies*. Vol.2 (1), ISSN 2249 8834. Online available at <http://zenithresearch.org.in/>
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