

# CONSUMER SATISFACTION WITH THE DISTRIBUTION SYSTEM FOR DURABLE PRODUCTS

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## ABSTRACT

This study introduces a process model of consumer satisfaction with the distribution system for a durable product. Using the distribution system for new automobiles, this research tests the applicability of the Expectancy-Disconfirmation paradigm at the search and servicing stages of the process. The results indicate that the Expectancy-Disconfirmation theory applies at both stages: satisfaction is a direct function of both the level of expectations held by the consumer prior to engaging in the particular stage and the extent to which those expectations are positively or negatively disconfirmed. The results also indicate that consumer satisfaction with the distribution system for new automobiles is a function of servicing satisfaction, followed by search satisfaction and finally by product performance satisfaction.

## INTRODUCTION

Research in the area of consumer satisfaction/dissatisfaction (CS/D) focusses mainly on goods and services and neglects the distribution system as a factor which affects CS/D. This omission provides an incomplete understanding of the reality facing consumers since the consumption of goods and services is a process which comprises the evaluation not only of the products consumed but also the different enterprises which produce, distribute and service these products. This study focusses on this previously unexplored area of CS/D. The objective is to fill some of the theoretical gaps and provide a guide to managerial action. Specifically, the main objectives of the study are to a) present a model (based on the Expectancy-Disconfirmation paradigm) of consumer satisfaction with the distribution system for durable products, and b) empirically test parts of this model by investigating consumer satisfaction with the distribution system for new automobiles.

## LITERATURE REVIEW

The investigation of consumer satisfaction/dissatisfaction (CS/D) is no longer in the infancy stage. A substantial amount of research has been conducted in this area since the early 70's. Several theories which try to identify the factors contributing to consumer satisfaction have been developed and tested. So far, the most promising approach appears to be the Expectancy/Disconfirmation paradigm which views satisfaction as the result of an evaluative process. In this process, consumers evaluate their consumption experience by comparing their perception of that experience with the expectations they had prior to consuming the product or service. This comparison results in feelings of disconfirmation. In keeping with the nomenclature of CS/D researchers, positive disconfirmation occurs when perceived performance exceeds prior expectations, and negative disconfirmation occurs when perceived performance is less than prior expectations. Neutral disconfirmation (or confirmation) is the case where perceived performance is equal to prior expectations. In this process, satisfaction is seen as an emotion which follows the consumption experience. Research by Oliver (1980) and by Thirkell (1980) suggests that satisfaction is an additive function of both disconfirmation and initial expectations.

The Expectancy-Disconfirmation approach has been applied to several products and services, including plants and video players (Churchill and Surprenant 1982), cars (Thirkell 1980) and a flu inoculation (Oliver 1980). It has also been tested on retail outlets (Swan and Trawick 1981). However, this theory has not been tested at the system level. This level concerns the operation of the marketing system at large. It includes the activities and firms involved in the manufacturing, distribution and servicing of all goods and services offered in the marketplace.

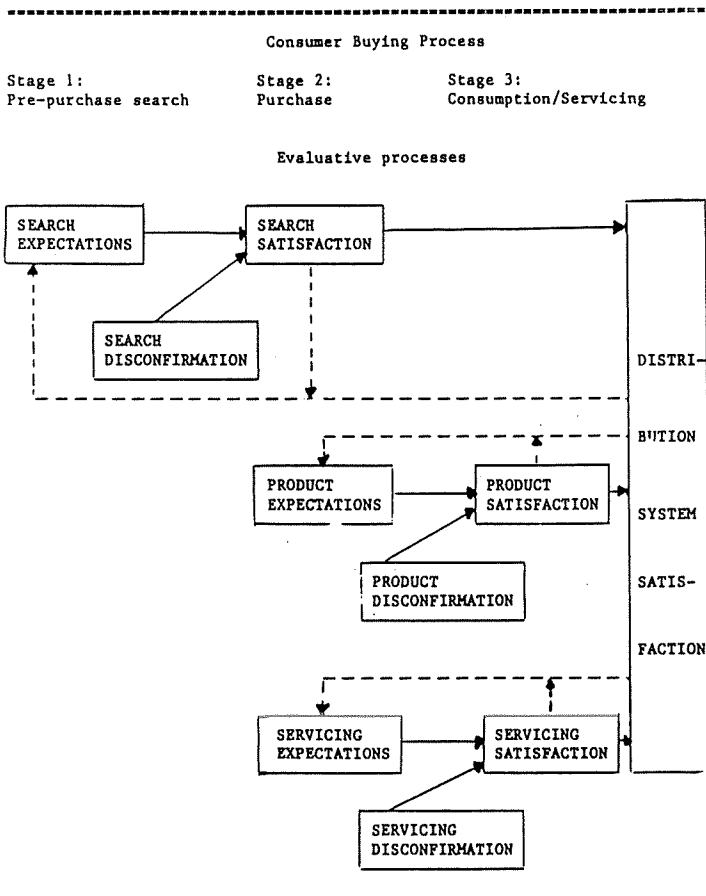
This level of conceptualization of the marketing system is very broad and it presents several difficulties in terms of research and the application of results. For example, it does not permit the diagnosis of the specific causes of consumer satisfaction, nor does it facilitate the determination of priorities for developing consumer protection programs. For researchers, this level also presents substantial problems of measurement. The study of consumer satisfaction at an intermediate level, such as at the distribution system level for a specific product, provides the advantages of investigating consumer satisfaction at the system level while circumventing the drawbacks at this level of conceptualization.

## RESEARCH MODEL AND HYPOTHESES

The sub-system investigated in this research is the distribution system for a durable product. The distribution system is defined as the set of stores and/or dealers selling a particular product category to consumers. It thus includes the specific store or dealer where the product is purchased and where the product is repaired and serviced during the warranty period, and during the duration of the service contract (or extended warranty contract), if one is included in the transaction. If product servicing is not the responsibility of the store or dealer but that of the manufacturer, then the distribution system for the product also includes the outlet where the product is to be repaired or serviced. This definition of a distribution system is suitable mainly for durable products.

As Figure 1 illustrates, the model presented in this section views consumer satisfaction with the distribution system of a product as the result of three evaluative processes which occur during the consumer's buying process. The first evaluative process concerns the prepurchase search (stage 1 of the buying process) made by consumers who buy a durable product. This evaluative process starts with the formation of pre-search expectations about the set of stores/dealers selling the product. During the prepurchase search, the consumer undertakes several activities which involve the utilization of different sources of information. One of these activities consists of visiting different dealers or stores which offer the product desired by the consumer. These interactions between consumers and retailers can be different for each consumer. Furthermore, The author would like to thank the University of Western Ontario and l'Ecole des Hautes Etudes Commerciales de Montréal for providing financial support, as well as the Ministry of Transportation of Ontario for supplying the names of new automobile buyers for the mailing list.

FIGURE 1  
Model of Distribution System Satisfaction



consumers tend to perceive them in their own way. Therefore, it is the perception of the stores or dealers visited that the consumer compares with his pre-search expectations. If the perceived interactions exceed the initial expectations, there is a positive disconfirmation. If the perceived interactions are equal to the expectations, the consumer experiences confirmation. And if the perceived interactions are below the consumer expectations, there is negative disconfirmation. The result of this comparison process is, respectively, consumer satisfaction, indifference or dissatisfaction with the set of stores/dealers visited.

Following search, the consumer purchases the product (stage 2 of the buying process). At this stage, the consumer forms some expectations about the product performance, and about the store or dealer where the product is bought. Because of the importance of durable products, product consumption (stage 3 of the buying process) generally includes the second evaluative process in which product performance perception is compared with pre-usage expectations. The result of this comparison process may be disconfirmation (positive or negative) of the expectations, and consequently, feelings of satisfaction or dissatisfaction with the product. Comparison may also result in product performance perceptions equal to expectations and consequently feelings of indifference.

Since purchasing a product implies choosing a specific store or dealer, the third evaluative process is related to the "purchase" (choice) of a store or dealer with all the attendant services. For instance, many retail stores offer services such as product financing, gift wrapping, an extended warranty or servicing plan, expert advice, and delivery. The price of the product often includes these services which may vary in quantity

and quality depending on the store. Very often, the retailer is also responsible for honoring the warranty offered by the manufacturer. Honoring the warranty often implies replacing or repairing the product, or reimbursing the customer. Therefore, at least for durable or semi-durable products, purchasing a product also means a more or less long term relationship with a specific store or dealer. Thus, the third evaluative process concerns the evaluation of the servicing experience and consequently, it happens during stage 3 of the buying process.

Again, a comparison can take place between the perceived interaction(s) with the store/dealer servicing the product and the consumer pre-servicing expectations. The result of this comparison process may be disconfirmation (positive, or negative), and consequently, feelings of satisfaction or dissatisfaction with the store or dealer. As in the case of product performance, comparison may also produce feelings of indifference if the store/dealer is equal to pre-servicing expectations.

The final result of these three evaluative processes is an overall feeling of satisfaction with the distribution system of the product purchased. Three components influence this overall satisfaction: a) search satisfaction, b) product satisfaction, and c) servicing satisfaction. Finally, as the feedback loops indicate, overall consumer satisfaction with the distribution system, as well as consumer satisfaction with each one of the three components impact on the expectations held by the consumers in the future, and thus become part of the consumer experience. As mentioned previously, products consumed in a short period of time do not require any servicing. Thus, this model applies mainly to durable or semi-durable products that demand periodic maintenance or servicing by specialists or that involve a warranty period during which the product may be repaired, if necessary.

The factors influencing consumer satisfaction with product performance have been the subject of many studies and hence, are not investigated in this research. Therefore, our three main hypotheses are as follows: the first hypothesis investigates the factors influencing consumer satisfaction at the search stage.

H1: Post-search satisfaction with the stores/dealers selling the product is a function of both pre-search expectations and the degree of confirmation or disconfirmation of these expectations during the perceived interactions with stores/dealers resulting from the pre-purchase search.

The second hypothesis investigates the factors influencing consumer satisfaction at the servicing stage.

H2: Post-servicing satisfaction with the store/dealer where the product was bought is a function of both pre-servicing expectations and the degree of confirmation or disconfirmation of these expectations during the perceived interactions with the store/dealer following the product purchase.

Finally, the third hypothesis investigates the factors related to overall satisfaction with the distribution system for durable products.

H3: Overall satisfaction with the distribution system is a function of:

- a) consumer post-search satisfaction with the stores or dealers selling the product,
- b) consumer post-servicing satisfaction with the store or dealer where the product is serviced,
- c) consumer satisfaction with the product performance.

## System Investigated

Several factors influenced the choice of the distribution system of new automobiles as the system for analysis. As mentioned by Moyer and Whitmore (1976), about one quarter of all retail trade in North America is related to the automobile. Furthermore, motor vehicle dealerships alone account for nearly one-fifth of all retail outlet sales. Thus, the distribution system for automobiles is one of the largest on the continent. While it is large and complex, researchers seem to give little consideration to the overall effectiveness of the channels that handle automotive products, at least from the viewpoint of the final consumer. A study by Ash (1980) shows a significant amount of consumer dissatisfaction with auto repairs and service. Another study by Bernacchi, Kono and Willette (1980) also reveals that 43% of the respondents were dissatisfied with automobile services under warranty. These results indicate a need for information on consumers' perceptions of car dealers. It seems, therefore, that auto repairs and service constitute a high priority for consumer protection programming (Ash, 1980).

## Source of Data

The data for this research were collected through a mail survey of new car owners in Ontario, the richest and most industrialised province in Canada. The sampling frame used was a regional subset of urban and rural residents who had purchased a new passenger car within the previous six months. The owners' names were obtained through license plate registrations and the respondents were chosen through a random sampling procedure. One thousand, two hundred questionnaires were mailed in two waves, after a pre-test of the instrument. The principal driver and owner of the new car was asked to respond to the questionnaire. While the response rate was 42%, 380 questionnaires (32% of the original sample) were usable. Women made up roughly one-third of the respondents and owners of imported cars (i.e. cars made from a manufacturer located outside of North America) also made up one-third. All the respondents had purchased their cars within the previous eleven months. It was therefore assumed that the majority of cars was still under warranty at the time of the survey. It was impossible to test for nonresponse biases, but a comparison of the cars owned by the respondents and those listed in the initial sample indicated no significant differences in the makes purchased by the two groups.

## Measurement of Expectations

There is considerable support in the literature for the multidimensionality of the expectation construct. Therefore, this study defines expectations as a set of beliefs about the benefits and costs associated with consumer interactions with the stores/dealers distributing a specific product category. The development of the expectation measures followed a review of expectation measurement in the CS/D area and in-depth interviews with new automobile buyers and dealers. The expectation constructs were measured following a procedure similar to the one adopted by Thirkell (1980). First consumers gave their ratings on a number of five-point bipolar scales measuring the subject's perceptions of the dealer's (or dealers') position on two sets of attributes, one for the search expectation construct and one for the servicing expectation construct (Table 1). Then, respondents rated the importance of each attribute to them on a five-point semantic differential scale ranging from unimportant to important. The global measures of consumer's search and servicing expectations were obtained by averaging the sum of attribute specific expectation levels multiplied by their associated level of importance. This procedure

## Search stage

dealership location  
choice of models  
price negotiation  
price of trade-in car  
knowledge of product

knowledge of repair  
knowledge of competition  
respect shown  
willingness to listen  
pressure-selling  
test-drive offered

## Servicing stage

follow-up after sales  
delivery time  
quality of car preparation  
willingness to solve problems  
range of services  
quality of repair  
quality of explanation  
cost of dealer work  
availability of parts

appointment time  
warranty honoured  
follow-up after repairs  
repair done first time  
repair done when promised  
cost estimates  
return of defective parts  
alternative transportation  
waiting room

implies the use of the aided-recall method. To reduce the chance of bias associated with this method, respondents only rated the items they considered before entering the process. Respondents also had the opportunity to add their own expectation attributes. Finally, to prevent order effects, the ratings of the items of the expectation scales were reversed in the questionnaire. The search scale included 11 items while the servicing scale included 18 items.

## Measurement of Disconfirmation

This construct is generally defined as the extent to which a consumer's perceptions of an object or experience exceed, meet, or fall short of prior expectations. Accordingly, positive disconfirmation occurs when, for the consumer, perceptions exceed expectations. If perceptions just equal expectations, confirmation is the result. Finally, if perceptions are less than expectations, negative disconfirmation results. This definition of disconfirmation emphasizes the relative nature of this construct since it is the result of a comparison process with expectations serving as the basis of comparison. Consequently, for the purposes of this study, search disconfirmation is the result of a comparison between servicing expectations and the consumer's perceptions of the store/dealer where the product was purchased.

A compensatory model was used to measure the two disconfirmation constructs. To ensure consistency with the expectation measures, the same two sets of attributes were used. A five-point scale, ranging from "Much worse than expected" to "Much better than expected", was the measure for each disconfirmation item. The global disconfirmation measures were obtained by summing the product of all attribute ratings and their associated importance weights and averaging these sums by the number of items answered by each consumer.

## Measurement of Satisfaction

Satisfaction is, in essence, an emotional response manifested in the feelings which follow an experience with a product, a service, an enterprise or a set of enterprises. It is thus seen in this study as a single global measure. Consequently, search satisfaction consists of an evaluation made by the consumer as to whether the experience of visiting dealers or stores was favourable, indifferent or unfavourable. Similarly, servicing satisfaction consists of the consumer's evaluation as to whether the experience of interacting with the specific store/dealer where the product was bought is favourable, indifferent, or unfavourable. Product satisfaction is defined as the consumer's evaluation of the product performance. Finally, distribution system satisfaction is defined as the consumer's overall feeling

toward the set of stores or dealers selling the product.

To be consistent with the previous operational definitions, a set of submeasures corresponding to the expectations items previously defined was taken. These submeasures, which used a five-point scale ranging from "Very satisfied" to "Very dissatisfied", helped to determine the specific causes of satisfaction or dissatisfaction to consumers. They also formed the global measures of search and servicing satisfaction. Based on evidence of three studies regarding the satisfaction construct (Aiello, Czepiel and Rosenberg 1977; Morris, Winter and Crull 1980; Westbrook 1980), the previous measurement procedure was simplified in the case of these two constructs. It consisted of calculating a simple raw unweighted sum of scores on the series of individual items and then dividing this sum by the number of items answered by the consumer. Finally, product satisfaction and distribution system satisfaction were measured with a five-point single item scale ranging from "Very satisfied" to "Very dissatisfied".

#### Reliability and Validity of the Measures

The internal consistency of the six scales was assessed using Cronbach's alpha. This test indicated an acceptable level of reliability, with the alpha coefficients ranging from .70 to .96. A series of tests were also performed to evaluate the validity of the scales. First, because of the recall procedure used, the question of possible time-related biases in the results was investigated. The objective was to see if consumers who had purchased a new car near the time of the survey reported higher or lower expectation levels than those who had purchased their automobile at an earlier period. Correlation coefficients between time since purchase and expectation levels were not statistically significant at the .05 level, indicating that time-related biases were relatively minor.

A second test involved calculating Pearson correlations between the global disconfirmation measures and a single score reflecting overall feelings of disconfirmation. The correlation coefficients were respectively .63 at the search stage and .74 at the servicing stage pointing to the conclusion that the disconfirmation measures captured the overall feelings of disconfirmation felt by consumers at both stages of the buying process.

The last test investigated the validity of the search and servicing satisfaction variables. The test consisted of calculating correlations between each of the constructs and a single score measuring consumer overall satisfaction feelings with the dealer(s). At both stages, the correlations were above .7 and statistically significant at the .001 level. Therefore, it appears that the global satisfaction measure captures consumer overall feelings of satisfaction with the dealer(s) at both stages of the buying process.

#### FINDINGS

The first two hypotheses focus on the effect of expectations and disconfirmation on satisfaction at the search and servicing stage. The first test consisted of analysing the relationship between expectations and satisfaction. As a first step, simple correlations were calculated between the expectation and the satisfaction variables. At the search stage, the Pearson correlation between expectations and satisfaction was .41, and was significant at the .001 level. Similarly, at the servicing stage, the Pearson correlation between the two measures was .27, and the level of significance was .001. These two findings indicate that at both stages, levels of satisfaction vary directly with increasing levels of expectations. However, a large percentage of respondents had reported being satisfied to a certain extent with the

dealers they visited during the search (75 percent) and/or with the dealer servicing their new car (71 percent). It was believed that this factor could have masked the existence of a reverse relationship among those respondents reporting some dissatisfaction. Therefore, an additional test was performed, which consisted of calculating separate correlation coefficients among the satisfied and the dissatisfied consumer groups. These results are presented in Table 2.

This table confirms that among satisfied consumers, expectation levels correlate positively with satisfaction levels. However, among dissatisfied consumers, the relationship varies depending on the buying stage. At the search stage, expectations are independent of satisfaction while at the servicing stage, higher expectations are associated with more dissatisfaction.

The second test investigates the relationship between disconfirmation and satisfaction. Pearson correlations were calculated and the results indicate that at both the search and servicing stages, satisfaction and disconfirmation are positively and significantly (at the .001 level) related. At the search stage, the correlation is .57 and at the servicing stage, it is .58. These results are not surprising. Indeed, in this study satisfaction is seen as the result of an internal comparison between expectations and perceived performance. When the perceived performance of the dealer(s) is not as good as the prior expectations, negative disconfirmation occurs, stirring some feelings of dissatisfaction. Similarly, when the perceived performance exceeds prior expectations, positive disconfirmation occurs, stimulating feelings of satisfaction in the consumer. Consequently, as the magnitude of negative disconfirmation decreases, so does consumer dissatisfaction; when the magnitude of positive disconfirmation increases, consumer satisfaction also increases.

The third test concerns the simultaneous effect of expectations and disconfirmation on satisfaction, including the interaction effect if any. Given the previous results obtained, the test of hypothesis H1 was performed on the total sample while the test of hypothesis H2 was performed separating the sample into satisfied and dissatisfied consumers. Table 3 shows the result of the multiple regressions performed. The independent variables entering the stepwise procedure were expectations, disconfirmation and the corresponding interaction term.

The results confirm the previous analyses. At the search stage, they indicate the existence of a relationship between consumer expectations, disconfirmation and the subsequent feeling of satisfaction experienced. They also indicate the presence of an interaction effect between the disconfirmation and expectation measures. Adding this interaction effect increases the variance explained by the model from 39 percent to 45 percent. The positive signs of the expectation and disconfirmation betas indicate that levels of satisfaction increase as a direct function of both levels of expectations and levels of disconfirmation. This result is consistent with previous results. Consequently, the null hypothesis that search satisfaction is independent of prior consumer expectations and subsequent levels of disconfirmation is rejected.

At the servicing stage, in order to perform the analyses, the sample was separated into two groups, the satisfied and the dissatisfied consumers. Among the satisfied consumers, the regression reveals that expectations has a positive effect on satisfaction. However, the disconfirmation measure on its own does not show any significant effect. This result does not mean that this variable does not have any impact at all. Apparently, its effect is captured by the interaction term

TABLE 2  
Relationships Between Expectations and Satisfaction

	Pearson Correlation Coefficient	
	Search Stage	Servicing Stage
Total Sample	.41 <sup>a</sup>	.27 <sup>a</sup>
Satisfied Consumers	.37 <sup>a</sup>	.37 <sup>a</sup>
Dissatisfied Consumers	.05	-.40 <sup>a</sup>

<sup>a</sup> Significant at the .001 level

TABLE 3  
Stepwise Regression

Dependent Variable : Satisfaction  
Independent Variables: Expectations  
Disconfirmation  
Interaction Term (Exp \* Disc)

		Search Stage	Servicing Stage	
			Satisfied Consumers	Dissatisfied Consumers
R Square		.45	.26	.59
Adjusted R Square		.45	.25	.58
F		90.1	36.8	86.2
Signif F		.000	.000	.000
Variables in the Equation				
Expectations	B	.05	.05 <sup>a</sup>	-
	T	5.0 <sup>a</sup>	4.2 <sup>a</sup>	-
Disconfirmation	B	.40	-	-
	T	5.4 <sup>a</sup>	-	-
(Exp * Disc)	B	-.01	.01	.01
	T	-2.3 <sup>b</sup>	6.3 <sup>a</sup>	9.2 <sup>a</sup>
Constant	B	2.87	3.16	2.80
	T	21.2 <sup>a</sup>	16.8 <sup>a</sup>	55.0 <sup>a</sup>

<sup>a</sup> Significant at the .01 level

<sup>b</sup> Significant at the .05 level

which, according to Table 3, has the greatest impact. This interaction term suggests that satisfaction is influenced by the combined action of expectations and disconfirmation. By itself, this interaction term accounts for over 75 percent of the explanatory power of the model. The signs of the different betas indicate that the effect of both expectations and disconfirmation is positive. This result is consistent with previous findings and it confirms that among satisfied consumers, levels of servicing satisfaction increase as a direct function of levels of expectations and subsequent disconfirmation.

Table 3 also gives the result of the stepwise regression among dissatisfied consumers. For this group of consumers, the only measure retained in the final equation is the interaction term. By itself, this measure explains 58 percent of the variance in servicing satisfaction. If we remove the interaction term from the regression equation, we find (1) that disconfirmation is the only measure retained in the model, (2) that this measure explains by itself 40 percent of the variance in satisfaction, (3) that it has a direct effect on satisfaction and (4), that the sign of the expectation beta is negative. Therefore, this last set of results indicates that among dissatisfied consumers, levels of satisfaction can best be explained by the interaction of expectations and disconfirmation. However, this effect is such that levels of satisfaction increase with increasing negative to positive disconfirmation, and decrease with higher levels of expectations. To summarize, these results are consistent with earlier findings that levels of servicing satisfaction increase as a direct function of levels of disconfirmation while the magnitude of reported satisfaction or dissatisfaction increases linearly with higher expectation levels. Consequently,

TABLE 4  
Correlations Between Distribution System Satisfaction and the Other Satisfaction Measures

Independent Variable	Pearson Coeff.	Signif. Level
Search Satisfaction	.49	.000
Servicing Satisfaction	.75	.000
Product Satisfaction	.43	.000

the results allow us to reject the null hypothesis that overall satisfaction is independent of prior expectations and subsequent levels of disconfirmation.

The third hypothesis investigates the effect on overall satisfaction with the distribution system of a product, of the feelings felt by consumers towards each component of that system. The analysis thus includes as independent variables both search and servicing satisfaction, as well as product performance satisfaction. This last variable was included since it is believed that when consumers evaluate the performance of stores or dealers, they are influenced by their evaluation of the products sold in these stores.

To test this hypothesis, a multiple regression was first performed with satisfaction with the distribution system as the dependent variable. However, the correlation matrix indicated a problem of multicollinearity. Therefore, this test was replaced by simple Pearson correlations. Table 4 presents the correlations for the three independent measures. The variable which has the closest relationship with overall satisfaction is servicing satisfaction with a correlation of .75 followed by search satisfaction (.49) and product performance satisfaction (.43). The three correlation coefficients are all positive and significant at the .001 level.

In summary, the satisfaction that consumers feel about each component of the distribution system of product is reflected in their overall evaluation of that system. The most important source of influence is servicing satisfaction, followed by search satisfaction and then, by product performance satisfaction.

## DISCUSSION

The major theoretical contribution of this study is that it tested the Expectancy-Disconfirmation theory in relation to the distribution system for a durable product. This research assessed consumer satisfaction and its determinant within the context of two of the consumer buying stages, the search and servicing stages. Consumers evaluated several aspects of their search for the best product as well as many dimensions of after-sales service repair and maintenance done during the warranty period. A unique contribution of this study is that at both stages, the performance of the various dealers responsible for selling and servicing the product and not the product itself, was the focus of analysis.

This study permitted the testing of hypotheses derived from both experimental and survey streams of CS/D research, that is the simultaneous effect of expectations and disconfirmation on consumer satisfaction. It is believed that even though this study does not provide the control offered by an experimental setting, it offers more in terms of external validity and consumer involvement due to the real-life purchase setting adopted.

One finding which was not reported in other CS/D studies is the presence of an interaction effect between expectations and disconfirmation when investigating the

simultaneous effect of these two constructs on satisfaction. This finding holds at both the search and servicing stages of the buying process. Additional research is needed to investigate if this relationship can be generalized to all types of services and retail outlets.

The data of this study indicate a relationship between expectations and satisfaction; however, the form of the relationship differed depending on the buying stage. At the search stage, the higher the initial expectations, the more satisfied consumers felt. At the servicing stage, higher expectation levels led to more extreme feelings of satisfaction or dissatisfaction. Future research is needed so as to clarify this discrepancy in the form of the relationship between the two stages. Is it peculiar to the automobile sector only? Or can it be explained by the fact that at the search stage, consumers evaluated their overall experience with several dealers while at the servicing stage, they evaluated their experience with one dealer only?

In addition to these findings, an additional test was performed to assess the factors which contribute to overall satisfaction with the distribution system. These results suggest that how consumers feel about the distribution system of a durable product such as an automobile is mostly influenced by their evaluation of the store/dealer servicing that product. This result makes sense for two reasons. First, most consumers who buy such a durable product have it serviced during its warranty period. Therefore, they become increasingly familiar with the particular dealer where they bought the product. Thus, they can probably evaluate that dealer with more confidence, a factor which might later be reflected in their overall evaluation of the distribution system. Secondly, the evaluation of the servicing experience comes after the search stage. Thus, it is more recent in consumers' mind. This factor probably makes it more likely that consumers, when asked to evaluate their overall satisfaction with the distribution system, can better remember what happened at that later stage and consequently, are more influenced by their evaluation of it.

Distribution system satisfaction is also substantially influenced by search satisfaction. Apparently, the feelings consumers have about the stores or dealers they visited during their search to buy a product is taken into consideration when consumers later evaluate the total experience of doing business with that set of stores or dealers including the specific outlet where they bought the product. However, this influence is not as pronounced as it is at the servicing stage of the process. Finally, the finding that overall satisfaction and product performance satisfaction are positively correlated gives some support to the hypothesis that consumers' evaluation of the products sold by a store influences their perception of the whole distribution system for these products. That is, if consumers are dissatisfied with the performance of a product, they might extend their dissatisfaction to the store itself, blaming it for a poor quality control or a bad choice of suppliers. This phenomenon is probably more pronounced when the consumers do not have any direct contact with the manufacturer and must rely on the retailer for repairing and servicing the product, as is the case for automobile. This last finding has some managerial implications which are discussed later.

In summary, the results indicate that overall satisfaction with the distribution of new automobiles is influenced firstly by the level of satisfaction felt with the dealer servicing the car while under warranty, followed by the amount of satisfaction experienced with the dealers visited during the search stage and then by the satisfaction felt regarding the performance of the car itself. This finding suggests that overall satisfaction at the sub-system level can be assessed by

measuring consumer satisfaction at the various stages of the buying process. This type of measure can contribute to theory building by providing information on the relative impact of the different sub-system components on overall satisfaction. Additional studies are needed across a wide variety of products in order to improve our understanding of the factors leading to consumer satisfaction and the attitudes and beliefs of consumers towards marketing practices in general. The same studies could also be useful in comparing the performance of different distribution systems and industries in meeting consumer needs and wants. This information, which could benefit marketing managers as well as public policymakers, could also be used to monitor the image and performance of the various sub-system actors over time.

The results of this empirical study hold several implications for managers. First, the relationship between expectations and satisfaction seems to suggest that raising consumer expectations through advertising, personal selling and promotions is a viable option, given the positive effect it can have on satisfaction levels. However, at least for the servicing stage, managers should be careful. Indeed, at this stage, very high expectations do not necessarily produce a desirable effect, since higher expectations were accompanied by more extreme feelings of satisfaction or dissatisfaction. Thus, if high expectations are followed by positive confirmation, the effect is beneficial to the firm. If high expectations are negatively disconfirmed, however, thus indicating that managers did not raise performance commensurately, the consumer may feel very dissatisfied. The consequence will be reduced consumer confidence in the outlet which serviced the product, a lower probability of repeat purchase by consumers after the warranty expires and the chance that consumers will voice their dissatisfaction to others. Consumers may also complain to the service manager and to the manufacturer. In the final analysis marketers should at least ensure that product benefits match consumers' expectations.

The analysis also shows that how consumers feel about the distribution system of a durable product is influenced by their feelings about each of its components. In the case of new automobiles, servicing satisfaction, followed by search and product performance satisfaction influence overall satisfaction. This finding suggests that car manufacturers and new automobile dealers should pay special attention to the quality of after-sales service. When shopping for a new car, consumers may see a specific dealer one or twice, but after the car is purchased, they must visit the dealer several times during a period of a year or more. In addition, unlike some other products, buyers are stuck with the car they purchased. They cannot return it or exchange it if the car and the dealer do not perform as well as they expected. Furthermore, because a car is a product which is used virtually everyday, it can become a major source of frustration for the unfortunate buyer who does not receive good service from the dealer. Finally, even if an automobile is a durable product which lasts for several years and for which many consumers shop a lot, several consumers are brand loyal. Brand loyalty in this case probably has as much if not more to do with good service and a friendly relationship with a specific dealer than with having purchased a good product in the first place.

On the basis of this study, new car dealers should ensure that their service department is given as much attention as the sales department. Employees who provide reliable and good quality service may very well be their best asset. Car manufacturers should also try to encourage their dealers to provide efficient after-sales service. It is to their advantage to do so because good after-sales service has an effect on their brand image and may make a difference in the stimulation of repeat

purchases and the development of loyal customers.

Since product performance satisfaction influences overall satisfaction with the distribution system, this may indicate that consumers see the dealers as partly responsible for the quality of cars they sell. Consumers may feel that dealers should make sure that the products they sell function well and do not require an unusual number of service visits. They may believe that dealers have some bargaining power with manufacturers and that they can apply pressure on the manufacturer to deliver good quality cars. Whether this is true for all dealers, the fact remains that consumers' satisfaction with products bought influences their perception of car dealers.

#### REFERENCES

Aiello, Albert Jr., John A. Czepiel, and Larry J. Rosenberg (1977), "Scaling the Heights of Consumer Satisfaction: An Evaluation of Alternative Measures", in Consumer Satisfaction, Dissatisfaction and Complaining Behavior, Proceedings of the 2nd Annual CS/D & CB Conference, Ralph L. Day, editor, pp. 43-50.

Ash, Stephen B. (1980), Consumer Satisfaction, Dissatisfaction and Complaining Behaviour: Major Findings and Directions for Action, Consumer and Corporate Affairs Canada.

Bernacchi, M.D., Ken Komo, and G.L. Willette (1980), "An Analysis of Automobile Warranty Service Dissatisfaction", Refining Concepts and Measures of Consumer Satisfaction and Complaining Behavior, Proceedings of the 4th Annual CS/D Conference, H. Keith Hunt and Ralph L. Day, editors, pp. 141-143.

Churchill, Gilbert A., and Carol Surprenant (1982), "An Investigation Into the Determinants of Consumer Satisfaction", Journal of Marketing Research, 19 (November), pp. 491-504.

Morris, Earl W., Mary Winter, and Sue R. Crull (1980), "Transformation and Weighting of Items in the Measurement of Satisfaction", Refining Concepts and Measures of Consumer Satisfaction and Complaining Behavior, Proceedings of the 4th Annual CS/D & CB Conference, H. Keith Hunt and Ralph L. Day, editors, pp. 81-85.

Moyer, M.S. and N.M. Whitmore (1976), "An Appraisal of the Marketing Channels for Automobiles", Journal of Marketing, 40 (July), pp. 35-40.

Oliver, Richard L. (1980), "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions", Journal of Marketing Research, 17 (November), pp. 460-469.

Swan, John E., and I. Frederick Trawick (1981), "Disconfirmation of Expectations and Satisfaction with a Retail Service", Journal of Retailing, 57:3 (Fall), pp. 49-67.

Thirkell, Peter C., "Consumer Expectations, Disconfirmation and Satisfaction", Unpublished Doctoral Dissertation, University of Western Ontario, (1980).

Westbrook, Robert A. (1980), "On the Measurement of Consumer Satisfaction: A Multidisciplinary Perspective", Proceedings of the Division 23 Program, 88th Annual Convention of the American Psychological Association, Gerald J. Gorn and Marvin E. Golberg, editors, pp.20-26.