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### **A Structural Equation Model for Consumers' Buying Behaviour and Satisfaction Towards Durable Goods in Erode District**

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#### **ABSTRACT**

Consumer behaviour can be characterized as “*the decision-making process and physical action engaged with getting, assessing, utilizing and discarding merchandise and ventures*”. Purchasing conduct is all psychological, social and physical conduct of potential client as they wind up mindful of assess buy devour and enlighten other individuals regarding the item and administrations. For the present study, the universe comprises of the consumers, who are utilizing durable products in Erode district. The sampling units have been selected by covering all the nine taluks of Erode district. The size of sample is 770 respondents. Both primary and secondary data were used in the study for the purpose of analysis. For collecting primary data, field survey technique was employed. Descriptive research has been considered the most appropriate for the study. The researcher used close-ended and open-ended questions in the questionnaire to collect primary data. Structural Equation Modelling, or SEM, is a very general, linear, cross-sectional statistical modeling technique. The Factor analysis, path analysis and regression represent the special cases of SEM. SEM is a largely confirmatory, rather than exploratory technique. The model is first estimated and the correlations or covariance matrix between the constructs or factors then serves as input to estimate the structural coefficients between constructs or latent variables.

**KEYWORDS:** Discarding Merchandise, Ventures, SEM and Cross-Sectional Statistical Modeling Technique, Consumers' Satisfaction, Perception, Learning, Attitude and Motivation.

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## **INTRODUCTION**

Consumer satisfaction is the measure of how the requirements and reactions are teamed up and conveyed to exceed expectations that consumer desire. It must be achieved if the consumer has a general decent association with the supplier. In the present aggressive business commercial center, consumer satisfaction is a vital execution example and essential differentiator of business methodologies. Thus, the more is consumer satisfaction; more is the business and the holding with consumer. Consumer satisfaction is a piece of consumer's experience that uncovered a supplier's conduct on consumer's desire. It additionally relies upon how proficiently it is overseen and how speedily benefits are given. The satisfaction could be identified with different business angles like manufacturing, engineering, quality of products and services, responses, customer's problems and queries, consummation of project, post delivery services, grievance administration and so on.

## **NEED OF THE STUDY**

The model is useful, two different factors that need to be considered are inclusion and propensity arrangement. Involvement refers to the subjective significance of the purchase and is a component of money related and utilitarian significance, saw chance, enthusiastic esteem and sign esteem. On the other hand, numerous choices can be found on propensity, propensity development being an essential of brand dedication. Contingent upon the level of association and whether a propensity has been framed or not, four sorts of purchasing choice develop: complex choices, mark dedication, restricted choices, and latency. Consumer behaviour is significant in the scholarly world for two great reasons. First, scholastics disperse information about consumer behaviour when they show courses regarding the matter. Second, scholastics create information about buyer conduct when they consider investigation concentrating on how customers act, think, and feel when procuring, utilizing and discarding offerings. Thus, such scholastic research is valuable to promoting chiefs, support gatherings, controllers and other people who need to understand consumer behaviour.

## **LITERATURE REVIEW**

**Priyadharshini and Selladurai, 2009<sup>1</sup>** A study on Customers Satisfaction towards Sony Television in Salem City' ,identified in their research, the attitude of the customers dealing with Sony Television in Salem city. The main objective of the study was to find out the customer satisfaction towards Sony television. The study was based purely on primary data which were collected using the personal contact approach. Questionnaires were distributed to a sample of 100 respondents in Salem city. Simple random sampling method was adopted for the study. Simple percentage analysis was utilized for analysis. The result was made clear that the Sony Television was the market leader. Sony Television had to come up with more innovative promotional campaigns in order to gain more consumers. Since, most of the respondents were expressed a position note on

factors like company image, price and perfection, it was indeed the manufacturer's duty to maintain the above factors at the same time with a view to retain the top position in the market.

**Rajendraprasad, et al., 2012**<sup>2</sup> "A relative analysis on customers' satisfaction of microwave oven: study on select companies" aimed to analyze the satisfaction level of customers towards microwave oven products of LG, Onida & Videocon. The objectives of this research were to identify and compare the customer satisfaction level for the select microwave companies and to study the existing customer satisfaction strategies adopted by the select microwave companies. The sample size of 300 respondents was taken from three major cities like Hubli, Dharwad and Belgaum of North Karnataka by using simple random sampling method. The data was analyzed with statistical tools like standard deviation, arithmetic mean and hypothesis was tested with chi-square test. They concluded that the users of LG microwave were satisfied at a higher enormity than the domestic firms, Videocon and Onida. Also, the study revealed that the LG firm was highly customer oriented and known for making customer driven innovative and superior quality products. LG products had proved themselves about their advanced technology, be it television, microwave oven or washing machine and all these have outperformed domestic company products.

**Richard Chinomona, et al., 2013**<sup>3</sup> "Brand Service Quality, Satisfaction, Trust and Preference as Predictors of Consumer Brand Loyalty in the Retailing Industry" sought in their research to explore the direct effects of brand service quality on consumer brand satisfaction and brand trust and the mediating role of brand satisfaction and trust in brand service quality, brand loyalty relationship. A sample size of 151 South African consumers in Gauteng was selected. In this study, structural equation modelling (SEM) approach using Smart (PLS) statistical software was used to test the posited hypotheses in the conceptual research model. The results indicated that brand service quality had a stronger effect on brand satisfaction than it had on brand trust. The relationship between brand satisfaction and brand trust was altogether solid. This finding demonstrated that brand benefit quality had a critical effect on brand trust by means of brand fulfilment. This implied that purchaser would not believe the administration nature of a brand fulfilment. This implied that purchaser would not believe the administration nature of a brand unless they were happy with that of brand's administration quality.

## **OBJECTIVES**

1. To analyse the level of satisfaction of consumers with regard to the durable products.
2. To offer better ways and means to improve the satisfaction level of the consumers and increase the market share of the durable products.

## **RESEARCH HYPOTHESES**

- H<sub>1</sub>-H<sub>3</sub> : There is no significant association between age, family monthly income, amount spent per annum and Perception.
- H<sub>4</sub>-H<sub>6</sub> : There is no significant association between age, family monthly income, amount spent per annum and Learning.
- H<sub>7</sub>-H<sub>9</sub> : There is no significant association between age, family monthly income, amount spent per annum and Attitude.
- H<sub>10</sub>-H<sub>12</sub> : There is no significant association between age, family monthly income, amount spent per annum and Motivation.
- H<sub>13</sub>-H<sub>16</sub> : There is no significant association between Perception, Learning, Attitude, Motivation and Level of Satisfaction towards Consumer Durable Goods.

## **METHODOLOGY**

This study is systematically and scientifically organized. The validity of any research depends on the systematic method of data collection and analyzing the same in a logical and sequential order. It has made an extensive use of both primary and secondary data. It describes consumers' buying behavior and satisfaction towards consumer durable goods in Erode District and hence the study is descriptive in nature.

## **DATA ANALYSIS AND INTERPRETATION**

In order to ascertain the relationship between consumer buying behaviour and satisfaction towards consumer durable products, the researcher has taken the following variables for constructing the model. For this, demographic variables like 'age', 'family monthly income', 'amount spent for purchasing durable goods per annum' have been selected, followed by four dimensions of buying behaviour variables like 'Perception', 'Learning', 'Attitude' and 'Motivation', and 'Level of Satisfaction' of the consumers towards consumer durable goods. The model is tested based on the following constructed model.

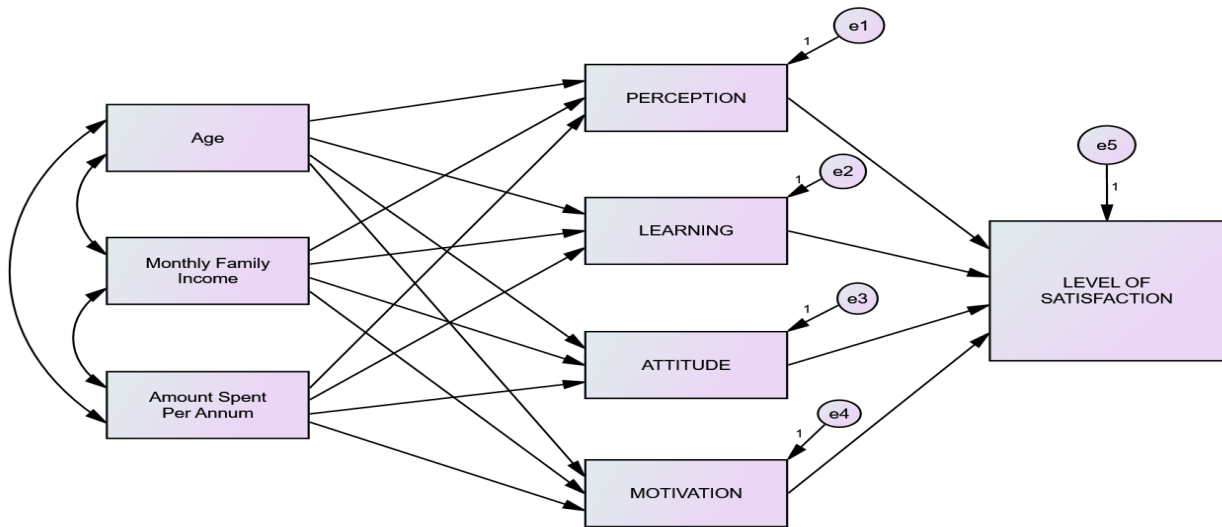


Figure 1. Hypotheses Model for Consumer Buying Behavior and Satisfaction

Testing a measurement model underlies a full structural model. If the fit of the measurement model is found acceptable, then one should proceed to test the structural model. The structural equation model is conducted to assess the construct validity by using the maximum likelihood method. The confirmatory test result showed good fit as shown in the following model fit summary table.

Table 1 : Model Fit Summary

No.	Test Factor	Value	Criteria*	Result
1	Chi-Square	38.383	p>0.05	1% level
2	Chi-Square / df (9)	4.267	2.0–5.0	Good Fit
3	GFI (Goodness-of-fit index)	0.968	>0.90	Good Fit
4	AGFI (Adjusted goodness-of-fit index)	0.917	>0.90	Good Fit
5	CFI (Comparative fit index)	0.933	>0.90	Good Fit
6	NFI (Normed fit index)	0.928	>0.90	Good Fit
7	TLI (Tucker-Lewis index)	0.913	>0.90	Good Fit
8	RMSEA (Root mean square error of approximation)	0.014	<0.07	Good Fit

\* Criteria recommended by Schumacker & Lomax 2004<sup>4</sup>, Hu and Bentler 1999<sup>5</sup> and Hair et al., 1998<sup>6</sup>

The model is said to fulfill the criteria of goodness of fit, if it satisfies certain values which are given by the table 1. Based on these values, estimated value for the model is 4.267 which is significant and satisfy the required basic condition. Followed by the values 0.968 for GFI, 0.917 for AGFI, 0.933 for CFI, 0.928 for NFI, 0.913 for TLI confirms the good model fit for the constructed model. Finally, the value of root mean square error of approximation (RMSEA=0.014) also valid at

theresult.

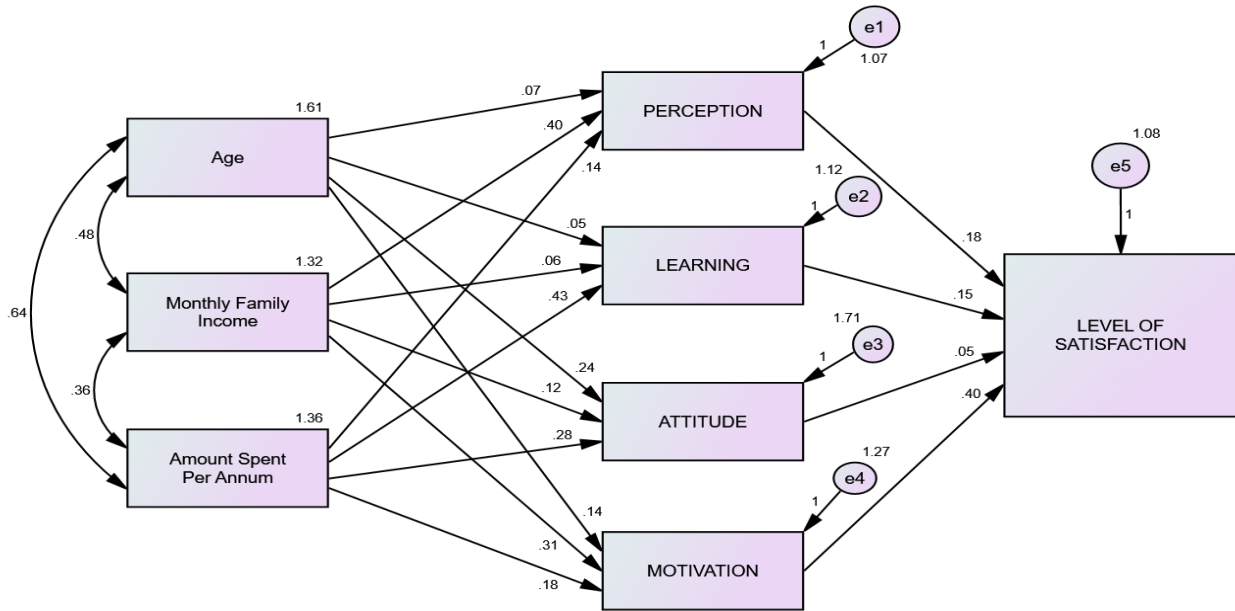


Figure 2. Resulted Hypotheses for Consumer Buying Behaviour and Satisfaction

Table 2: Regression Weights

Hypothesis No.	Measured Variable		Latent Variable	Estimate	S.E.	C.R.	'p' value
H <sub>1</sub>	Age	→	Perception	0.072	0.034	2.159	0.031**
H <sub>2</sub>	Family Monthly Income	→	Perception	0.403	0.035	11.604	0.000*
H <sub>3</sub>	Amount Spent per Annum	→	Perception	0.137	0.036	3.822	0.000*
H <sub>4</sub>	Age	→	Learning	0.049	0.034	1.434	0.152 <sup>NS</sup>
H <sub>5</sub>	Family Monthly Income	→	Learning	0.062	0.036	1.740	0.082 <sup>NS</sup>
H <sub>6</sub>	Amount Spent per Annum	→	Learning	0.428	0.037	11.654	0.000*
H <sub>7</sub>	Age	→	Attitude	0.236	0.042	5.553	0.000*
H <sub>8</sub>	Family Monthly Income	→	Attitude	0.124	0.044	2.823	0.005*
H <sub>9</sub>	Amount Spent per Annum	→	Attitude	0.279	0.045	6.148	0.000*
H <sub>10</sub>	Age	→	Motivation	0.143	0.037	3.920	0.000*
H <sub>11</sub>	Family Monthly Income	→	Motivation	0.311	0.038	8.209	0.000*
H <sub>12</sub>	Amount Spent per Annum	→	Motivation	0.185	0.039	4.730	0.000*
H <sub>13</sub>	Perception	→	Level of Satisfaction	0.178	0.033	5.403	0.000*
H <sub>14</sub>	Learning	→	Level of Satisfaction	0.147	0.032	4.554	0.000*
H <sub>15</sub>	Attitude	→	Level of Satisfaction	0.055	0.027	2.031	0.042**
H <sub>16</sub>	Motivation	→	Level of Satisfaction	0.403	0.031	13.003	0.000*

Note : \* - Significant at 1% level; \*\* - Significant at 5% level;

## **FINDINGS**

It is understood from the above analysis that,

The relationship of Perception with the selected measured variables noticed that the null hypotheses 1, 2 and 3 are rejected due to significant results. So, it is observed that there is a close significant association between the selected measured variables namely age, family monthly income, amount spent per annum and Perception. Further, all the selected relationships have positive association.

Considering the relationship between the selected three measured variables and Learning, the null hypothesis 6 is rejected owing to the significant result and remaining two hypotheses 4 and 5 are accepted due to insignificant results. Hence, there is a significant relationship between the amount spent per annum and Learning of the respondents. Further, there is no significant relationship between age, family monthly income and Learning of the respondents.

In the case of relationship between three demographics and Attitude of the consumers, all the null hypotheses 7, 8 and 9 are rejected due to significant result. So, it is identified that there is a significant association between the age, family monthly income, amount spent per annum and Attitude of the consumers. Further, all the selected relationships have positive significant association.

The relationship between three measured variables and the latent variable Motivation, the null hypotheses 10, 11 and 12 are rejected due to significant results. It is observed that Motivation has a significant association with the measured variables namely age, family monthly income and amount spent per annum. Further, all the selected relationships have positive significant association.

Finally, while considering the relationship between four dimensions of buying behavior and level of satisfaction of the consumers towards consumer durable goods, the null hypotheses 13, 14, 15 and 16 are rejected due to registration of significant results.

It indicates that level of satisfaction towards consumer durable goods has a significant relationship with the variables Perception, Learning, Attitude and Motivation.

## **CONCLUSION**

The result of structural equation modeling has found that when there is an increase in age and family monthly income of the consumers, then their perception, attitude and motivation towards durable products also increases. When the amount spent per annum by the consumer increases, their perception, learning, attitude and motivation also increases positively. On the other hand, when the four dimensions of buying behavior like perception, learning, attitude and motivation of the consumers towards durable goods increases, then their level of satisfaction also positively increases.

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