



# A STUDY ON CUSTOMERS AWARENESS AND SATISFACTION TOWARDS ELECTRIC SCOOTER WITH SPECIAL REFERENCE TO PERUNDURAI TALUK, ERODE DISTRICT, TAMILNADU.

**Dr.H.Vasudevan,**  
Associate Professor and Head,  
Department of Commerce (CA),  
Kongu Arts and Science College(Autonomous),  
Erode.

**Ms.K.Kalaivani,**  
Ph.D. Research Scholar and Assistant Professor,  
Department of Commerce ,  
Kongu Arts and Science College(Autonomous),  
Erode.

## ABSTRACT:

In today's competitive and fast paced world, automobiles plays a very pivotal role in any individuals overall life. Be it the productivity, performance or coping with livelihood issues, vehicles saves a significant amount of time and efforts aiding as a bridge between different commuting points. However, the concern over greenhouse gas emissions and their ill effects on global warming has forced the mankind to look for alternative fuel options. All major players in the automobile industry are currently going through a transitional phase to launch electric vehicles.

Though the electric vehicles seem to be best solution with reference to the aforesaid issue, but when it come to the consumer decision making process the transitional shift from petrol to Electric vehicles is very sluggish. The study focuses on understanding the customer awareness and satisfaction towards the electric scooters across Perundurai taluk. Responses' were collected from around 120 users to analyze the essential factors relevant to the purchase of electric scooters. The data was analyzed by using statistical tools such as chi square test and weighted score analysis.

**Keywords:** Electric Scooter, Customer Satisfaction, Customer Awareness.

## INTERODUCTION:

A vehicle that is powered by one or more electric motors or traction motors is known as an electric vehicle (EV). An electric vehicle can be self-contained, with a battery, solar panels, fuel cells, or an electric generator to convert gasoline to energy, or it can be fueled by electricity from off-vehicle sources via a collector system. Electric vehicles (EVs) originally appeared in the mid-19th century, when electricity was one of the favoured means for motor vehicle propulsion, providing a degree of comfort and ease of operation. Electric scooters, like other EVs, are plug-in electric vehicles with a motor mounted on the frame. They differ from the traditional unmotorized scooters due to an additional component which is a battery, and the electrics, especially an electric motor. They

are meant to provide intermittent mobility support and usually have a wide turning radius. They are extremely compact and lightweight, and pretty much safe. Like other electric vehicles, electric scooters are powered by rechargeable Lithium or lead batteries. They are steered with adjustable tillers which are T-shaped steering columns – they are tilted forward or backward and locked at any desired position. Electric scooters come in various types, from small, light scooters to heavy-duty scooters and daily commute scooters.

### **NEED FOR THE STUDY:**

The growth of electric vehicles is very slow in India, and not many electric vehicle industries are coming to India for setup. Customers are not having much knowledge about electric vehicles. Customers who all are already having vehicles are not willing to switch to an electric vehicle because of certain aspects.

### **REVIEW OF LITERATURE:**

Thuy & Hong (2019) studied the high school students in Hanoi city to identify the factors that influence their attitude and intention towards E2W usage and their affected level. They concluded that factors viz. “perceptions of economic benefit”, “usage convenience”, “friendly environmental awareness” and “stylish design” influenced the attitude towards E2W usage. Whereas the intention to use E2Ws was found to be influenced by “subjective norm”, “attitude toward E2W usage” and “the attraction of motorcycles”.

Simsekoglu & Klöckner (2019). It was found that age, perceived advantages, social norms and familiarity were positively influencing intention of buying an electric bike. It was found that perceived challenges related to usability and safety were negatively influencing the buying consideration of an electric bike. Perceived advantages were found to be low in non-users. They also perceived higher obstacles (as compared to the users of e-bikes) towards purchase of e-bikes. For both e-bike users and non-users, environmental factors have been the greatest obstacle to e-bike use.

(Kalra, 2022) studied 63 percent of customers assuming that an EV is out of their budget, the capital cost has always been a big issue in EV purchasing decisions. Our country's lack of suitable charging infrastructure is a major impediment to greater EV adoption. But large OEMs are also taking steps to enter the EV component industry in order to lessen dependency on imports and achieve the government's 50 percent localization requirement for government subsidies. However, he also mentioned a comprehensive infrastructure that is inexpensive, accessible, and supports all consumer groups, along with a solid finance environment, governmental incentives, and technology developments are anticipated to position the electric vehicle industry for major expansion over the next decade.

### **OBJECTIVES OF THE STUDY:**

1. To find out the demographic profile of the respondents.
2. To study the level of awareness of the respondents about Electric Scooter.
3. To analyze the level of satisfaction of the respondents towards Electric Scooter.
4. To find out the problems faced by the respondents.

### **RESEARCH METHODOLOGY**

#### **SOURCES OF DATA:**

The study is mainly based on primary data. Secondary data also collected from Books , journals and company websites.

#### **SAMPLING DESIGN**

The study aims at analyzing the customers' attitude towards Electric Scooter,. A total of 120 samples were taken for the study. Convenient sampling method has been used to collect the data.

#### **STATISTICAL TOOLS USED:**

1. Percentage analysis.
2. Chi square test.
3. weighted score analysis.

**HYPOTHESIS:**

1. “There is no significant association between age group of respondents and level of awareness on Electric Scooter”.
2. “There is no significant association between Educational qualification of respondents and satisfaction level on running cost of Electric Scooter”.
3. “There is no significant association between monthly income of the respondents and level of satisfaction on price towards Electric Scooter”.

**LIMITATIONS OF THE STUDY:**

1. The sample size limited to 120 respondents only.
2. The study is confined to Perundurai taluk only.

**DATA ANALYSIS AND INTERPRETATION:****TABLE 1****DEMOGRAPHIC VARIABLES OF THE RESPONDENTS:**

DEMOGRAPHIC VARIABLES		FREQUENCY	PERCENTAGE
Gender	Male	62	52
	Female	58	48
Age group	Upto 25yrs	27	23
	25 to 35 yrs	30	25
	35 to 45 yrs	38	31
	Above 45 yrs	25	21
Educational qualification	SSLC	33	28
	HSC	39	33
	Under graduate	22	17
	Post graduate	26	22
Marital status	Married	65	54
	unmarried	55	46
Occupation	Business	33	27
	Profession	24	21
	Govt. employee	29	24
	Private sector employee	34	28
Income level	Below Rs. 10,000	40	33

(Monthly)	From Rs. 10,000 to 20,000	35	30
	From Rs.20,000 to 40,000	23	19
	Above 40,000	22	18

Source : primary data

#### CHI SQUARE ANALYSIS:

#### HYPOTHESIS:

There is no significant association between age groups of respondents and level of awareness on Electric Scooter.

**TABLE 2**

**AGE OF THE RESPONDENTS AND LEVEL OF AWARENESS(TWO WAY TABLE)**

AGE GROUP	LEVEL OF AWARENESS			TOTAL
	FULLY AWARED	PARTLY AWARED	NOT AWARED	
Upto 25yrs	8	12	7	27
25 to 35 yrs	9	15	6	30
35 to 45 yrs	11	22	5	38
Above 45 yrs	8	9	8	25
<b>Total</b>	<b>36</b>	<b>58</b>	<b>26</b>	<b>120</b>

Source : primary data

The chi square statistic is 4.422.The p value is .62 .Hence the result is not significant at  $p < .05$

#### HYPOTHESIS:

There is no significant association between Educational qualification of respondents and satisfaction level on running cost of Electric Scooter.

**TABLE 3****EDUCATIONAL QUALIFICATION OF THE RESPONDENTS AND LEVEL OF SATISFACTION ON RUNNING COST  
(TWO WAY TABLE)**

EDUCATIONAL QUALIFICATION	LEVEL OF SATISFACTION ON RUNNING COST			TOTAL
	HIGHLY SATISFIED	SATISFIED	NOT SATISFIED	
SSLC	10	17	6	33
HSC	9	23	7	39
Under graduate	7	10	5	22
Post graduate	8	12	6	26
<b>Total</b>	<b>34</b>	<b>62</b>	<b>24</b>	<b>120</b>

Source : primary data

The chi square statistic is 1.63.The p value is .95 .Hence the result is not significant at  $p < .05$

**HYPOTHESIS:**

There is no significant association between monthly income of the respondents and level of satisfaction on price towards Electric Scooter.

**TABLE 4****MONTHLY INCOME OF THE RESPONDENTS AND LEVEL OF SATISFACTION ON PRICE (TWO WAY TABLE)**

MONTHLY INCOME	LEVEL OF SATISFACTION ON PRICE			TOTAL
	HIGHLY SATISFIED	SATISFIED	NOT SATISFIED	
Below Rs. 10,000	11	6	23	40
From Rs. 10,000 to 20,000	10	5	20	35
From Rs.20,000 to 40,000	9	6	8	23
Above 40,000	6	9	7	22
<b>Total</b>	<b>36</b>	<b>26</b>	<b>58</b>	<b>120</b>

Source : primary data

The chi square statistic is 4.12.The p value is .660 .Hence the result is not significant at  $p < .05$ .

**TABLE 5****PROBLEMS FACED BY THE RESPONDENTS**

S.NO	PROBLEM	WEIGHTED SCORE	RANK
1	Frequent repair	443	VI
2	Motor is overheating.	575	III
3	• Brake problems.	493	V
4	Expensive	675	I
5	Low weight capacity	663	II
6	Charging issues	552	IV

Source : primary Data

From table 7 it can be concluded that the main problem faced by the respondents is Expensive.

**FINDINGS:**

Majority (52%) of the respondents were male.

Majority (38%) of the respondents were coming under the age group of from 35 to 45 years age group.

Majority (54%) of the respondents were under married.

Majority (28%) of the respondents were private sector employees.

Majority (33%) of the respondents had monthly income from 10000 to 20000.

The main problem faced by the respondents is Expensive.

**SUGGESTIONS :**

The companies should reduce the price of Electric scooters so as to increase the sales and also attract the new customers.

The companies may take certain steps to reduce the overheating the motors and also reduce the battery issues.

It is advised to the companies to increase the weighting capacity of the scooters.

The electric bike manufacturers should initiate awareness campaign by highlighting the economic viability of the product against the rising fuel price.

**CONCLUSION:**

The Electric Bike industry is in a nascent stage still in India, with lots of apprehension about its durability and quality being delivered. While doing this study, it became more clear that lack of awareness, quality issues are some of the biggest challenges in the industry. But with ever-increasing petrol prices and high pollution, sooner electric Scooter will put a serious challenge to the Petrol Bikes. At this stage, the primary focus of the company shall lie in R&D, improving quality, and create awareness among the people

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