JOURNAL: PRIMAX INTERNATIONAL JOURNAL OF COMMERCE AND **MANAGEMENT RESEARCH**

ISSN: Print ISSN: 2321-3604 Online ISSN: 2321-3612 & Open Access DOI: 10.17605/OSF.IO/N9T7F

Impact Factor: 7.184

PRIMAX IJCMR VOLUME NO.10, ISSUE NO.1, APRIL-JUNE -2022

Research Article

CONSUMER PERCEPTION TOWARDS ELECTRIC SCOOTER IN BANGALORE

Dr. S Rosaline Jayanthi*

Assistant professor, Department of commerce, St. Francis De Sales College, Bangalore, Karnataka. Bhuvaneshwari C* Department of Commerce (PG), St. Francis De Sales College, Bangalore, Karnataka.

*Corresponding authors | Received: 03/04/2022 | Accepted: 20/05/2022 | Published: 10/06/2022

Abstract: Electronic vehicles helps to reduce the dependence of petrol and also helps in decreasing pollution. Global warming has become the primary concern all around. In Bangalore usage of electric vehicles is more to know the reason for this consumer perception towards electric scooter in Bangalore this research has been conducted. The objective of this study is to know the awareness towards electric scooter and factor which are influencing customer to purchase election scooter. For this research primary data has been collected from 55 electric scooter users with the help of random sampling method. For data analysis chi square test and ranking analysis has been used. Research has been shown that the consumer is aware of electric scooter and the factors which influencing them to purchase electric scooter are cost effective and reduce accidents. Key words : Electric vehicles, awareness, factors, customer satisfaction.

Introduction

Electric scooter is a type of electric vehicle. It has electric battery that powers it. For this electric scooter electricity is provided by these electric batteries. electric scooter is basically a two-wheeler in which one or two people can easily travel. These electric scooters come in different styles, colors and quality. Most of the electric scooters nowadays are powered by a rechargeable battery. These rechargeable batteries durability is more. Most of the people are not aware of these electric scooters and its benefits like reduce noise pollution, eco-friendly, storage space, light weight, cheapest alternative to the rising fuel prices, ideal for short commutes. Apart from this most of them are preferring electric scooters for various reasons like low cost, trendy, reduce pollution, long durability and reduce accidents.

Objective of the study

The following are the objectives of the study

- Awareness towards electric scooter
- Factor that influences customer to purchase electric scooter

Scope of the study

The study is concerned about the awareness regarding electric scooter. Factor which are influencing the customer to purchase this electric scooter and to know whether the consumer are satisfied with this electric scooter.

Limitation of the study

The following are the limitations of the study The study is limited to the electric scooter users only The primary data is limited to 55 members only The primary data was collected randomly by the electric scooter users Time duration of study is December 2021 to January 2022

Literature review

Vinoth S, Parthiban M (2021):- A study on Customer perception towards electric two-wheeler in Chennai. The objective of this research is to analyze the key attributes of electric bike and to determine the various factors influencing purchase of electric bikes. The study is limited to 120 members and the research was concluded that lack of awareness, regulatory authority, quality issue are some of the biggest Challenges in the Industry.

M S Mifzala Ansar, Monika (2019):- A study on customer perception towards E-vehicles in Bangalore. Convenient sampling is used and 120 response were collected for the study. The study is concluded that sustainability is the answer the most environment problems and EV and HEV are was to sustainable development.

Research methodology and tools

For this study the Primary data has been collected from the 55 electric scooter users in Bangalore. The study adopted descriptive research and random sampling techniques. For this study both primary and secondary data has been used. Data has been analyzed by using chi-square test and Ranking analysis.

Findings

Socioeconomic characteristic will be influence the awareness towards electric scooter. In order to find out the relationship between Socioeconomic characteristic and awareness towards electric scooter. The following statistical analysis has been made on the basis of following null hypothesis.

Ho: satisfaction level and awareness towards electric scooter has no relationship.

PRINT ISSN: 2321-3604 ONLINE ISSN: 2321-3612 & OPEN ACCESS PRIMAX IJCMR VOLUME NO. 10, ISSUE NO.1, APRIL -JUNE - 2022

Socio economic characteristic and awareness towards electric scooter

Analyzing the relationship between socio economic characteristics and awareness towards electric scooter.

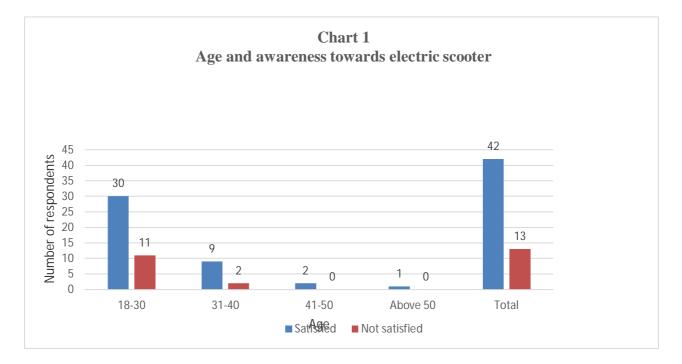
Age and awareness towards electric scooter

Age place important role while purchase of any vehicle. Based on age people have different knowledge and experience. To know the relationship between awareness towards electric scooter and age the fallowing Chi-square test has been done. Table 1 and Chart 1 shows the relationship between awareness towards electric scooter and age.

Table 1: Age and awareness towards electric scooter: a x² test

Satisfaction level					
	18-30	31-40	41-50	Above 50	Total
Satisfied	30	09	02	01	42
Not satisfied	11	02	00	00	13
Total	41	11	02	01	55

$x^2 = 1.27$ Degree of freedom = 3 Table value = 7.815



Ho: Age and awareness towards electric scooter has no relationship.

Ha: Age and awareness towards electric scooter has relationship.

PRINT ISSN: 2321-3604 ONLINE ISSN: 2321-3612 & OPEN ACCESS PRIMAX IJCMR VOLUME NO. 10, ISSUE NO.1, APRIL -JUNE - 2022

The calculated value of $x^2 1.27$ is less than table value 7.815. It means the null hypothesis is accepted, and alternative hypothesis is rejected which means there is no relationship between age and awareness towards electric scooter.

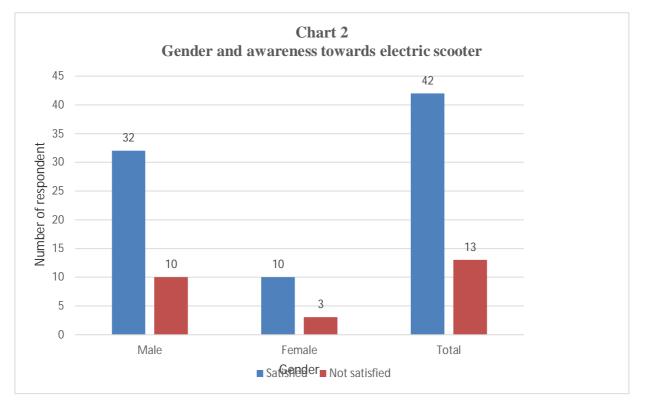
Gender and awareness towards electric scooter

Female and male will think different opinions while purchasing of any vehicle. So to know the awareness towards electric scooter based on gender following chi-square test has been conducted. Table 2 and Chart 2 shows the relationship between Gender and awareness towards electric scooter.

Table 2: Gender and awareness towards electric scooter: x² test

Satisfaction level	Ger	Total	
	Male	Female	
Satisfied	32	10	42
Not satisfied	10	03	13
Total	42	13	55

 $x^2 = 0.001$ Degree of freedom = 1 Table Value = 3.841



Ho: Gender and awareness towards electric scooter has no relationship.

Ha: Gender and awareness towards electric scooter has relationship.

PRINT ISSN: 2321-3604 ONLINE ISSN: 2321-3612 & OPEN ACCESS PRIMAX IJCMR VOLUME NO. 10, ISSUE NO.1, APRIL -JUNE - 2022

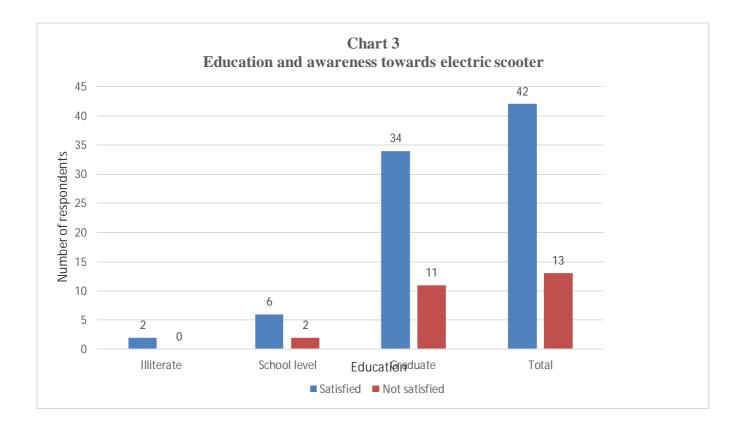
The calculated x² value 0.001 is less than table value 3.841. It means that the null hypothesis is accepted, and alternative hypothesis is rejected which means there is no relationship between gender and awareness towards electric scooter.

Education and awareness towards electric scooter

Different education group of people will have different opinions some will think about electric scooter is good and some will think it's not worthy to purchase. Table 3 and Chart 3 shows the relationship between education and awareness towards electric scooter. Table 3: Education and awareness towards electric scooter: x^2 test

Satisfaction level		Total		
	Illiterate			
Satisfied	02	06	34	42
Not satisfied	00	02	11	13
Total	02	08	45	55

 $x^2 = 0.644$ Degree of freedom =2 Table value = 5.991



Ho: Education and awareness towards electric scooter has no relationship.Ha: education and awareness towards electric scooter has relationship.

112 | Page Primax Publications www.primaxijcmr.com

The calculated x^2 value 0.644 is less than table value 5.991. It means the null hypothesis is accepted, and alternative hypothesis is rejected which means there is no relationship between education and awareness towards electric scooter.

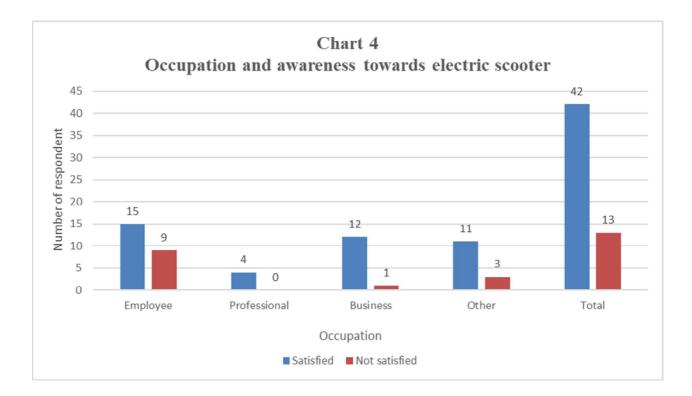
Occupation and awareness towards electric scooter

Occupation place a important role while purchase of any vehicle. Based on occupation people will have different opinions towards electric scooter. Table 4 and Chart 4 show the relationship between Occupation and awareness towards electric scooter.

Table 4: Occupation and awar	eness towards electric scooter. x ² test	t
------------------------------	---	---

Satisfaction level		Total			
	Employee	Other			
Satisfied	15	04	12	11	42
Not satisfied	09	00	01	03	13
Total	24	04	13	14	55

 $x^2 = 5.618$ Degree of freedom=3 Table Value= $\overline{7.815}$



Ho: Occupation and awareness towards electric scooter has no relationship.

Ha: Occupation and awareness towards electric scooter has relationship.

The calculated x² value 5.618 is less than table value 7.815. It means the null hypothesis is accepted, and alternative hypothesis is rejected which means there is no relationship between Occupation and awareness towards electric scooter.

Factors that influence customer to purchase electric scooter

Now a days most of the people are purchasing electric scooter because of so many reasons to analyze which factor is influenced customer to purchase electric scooter the following Ranking analysis has been conducted. Table 5 and Chart 5 represent the ranking analysis of factor influencing customer to purchase electric scooter.

Table 5: Factors that influencing customer to purchase electric scooter:

station (80) (09) (08) (21) (54) (35) (00) (06) (18) (15) (2 2 Faster charging 07 03 04 06 05 07 07 05 04 55 3 Long durability 03 09 03 05 07 10 08 06 04 00 55 3 Long durability 03 09 03 05 07 10 08 06 04 00 55 4 High warranty of 02 04 07 07 04 05 13 06 04 03 55 battery (20) (36) (56) (49) (24) (25) (52) (18) (08) (02) (20 (36) (56) (42) (18) (25) (18) (08) (02) (36) (21) (41) (08) (22) (30) (108) <	Sl.no	Factors/Rank	1	2	3	4	5	6	7	8	9	10	Total
2 Faster charging 07 03 04 06 05 07 07 07 05 04 52 3 Long durability 03 09 03 05 07 10 08 06 04 05 07 07 05 04 52 3 Long durability 03 09 03 05 07 10 08 06 04 00 52 4 High warranty of 02 04 07 07 04 05 13 06 04 03 52 5 Reduce pollution 06 01 09 06 03 05 03 07 07 08 52 12 18 08 03 62 53 5 Reduce pollution 06 01 09 06 03 05 03 07 07 08 53 6 Reduce accidence 03 1	1	Increase charging	08	01	01	03	09	07	00	02	09	15	55
1 1		station	(80)	(09)	(08)	(21)	(54)	(35)	(00)	(06)	(18)	(15)	(246)
3 Long durability 03 09 03 05 07 10 08 06 04 00 55 3 Long durability 03 09 03 05 07 10 08 06 04 00 55 4 High warranty of battery 02 04 07 07 04 05 13 06 04 03 55 5 Reduce pollution 06 01 09 06 03 05 03 07 07 08 55 60 020 (36) (56) (49) (24) (25) (18) (08) (03) (22) 5 Reduce pollution 06 01 09 06 03 05 03 07 07 08 55 6 Reduce accidence 03 12 02 10 09 03 04 05 02 55 7 Trendy </td <td>2</td> <td>Faster charging</td> <td>07</td> <td>03</td> <td>04</td> <td>06</td> <td>05</td> <td>07</td> <td>07</td> <td>07</td> <td>05</td> <td>04</td> <td>55</td>	2	Faster charging	07	03	04	06	05	07	07	07	05	04	55
1000000000000000000000000000000000000			(70)	(27)	(32)	(42)	(30)	(35)	(28)	(21)	(10)	(04)	(299)
4 High warranty of been between the polarity 0.00 <td>3</td> <td>Long durability</td> <td>03</td> <td>09</td> <td>03</td> <td>05</td> <td>07</td> <td>10</td> <td>08</td> <td>06</td> <td>04</td> <td>00</td> <td>55</td>	3	Long durability	03	09	03	05	07	10	08	06	04	00	55
battery (20) (36) (56) (49) (24) (25) (52) (18) (08) (03) (2 5 Reduce pollution 06 01 09 06 03 05 03 07 07 08 55 6 Reduce accidence 03 12 02 10 09 03 04 05 05 02 55 6 Reduce accidence 03 12 02 10 09 03 04 05 05 02 55 7 Trendy 05 02 07 05 04 05 06 07 05 9 8 Improve social 04 03 12 06 03 01 09 07 03 07 55 9 Cost effective 06 18 (56) (35) (24) (25) (36) (14) 05 65 9 Cost effect			(30)	(81)	(24)	(35)	(42)	(50)	(32)	(18)	(08)	(00)	(320)
5 Reduce pollution 06 01 09 06 03 05 03 07 07 08 55 6 Reduce accidence 03 12 02 10 09 03 04 05 03 07 07 08 55 6 Reduce accidence 03 12 02 10 09 03 04 05 05 02 55 7 Trendy 05 02 07 05 04 05 09 06 07 05 55 7 Trendy 05 02 07 05 04 05 09 06 07 05 55 8 Improve social 04 03 12 06 03 01 09 07 03 07 55 9 Cost effective 06 14 05 05 04 06 01 05 07 02 55	4	High warranty of	02	04	07	07	04	05	13	06	04	03	55
Image Image <th< td=""><td></td><td>battery</td><td>(20)</td><td>(36)</td><td>(56)</td><td>(49)</td><td>(24)</td><td>(25)</td><td>(52)</td><td>(18)</td><td>(08)</td><td>(03)</td><td>(291)</td></th<>		battery	(20)	(36)	(56)	(49)	(24)	(25)	(52)	(18)	(08)	(03)	(291)
6 Reduce accidence 03 12 02 10 09 03 04 05 05 02 55 7 Trendy 05 02 07 05 04 05 06 07 05 04 05 05 02 55 7 Trendy 05 02 07 05 04 05 09 06 07 05 55 8 Improve social 04 03 12 06 03 01 09 07 03 07 55 9 Cost effective 06 14 05 05 02 07 05 04 05 09 06 07 05 55 8 Improve social 04 03 12 06 03 01 09 07 03 07 55 9 Cost effective 06 14 05 05 04 06 01 <td>5</td> <td>Reduce pollution</td> <td>06</td> <td>01</td> <td>09</td> <td>06</td> <td>03</td> <td>05</td> <td>03</td> <td>07</td> <td>07</td> <td>08</td> <td>55</td>	5	Reduce pollution	06	01	09	06	03	05	03	07	07	08	55
100 1			(60)	(09)	(72)	(42)	(18)	(25)	(12)	(21)	(14)	(08)	(281)
7 Trendy 05 02 07 05 04 05 09 06 07 05 55 8 Improve social 04 03 12 06 03 01 09 07 03 07 55 9 Cost effective 04 03 12 06 03 01 09 07 03 07 55 9 Cost effective 06 14 05 05 04 06 01 09 07 03 07 55 9 Cost effective 06 14 05 05 04 06 01 05 07 02 55 10 Fast driving 11 06 05 02 07 06 01 04 04 09 55	6	Reduce accidence	03	12	02	10	09	03	04	05	05	02	55
(50) (18) (56) (35) (24) (25) (36) (18) (14) (05) (2 8 Improve social 04 03 12 06 03 01 09 07 03 07 55 9 Cost effective 06 14 05 05 04 06 01 05 07 02 55 10 Fast driving 11 06 05 02 07 06 01 04 04 09 55			(30)	(108)	(16)	(70)	(54)	(15)	(16)	(15)	(10)	(02)	(336)
8 Improve social image 04 03 12 06 03 01 09 07 03 07 55 9 Cost effective 06 14 05 05 04 06 01 09 07 03 07 55 9 Cost effective 06 14 05 05 04 06 01 05 07 02 55 10 Fast driving 11 06 05 02 07 04 04 04 05 05 04 06 01 05 07 02 55 10 Fast driving 11 06 05 02 07 06 01 04 04 09 55	7	Trendy	05	02	07	05	04	05	09	06	07	05	55
Image (40) (27) (96) (42) (18) (05) (36) (21) (06) (07) (21) 9 Cost effective 06 14 05 05 04 06 01 05 07 02 55 10 Fast driving 11 06 05 02 07 06 01 04 04 09 55			(50)	(18)	(56)	(35)	(24)	(25)	(36)	(18)	(14)	(05)	(281)
9 Cost effective 06 14 05 05 04 06 01 05 07 02 55 10 Fast driving 11 06 05 02 07 06 01 05 07 02 55	8	Improve social	04	03	12	06	03	01	09	07	03	07	55
Image: Mark 100 m		image	(40)	(27)	(96)	(42)	(18)	(05)	(36)	(21)	(06)	(07)	(298)
10 Fast driving 11 06 05 02 07 06 01 04 09 55	9	Cost effective	06	14	05	05	04	06	01	05	07	02	55
			(60)	(126)	(40)	(35)	(24)	(30)	(04)	(15)	(14)	(02)	(350)
	10	Fast driving	11	06	05	02	07	06	01	04	04	09	55
(110) (54) (40) (14) (42) (30) (04) (12) (08) (09) (3)			(110)	(54)	(40)	(14)	(42)	(30)	(04)	(12)	(08)	(09)	(323)

Ranking Analysis

(Figures in the cells denotes number of respondents. Figures in the parenthesis denotes score)

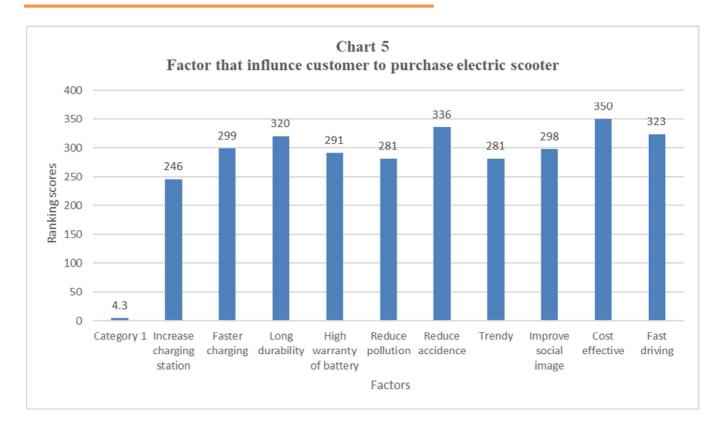


Table 5 and Chart 5 represent the factors influencing that customer to purchase electric scooter. The ranks were assigned as follows for the factors influencing to purchase electric scooter

- 1. Cost effective
- 2. Reduce accidence
- 3. Fast driving
- 4. Long durability
- 5. Faster charging
- 6. Improve social image
- 7. High warranty of battery
- 8. Reduce pollution and trendy
- 9. Increase charging station

According to the results of ranking analysis the first factor that influence customer to purchase electric scooter is cost effective and the second factor is reduce accidence and the third one is fast driving and fourth one is long durability and fifth factor is faster charging and sixth on is improve Socio image and seventh one is high warranty of battery and the eight one is reduce pollution and trendy and last but not the least one is increase charging station.

Conclusion

Customer perception towards electric scooter in Bangalore. The study was conducted in Bangalore City and 55 respondents were collected with the help of random sampling method. The electric scooter usage in Bangalore is more compare to the rural areas because most of the people are aware of electric scooter and they it's benefits and also it is helping them to reduce their petrol cost and accident because of that only people are preferring electric scooter. As in conclusion the electric scooter usage is very helpful for both the individual and society to reduce pollution.

Reference

1. https://www.researchgate.net/publication/251589609_Investigating_the_technical_eco nomic_and_environmental_performance_of_electric_vehicles_in_the_real-world_A_cas e_study_using_electric_scooters

2. https://www.irjet.net/archives/V7/i5/IRJET-V7I578.pdf

3. <u>https://www.slideshare.net/hemanthcrpatna/a-report-on-consumer-awareness-and-perc</u> <u>eption-towards-e-biks</u>

4. https://ejmcm.com/article_7216_a56db3d7f55a5b1ac66729c3a1ce910e.pdf