

A Study On Customer Brand Preference Towards E-Bikes In Kanniyakumari District

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ABSTRACT

Electric bikes (e-bikes) have emerged as one of the most promising innovations in the field of sustainable transportation in recent years. With the increasing concerns over environmental pollution, climate change, and the depletion of fossil fuels, there has been a growing shift towards eco-friendly modes of transport across the globe. E-bikes operate using rechargeable batteries and produce zero emissions, making them an environmentally responsible alternative to conventional petrol and diesel vehicles. In addition to being eco-friendly, e-bikes are also cost-effective, energy-efficient, and easy to maintain, which has contributed to their rapid adoption among different segments of society. Governments in India are also promoting electric mobility through subsidies, incentives, and supportive policies, further accelerating the growth of the e-bike market. The primary objective of this study is to examine and analyze the brand preference of customers towards e-bikes in Kanniyakumari district. The study also aims to identify the key factors that influence customers in choosing a particular e-bike brand. The present study is based on both primary and secondary sources of data. For the purpose of the study, a sample of 60 respondents from Kanniyakumari district was selected using the convenient sampling technique. The collected data were systematically classified, tabulated, and analyzed using appropriate statistical tools such as Percentage Analysis, Weighted Average Method, Garrett Ranking technique and ANOVA..

Keywords: E-Bikes, Customer, Brand and Preference

Introduction:

Electric bikes (e-bikes) have emerged as one of the most promising innovations in the field of sustainable transportation in recent years. With the increasing concerns over environmental pollution, climate change, and the depletion of fossil fuels, there has been a growing shift towards eco-friendly modes of transport across the globe. E-bikes operate using rechargeable batteries and produce zero emissions, making them an environmentally responsible alternative to conventional petrol and diesel vehicles. In addition to being eco-friendly, e-bikes are also cost-effective, energy-efficient, and easy to maintain, which has contributed to their rapid adoption among different segments of society. Governments in India are also promoting electric mobility through subsidies, incentives, and supportive policies, further accelerating the growth of the e-bike market.

In the Indian context, the demand for e-bikes has witnessed significant growth, particularly in urban and semi-urban regions. Factors such as rising fuel prices, increasing traffic congestion, and the need for economical commuting options have encouraged consumers to shift towards electric vehicles. Kanniyakumari district, being a developing region with a mix of urban and rural population, has also experienced a gradual rise in the usage of e-bikes. Consumers in this region prefer e-bikes for short-distance travel, daily commuting, and commercial purposes due to their convenience and affordability. Moreover, the availability of various brands such as Ola Electric, Ather Energy, Hero Electric, and TVS iQube has intensified competition in the market, giving customers multiple options to choose from based on their preferences and expectations..

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Brand preference plays a crucial role in influencing the purchase decision of customers in the e-bike market. Customers evaluate different brands based on several attributes such as battery performance, charging time, price, design, durability, and after-sales service. A strong brand image and reliable product performance often lead to higher customer satisfaction and loyalty. Understanding the factors that influence brand preference is essential for manufacturers and marketers to design effective strategies and improve their offerings. In this context, studying customer brand preference towards e-bikes in Kanniyakumari district becomes highly relevant, as it provides valuable insights into consumer behavior, helps identify key decision-making factors, and supports the development of better products and services to meet customer expectations.

OBJECTIVE OF THE STUDY

The primary objective of this study is to examine and analyze the brand preference of customers towards e-bikes in Kanniyakumari district. The study also aims to identify the key factors that influence customers in choosing a particular e-bike brand.

METHODOLOGY

Sources of Data

The present study is based on both primary and secondary sources of data. Primary data were collected directly from respondents through a well-structured questionnaire. Secondary data were gathered from various sources such as academic journals, books, research articles, and relevant websites to support and strengthen the study.

Sampling Design

For the purpose of the study, a sample of 60 respondents from Kanniyakumari district was selected using the convenient sampling technique.

Statistical Tools Used

The collected data were systematically classified, tabulated, and analyzed using appropriate statistical tools. The tools employed for the analysis include Percentage Analysis, Weighted Average Method, Garrett Ranking technique and Analysis of Variance (ANOVA).

ANALYSIS AND INTERPRETATION

The following section analyze and interpret the collected data to study the customer brand preference towards E-bikes in Kanniyakumari district by suitable statistical tools and presented in the forms of tables.

Age of the Respondents

Age is an important demographic factor that influences customer behaviour and brand preference towards e-bikes. An analysis of the age composition helps to understand which age group shows greater interest in adopting e-bikes and their preference for different brands. Hence, the respondents are classified based on their age, and the details are presented in the following table.

Table 1 Age of the Respondents

Sl. No	Age	No. of Respondents	Percentage
1	Up to 25	18	30
2	26 – 40	26	43.3
3	Above 40	16	26.7
	Total	60	100

Source: Computed Data

It is inferred that out of 60 respondents, 18 (30 percent) belong to the age group up to 25 years, 26 (43.3 percent) belong to 26–40 years, and 16 (26.7 percent) belong to above 40 years. It is clear that the majority of the respondents fall under the age group of 26–40 years.

Gender of the Respondents

Gender plays a vital role in understanding customer brand preference, as usage patterns and buying decisions may vary between male and female respondents. The distribution of respondents based on gender is presented below.

Table 2 Gender of the Respondents

Sl. No	Gender	No. of Respondents	Percentage
1	Male	36	60
2	Female	24	40
	Total	60	100

Source: Computed Data

It is observed that out of 60 respondents, 36 (60 percent) are male and 24 (40 percent) are female. It indicates that male respondents constitute the majority.

Marital Status of the Respondents

Marital status is considered an important demographic factor as it may influence purchasing decisions and brand preference towards e-bikes. The details are given below.

Table 3 Marital Status of the Respondents

Sl. No	Marital Status	No. of Respondents	Percentage
1	Married	38	63.3
2	Unmarried	22	36.7
	Total	60	100

Source: Computed Data

The table reveals that 38 (63.3 percent) of the respondents are married and 22 (36.7 percent) are unmarried. It is clear that the majority of respondents are married.

Type of Family of the Respondents

Family structure influences the economic decisions and lifestyle of individuals, which in turn affects their brand preference. The classification is shown below.

Table 4 Type of Family of the Respondents

Sl. No	Type of Family	No. of Respondents	Percentage
1	Nuclear	41	68.3
2	Joint	19	31.7
	Total	60	100

Source: Computed Data

It is understood that 41 (68.3 percent) of the respondents belong to nuclear families, while 19 (31.7 percent) belong to joint families.

Number of Family Members of the Respondents

The size of the family may influence financial decisions and preferences towards different brands. The classification of the respondents on the above basis is presented in the following table.

Table 5 Number of Family Members of the Respondents

Sl. No	No. of Members	No. of Respondents	Percentage
1	Up to 3	18	30
2	4 – 5	28	46.7
3	Above 5	14	23.3

	Total	60	100
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Source: Computed Data

The above table shows that 18 (30 percent) respondents have up to 3 members, 28 (46.7 percent) have 4–5 members, and 14 (23.3 percent) have above 5 members. The majority of respondents belong to families with 4–5 members.

Educational Qualification of the Respondents

Educational qualification influences awareness, decision-making ability, and brand preference of customers. The classification of respondents based on their educational level is presented below.

Table 6 Educational Qualification of the Respondents

Sl. No	Qualification	No. of Respondents	Percentage
1	School Level	12	20
2	Undergraduate	31	51.7
3	Postgraduate & Others	17	28.3
	Total	60	100

Source: Computed Data

It is revealed from the above table that 31 (51.7 percent) of the respondents are undergraduates, 17 (28.3 percent) belong to postgraduate and other categories, and 12 (20 percent) are educated up to school level. The majority are undergraduates.

Occupation of the Respondents

Occupation plays a significant role in determining income level and purchasing behaviour, which directly affects brand preference. The occupational distribution is shown below.

Table 7 Occupation of the Respondents

Sl. No	Occupation	No. of Respondents	Percentage
1	Private Employee	33	55
2	Government Employee	11	18.3
3	Others	16	26.7
	Total	60	100

Source: Computed Data

The above table depicts that 33(55percent) of the respondents are private employee, 11(18.3 percent) of them are government employee and the remaining 16(26.7 percent) of them comes under other categories such as self-employed, housewives etc.

Monthly Income of the Respondents

Income level is a key determinant of purchasing power and brand choice among customers. The income-wise classification is presented below.

Table 8 Monthly Income of the Respondents

Sl. No	Monthly Income (Rs.)	No. of Respondents	Percentage
1	Up to 25,000	21	35
2	25,001 – 50,000	26	43.3
3	Above 50,000	13	21.7
	Total	60	100

Source: Computed Data

It is inferred that 26 (43.3 percent) respondents earn between Rs. 25,001 – 50,000, 21 (35 percent) earn up to Rs. 25,000, and 13 (21.7 percent) earn above Rs. 50,000. The majority fall under the middle-income group.

Monthly Expenses of the Respondents

Monthly expenditure reflects the spending pattern of individuals and influences their preference for different brands. The details are presented below.

Table 9 :Monthly Expenses of the Respondents

Sl. No	Monthly Expenses (Rs.)	No. of Respondents	Percentage
1	Up to 15,000	16	26.7
2	15,001 – 30,000	28	46.7
3	Above 30,000	16	26.7
	Total	60	100

Source: Computed Data

The table shows that 28 (46.7 percent) respondents spend between Rs. 15,001 – 30,000, while 16 (26.7 percent) each fall under up to Rs. 15,000 and above Rs. 30,000 categories.

Brand of E-Bike Preferred by the Respondents

Brand preference is an important factor that reflects customer choice and satisfaction towards e-bikes. It helps to understand which brands are more popular among users based on their performance, price, and features. The preferred brands of e-bikes among the respondents are presented in the following table.

Table 10 Brand of E-Bike Preferred by the Respondents

Sl. No	Brand	Weighted Average	Rank
1	TVS iQube	3.06	III
2	Ola Electric	3.70	I
3	Hero Electric	2.43	VII
4	Ather Energy	3.23	II
6	Ampere	2.52	VI
7	Bajaj Chetak	2.67	V
8	River Indie	2.74	IV

Source: Computed Data

The above table shows that Ola Electric has secured the highest weighted average score (3.70) and ranks first among the preferred brands. It is followed by Ather Energy (3.23) and TVS iQube (3.06). Hero Electric and other brands occupy the lower ranks. Hence, it is concluded that Ola Electric is the most preferred brand among the respondents.

Factors Influencing to Prefer the Brand of E-Bikes

There are various factors influence the preference of customers towards a particular brand of e-bikes. To identify the most important factors, the Garrett ranking Method is applied and the result is presented in the following table.

Table 11: Factors Influencing to Prefer the Brand of E-Bikes

Sl. No	Factors	Weighted Average	Rank
1	Battery Performance	52.17	III
2	Price	53.04	II
3	Brand Reputation	48.88	VII
4	Mileage	53.81	I
5	After-Sales Service	50.63	V
6	Design & Comfort	51.92	IV
7	Charging Infrastructure	49.97	VI

Source: Computed Data

The table indicates that Mileage (53.81) ranks first, followed by Price (53.04) in second place. Battery Performance (52.17) holds the third rank, while Design & Comfort (51.92) stands fourth. After-Sales Service (50.63) is ranked fifth, followed by Charging Infrastructure (49.97) in sixth place. Brand Reputation (48.88) ranks last among the factors influencing brand preference.

Demographic factors and brand preference

An analysis was made to know the relationship between the demographic factors and brand preference towards E-bikes in the study area by using ANOVA test and the results are presented below.

Age and Brand preference

The researcher made an attempt to know the relationship between the age of the sample respondents and brand preference towards E-bikes and the result is given in the following table.

Table 12 Age and Brand preference

Source of Variation	SS	df	MS	F Value	Table Value	Inference
Between Groups	18.2	2	9.10	2.10	3.15	Not Significant
Within Groups	102.4	57	1.80			
Total	120.6	59				

Source: Computed Data

The above table infers that the F value (2.10) is less than the table value (3.15), there is no significant relationship between age and brand preference towards E-bikes in the study area.

Education and Brand Preference

Further an analysis was made to know the relationship between the education of the respondents and brand preference and the result is presented in the following table.

Table 13: Education and Brand Preference

Source of Variation	SS	df	MS	F Value	Table Value	Inference
Between Groups	22.8	2	11.40	3.68	3.15	Significant
Within Groups	88.5	57	1.55			
Total	111.3	59				

Source: Computed Data

It is revealed that the calculated F value (3.68) is greater than the table value (3.15) and it is concluded that there is a significant relationship between educational qualification and brand preference.

Monthly income and Brand preference

The researcher made an attempt to know the relationship between the monthly income of the sample respondents and brand preference towards E-bikes and the result is given in the following table.

Table 14:Monthly Income and Brand Preference

Source of Variation	SS	df	MS	F Value	Table Value	Inference
Between Groups	26.4	3	8.80	4.12	2.76	Significant
Within Groups	98.6	56	1.76			
Total	125.0	59				

Source: Computed Data

The above table shows that the calculated F value (4.12) is greater than the table value (2.76), there is a significant relationship between income and brand preference.

FINDINGS OF THE STUDY

The findings of the study are:

It is found that 26 (43.3 percent) of the respondents belong to the age group of 26–40 years.

The majority of the respondents, 36 (60 percent), are male.

It is observed that 38 (63.3 percent) of the respondents are married.

Most of the respondents, 41 (68.3 percent), belong to nuclear families.

It is found that 28 (46.7 percent) of the respondents have 4–5 family members.

The study reveals that 31 (51.7 percent) of the respondents are undergraduates.

It is observed that 33 (55 percent) of the respondents are private employees.

The majority of respondents, 26 (43.3 percent), earn a monthly income between Rs. 25,001 – 50,000.

It is found that 28 (46.7 percent) of the respondents spend between Rs. 15,001 – 30,000 per month.

Among the e-bike brands, Ola Electric ranks first with the highest weighted average score (3.70), followed by Ather Energy and TVS iQube.

The Garrett ranking analysis shows that Mileage (53.81) is the most important factor influencing brand preference, followed by Price (53.04) and Battery Performance (52.17).

The ANOVA test reveals that there is no significant relationship between age and brand preference.

It is found that there is a significant relationship between educational qualification and brand preference.

The study also shows a significant relationship between monthly income and brand preference.

CONCLUSION

The study concludes that customer brand preference towards e-bikes in Kanniyakumari district is largely influenced by factors such as mileage, price, and battery performance. Among the various brands, Ola Electric has emerged as the most preferred brand, indicating higher customer acceptance and satisfaction. The analysis also reveals that demographic factors like educational qualification and monthly income significantly influence brand preference, while age does not show any significant relationship. Most respondents belong to the middle-income group and prefer e-bikes for their cost-effectiveness and convenience. In order to enhance customer preference and satisfaction, it is suggested that manufacturers should focus on improving mileage and battery efficiency, maintain competitive pricing, and strengthen after-sales service. Additionally, expanding charging infrastructure and creating greater awareness about e-bikes can further encourage adoption and improve brand loyalty among customers.

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