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A STUDY ON CONSUMER PERCEPTION TOWARDS ELECTRIC VEHICLE WITH SPECIAL REFERENCE TO BELAGAVI CITY

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Abstract
The rapid advancement of technology and increasing environmental concerns are driving the adoption of electric vehicles (EVs) as a viable alternative to traditional vehicles. This study focuses on consumer perceptions of EVs in Belagavi City, examining factors influencing attitudes, preferences, and adoption intentions, such as environmental awareness, cost, infrastructure availability, and government policies. A structured questionnaire was administered to 120 respondents representing diverse demographics in Belagavi. The results show that while many consumers are aware of EVs' environmental benefits, barriers such as high initial costs, limited charging infrastructure, and mileage anxiety hinder adoption. Government incentives and subsidies significantly shape consumer interest. The study concludes that to attain widespread acceptance of EVs in Belagavi, targeted awareness campaigns, improved charging infrastructure, and attractive financial incentives are crucial. These insights are valuable for policymakers, automotive manufacturers, and stakeholders in the EV ecosystem to develop strategies that align with consumer expectations and strengthen the shift toward sustainable mobility.

Keywords: Electric Vehicles, Consumer, Perception, Incentives, Subsidy, Environment.

Introduction

The automotive industry is undergoing a profound transformation driven by growing environmental concerns, technological advancements, and the shift toward sustainable mobility. Among the most promising solutions to address issues such as air pollution, carbon emissions, and the depletion of fossil fuels are EVs. As an alternative to traditional vehicles, i.e., E-Vehicles offer cleaner, smoother, low-weight, and more sustainable transportation, which has gained significant attention in India due to the increasing awareness of climate change and the government's efforts to promote green technologies. The Indian government is actively encouraging the adoption of EVs through various policies, subsidies, and incentives. However, despite this, the adoption rate remains slow, particularly in regions like Belagavi city, which is known for its rich history and rapid urbanization, and similarly faces the same environmental challenges that many urban areas in India do, including high pollution levels and increasing congestion. The need for cleaner, more sustainable transportation options is becoming more pressing. E-vehicles could play a significant role in reducing emissions and improving air quality in Belagavi. Despite the potential environmental benefits and government support, the adoption of electric vehicles in the city has been relatively low, suggesting the presence of several barriers. Consumer perception is a critical factor in the adoption of any new technology, and electric vehicles are no exception. While many consumers in Belagavi are aware of EVs' environmental advantages, they face challenges such as high initial costs, limited charging infrastructure, and mileage anxiety. These factors contribute to hesitation in adopting EVs despite their potential long-term savings and environmental benefits. Furthermore, there is a lack of awareness about E-Vehicle technology, and misconceptions about its performance and reliability continue to exist among the general public. This study explores consumer perceptions towards E-vehicles in Belagavi city, focusing on factors influencing their attitudes, preferences, and intentions to adopt E-Vehicles. These

factors include environmental consciousness, cost concerns, government incentives, and the availability of charging infrastructure. By understanding the perceptions and barriers to EV adoption, the research will provide insights to policymakers, automotive manufacturers, and stakeholders in the EV ecosystem. This information will help guide strategies to promote EV adoption in Belagavi city, leading to a cleaner, more sustainable transportation future for the city.

Government Initiation for Electric Vehicles in India.

The Government of India has launched several schemes to promote the adoption of Electric Vehicles in India. These schemes focus on providing financial incentives, building infrastructure, promoting domestic manufacturing, and reducing the reliance on imports to create a sustainable E-Vehicles ecosystem. Such schemes are as follows…

1) Faster Adoption and Manufacturing of Electric Vehicles (FAME)

FAME I (2015 - 2019)	FAME II (2019 - 2024)
The first phase of the FAME India scheme was launched in 2015 to promote the adoption of E-Vehicles by providing subsidies and incentives for electric two-wheelers, three-wheelers, four-wheelers, and buses. It also supported the development of the charging infrastructure in India.	FAME II was launched in 2019 with a total outlay of ₹10,000 crores. It focuses on providing financial Incentives for the purchase of electric two-wheelers, three-wheelers, and four-wheelers (for commercial purposes) and also supports for public and shared transport in India.

2) National Electric Mobility Mission Plan (NEMMP) 2020.

The NEMMP was launched in 2013 to achieve national fuel security by promoting electric and hybrid vehicles to transform conventional vehicles into Electric Vehicles. It has key goals which are incentivizing the manufacturing and adoption of EVs and achieving a target of 6-7 million EVs on the road by 2020, with emphasis on promoting domestic production and reducing reliance on imports of EVs.

3) PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) Scheme.

PM E-Drive scheme was introduced on 1 Oct 2024 and it will remain in force until March 31, 2026, with a financial outlay of Rs 10,900 to accelerate the Electric Vehicles, establish the required infrastructure, and promote Electric Vehicles in India. Under the scheme, incentives are to be provided for electric vehicles such as E-2 wheelers, E-3 wheelers, E-ambulances, E-trucks, and other emerging categories of E-Vehicles in India.

Review of Literature

The recent research examined consumer perceptions of EVs in India, highlighting the factors influencing purchasing decisions and the evolving attitudes toward EVs across different regions. These studies utilized various analytical approaches to enhance our understanding of the psychological behavior of Consumers toward E-Vehicles.

Sajan Acharya (2019) "Consumer per sab sent Mars electrical vehicle industry," says that the main purpose of the study was to evaluate the need for the promotion of electric vehicles by the government and to know the future needs and perception of people towards electric vehicles. The researcher chooses Mangalore as the study area, and the sample size is 100. This study is based on primary and secondary sources. This paper is restricted to Mangalore only is one of the limitations of the study.

Omkar tape, Prof Shweta Kishore (2020) "Consumer perception of an electrical vehicle in India." The primary objective of this paper is to understand consumer perception and the factors important for the purchase of electric vehicles in India. This study is based on the descriptive research methodology and primary data of the sample population of 212, which was collected using an online questionnaire. The statistical tool Chi-Square was used for the hypothesis. **Janjanam Chandra Prakash Rao's (2023)**"A study on consumer perception of e vehicle," he studies attempts to know about consumer perception towards E-vehicle, it also tries to study the negative impact of fossil fuels on the environment. He uses the Pic study area as Bangalore city. The study is based on primary and secondary data. Primary data is collected from 102 consumers through an offline survey by approaching the target consumers. Secondary data was collected in various respects statistical tools, the Likert scale, and open-ended and closed-ended. **M Kalimuthu (2023),** "Consumer perception towards the electric vehicle with special reference to Coimbatore city," opined that the primary purpose of the study is to analyze the consumer perception and purchase intention of the electric vehicle. This paper focuses on customer awareness factors influencing psychological and environmental benefits, etc. The researcher has adopted various statistical techniques such as the rank method and percentage analysis. The researcher chose the study area as Coimbatore City and used 120 respondents as the sample size. **Akash Gupta (2024),** "A study on consumer perception towards electrical vehicles, "says that the main purpose of the study was to examine the vehicles. The main objective of the study is consumer awareness level and knowledge regarding electric vehicles. To find out the factors that influence their buying decision of e-vehicles. He chooses the Noida city of Uttar Pradesh as the study area, and the sample size is 400. This study is based on the solvents. The statistical tools were used as percentage analysis, bar chart, U Test, and H-test. **C. Surendranath Reddy and Ajay Abraham (2024)** "Perception of young consumers towards electric two-wheelers" state that the main purpose of the study was to explore the expectation of the year 2 hours performance of electric two-wheelers. De choice of Bangalore City as the study area and the sample size is 272. The study is based on the primary data collected using a systematic questionnaire. Research participants included young customers between the age group of 18-40 from Bangalore city. That was analyzed using statistical tools like reliability tests and regression; however, consumer perception is a complex psychological behavior towards products and services. The perception changed as time and the market changed.

The review related to the problem statement clearly indicates that, there is a need to create awareness about e-vehicles in the study area and understand the various factors affecting the consumer perception with respect to e-vehicles and their satisfaction level.

Objectives of the Study

- To ascertain consumers' knowledge and awareness about E-vehicles in Belagavi City.
- To study factors affecting consumer perception of E-vehicles.
- To study the satisfaction level of consumers with E-vehicles.

Research Methodology

This study explores consumer perceptions of electric vehicles (EVs) in Belagavi City by using primary and secondary data. The primary data was collected from 120 respondents using a structured online questionnaire through convenience sampling; similarly, secondary data included books, research articles, and journals. Descriptive statistical methods, including percentage analysis and graphs, were used to analyze the data. Additionally, a Chi-square test was employed to examine the significance of

differences in consumer perceptions regarding showroom price, mileage anxiety, and charging infrastructure.

Result and Discussion

1. Consumers' knowledge and awareness level about E-vehicles in Belagavi City.

Know the consumers' knowledge and awareness levels about E-vehicles based on the factors mentioned below in Belagavi City. Moreover, each one begins with how familiar they are with.

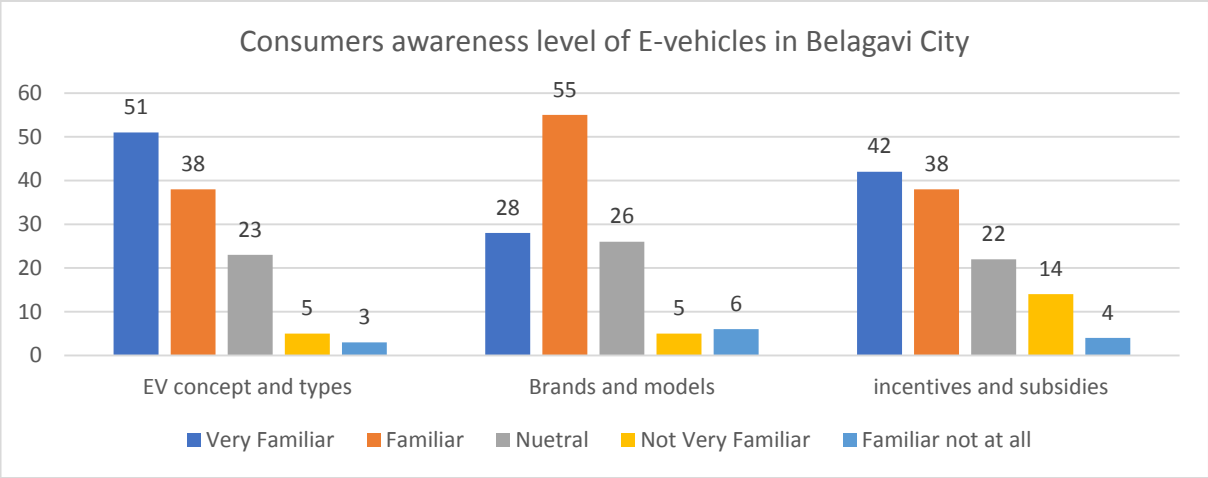
1. The concept of electric vehicles and different types of electric vehicles.
2. The different brands and models of electric vehicles available in the market.
3. The current government policies, incentives, and subsidies regarding electric vehicles.

Table 1. Consumers' knowledge and awareness level about E-vehicles in Belagavi City

Particulars	EV concept and types		Brands and models		Incentives and subsidies	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Very Familiar	51	43	28	23	42	35
Familiar	38	32	55	46	38	32
Neutral	23	19	26	22	22	18
Not Very Familiar	05	4	05	4	14	12
Familiar not at all	03	2	06	5	04	3
Total	120	100	120	100	120	100

Source: Field study, April 2025

Graph 1



The above Table and chart 1 explore the level of consumer knowledge and awareness regarding E-vehicles in Belagavi City, focusing on three specific areas among the 120 respondents. Firstly, regarding the concept of electric vehicles and their types, a significant majority of respondents are familiar. A total of 89 respondents, i.e., 75%, reported that they are familiar. Of this, 51 respondents,

i.e., 43% very familiar, and 38 respondents, i.e., 32% familiar with the basic concept and types of electric vehicles. Only a small portion of 5 respondents, i.e. 4% were not very familiar, and 3 respondents, i.e., 2% not familiar at all. Secondly, awareness about different brands and models of E-vehicles is slightly lower, with 55 respondents, i.e. 46% familiar and very familiar, consisting of 28 respondents, i.e., 23%, while 26 respondents, i.e. 22% were neutral, and 11 respondents, 9% expressed unfamiliarity. Lastly, regarding government policies, incentives, and subsidies, the awareness level is moderate. A combined 80 respondents, i.e., 64% were either very familiar, consisting of 42 respondents, i.e., 35% or familiar, consisting of 38 respondents, i.e., 32% with these schemes. However, a significant number of 30 respondents, i.e. 25% were either neutral or not familiar with the existing benefits. In summary, consumers in Belagavi City demonstrate a relatively strong understanding of the general concept and types of E-vehicles, followed by moderate awareness of available brands and government incentives. However, the lower familiarity with specific policies and available models indicates a need for targeted awareness campaigns, possibly through local dealerships, government outreach, and media engagement, to bridge the remaining knowledge gaps and further support informed E-vehicle adoption in the city.

2. The different variables affecting consumer perception of E-vehicles.

The responses will provide insights into what influences attitudes toward E-vehicle adoption in the city. Despite this, each one begins with how strongly they agree with.

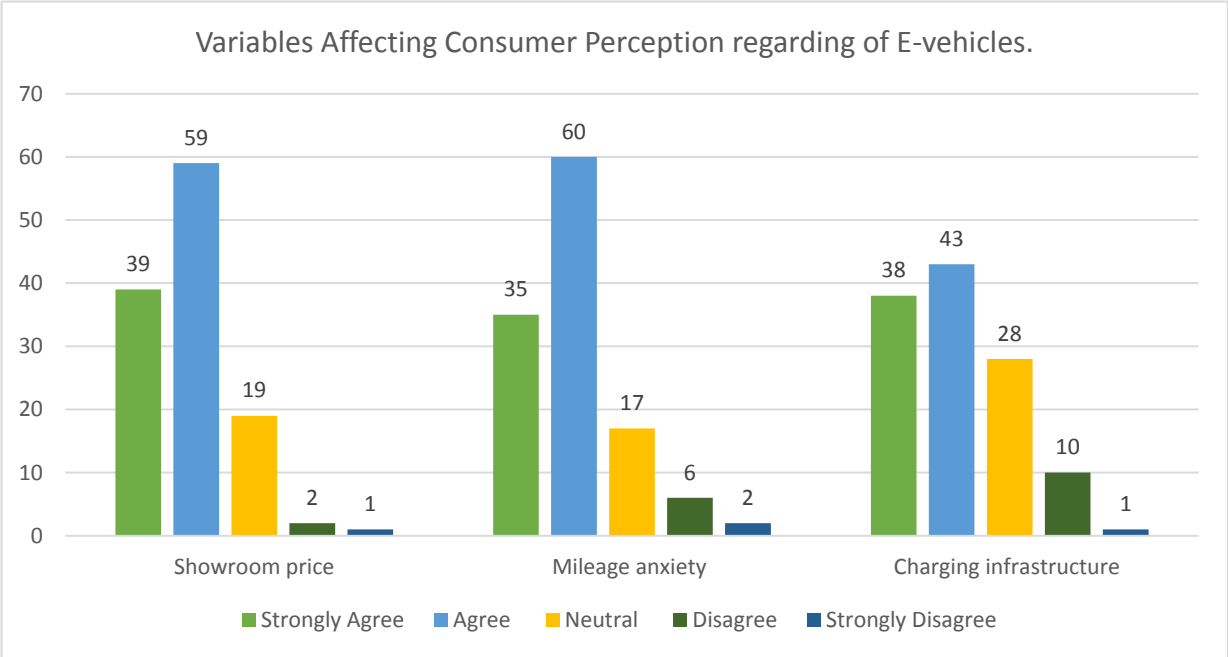
1. The Showroom price of electric vehicles is a significant barrier to their adoption.
2. The concern about the mileage anxiety of electric vehicles.
3. The current availability of public charging infrastructure in Belagavi is adequate

Table 2. Variables Affecting Consumer Perception of E-vehicles

Particulars	Showroom price		Mileage anxiety		Charging infrastructure	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Strongly Agree	39	32	35	29	38	31
Agree	59	49	60	50	43	36
Neutral	19	16	17	14	28	23
Disagree	02	2	06	5	10	8
Strongly Disagree	01	1	02	02	01	2
Total	120	100	120	100	120	100

Source: Field study, April 2025.

Graph 2



The above Table and chart 2, the results provide valuable insights into how showroom price, mileage anxiety, and charging infrastructure availability in Belagavi factors influence consumer attitudes toward E-vehicle adoption. Firstly, the showroom price of electric vehicles is perceived as a significant barrier by a majority of respondents. Among the 120 respondents, A combined total of 81% either strongly agreed 39 respondents i.e. 32% or agreed, 59 respondents i.e. 49% that high initial costs are a deterrent to adoption. Only 3 respondents, i.e. 3% disagreed or strongly disagreed, while 19 respondents i.e.16% remained neutral. This indicates that pricing continues to be one of the primary concerns for potential buyers, and cost-reduction strategies or government subsidies could play a crucial role in encouraging adoption. Secondly, mileage anxiety, or concerns over how far an E-vehicle can travel on a single charge, is also seen as a notable issue. Among 120 respondents, 60 respondents i.e. 50% agreed and 35 respondents i.e., 29% strongly agreed that mileage anxiety affects their perception, totaling 79% in agreement. Only 6 respondents, i.e., 5%, disagreed, and 17 respondents, i.e., 14%, remained neutral. Thirdly, the perception of the current public charging infrastructure in Belagavi is mixed but leans toward moderate satisfaction. While 38 respondents, i.e. 31% strongly agreed and 43 respondents i.e. 36% agreed that charging availability is adequate a notable portion 28 respondents i.e. 23% were neutral, and 11 respondents i.e. 10% disagreed or strongly disagreed. In summary, the data shows that showroom price and mileage anxiety are perceived as stronger barriers compared to charging infrastructure. High cost and range concerns continue to shape consumer perception negatively, even as charging availability begins to show signs of adequacy.

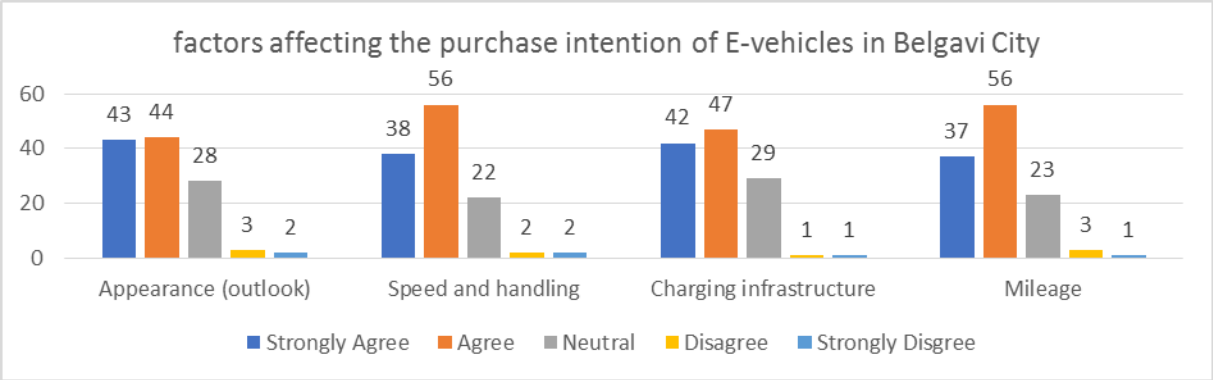
3. **Factors affecting the purchase intention of E-vehicles.**

The following are designed to measure the factors affecting the purchase intention of E-Vehicles and also help assess the relative importance of each factor in shaping purchasing decisions.

Table 3. Factors affecting the purchase intention of E-vehicles
Source: Field study, April 2025

Particulars	Appearance (outlook)		Speed and handling		Charging infrastructure		Mileage	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Strongly Agree	43	36	38	32	42	35	37	31
Agree	44	37	56	46	47	39	56	47
Neutral	28	23	22	18	29	24	23	19
Disagree	03	2	02	2	01	1	03	2
Strongly Disagree	02	2	02	2	01	1	01	1
Total	120	100	120	100	120	100	120	100

Graph 3



The above table and chart 3 present several key factors that significantly influence the purchase intention of E-vehicles. Among 120 respondents regarding appearance (outlook), 43 respondents, i.e. 36% strongly agreed and 44 respondents, i.e. 37% agreed that the design and aesthetic appeal of the vehicle influence their purchase decision, accounting for a combined 73%. Only a small portion 5 respondents i.e. 4% disagreed or strongly disagreed, while 28 respondents i.e. 23% remained neutral. This suggests that visual appeal is an important consideration for many consumers. When it comes to speed and handling, the factor was rated even more highly, with 38 respondents i.e. 32% strongly agreeing and 56 respondents i.e. 46% agreeing, totaling 78%. Only 4 respondents i.e. 4% disagreed or strongly disagreed, and 22 respondents i.e. 18% were neutral. This indicates that performance and driving experience are top priorities for potential E-vehicle buyers. Similarly, charging infrastructure also plays a significant role, with 42 respondents i.e. 35% strongly agreeing and 47 respondents i.e. 39% agreeing, amounting to 74% in favor. Only 2 respondents i.e. 2% disagreed, and 29 respondents i.e. 24% were neutral. This highlights the importance of accessible and reliable charging stations in shaping purchase decisions. Finally, mileage, or the range of the vehicle, received strong support from respondents, with 37 respondents i.e. 31% strongly agreeing and 56 respondents i.e. 47% agreeing again totaling of 78%. A minimal 4 respondents i.e. 3% disagreed or strongly disagreed, while 23 respondents i.e. 19% were neutral. This clearly indicates that concerns over how far a vehicle can

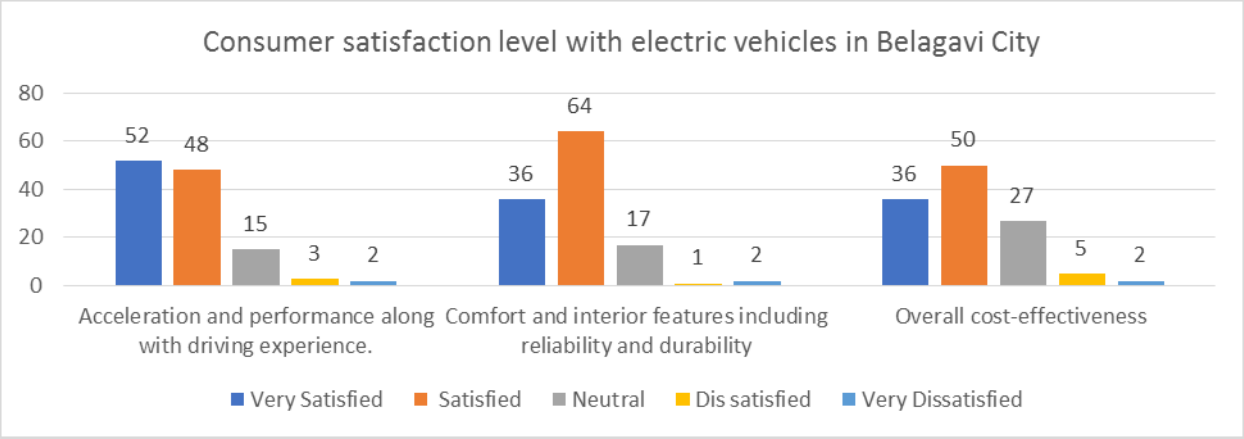
travel on a single charge, commonly referred to as range anxiety, remain a major consideration. In conclusion, the data shows that all four factors have a strong influence on purchase intention.

Table 4. Consumer satisfaction level with electric vehicles in Belagavi City

Particulars	Acceleration and performance, along with driving experience.		Comfort and interior features, including reliability and durability.		Overall cost-effectiveness	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Very Satisfied	52	43	36	30	36	30
Satisfied	48	40	64	54	50	42
Neutral	15	12	17	14	27	22
Dissatisfied	03	3	01	2	05	4
Very Dissatisfied	02	2	02	2	02	2
Total	120	100	120	100	120	100

Source: field study, April 2025.

Graph 4



The above table and chart 4 show that among the three factors first is acceleration and performance along with driving experience. A significant majority of consumers expressed satisfaction among 120 respondents; 52 respondents, i.e., 43% were Very Satisfied, and 48 respondents, i.e. 40% were satisfied, totaling 83% positive sentiment. Only a small fraction, 3 respondents i.e. 3% and 2 respondents i.e. 2% reported being Dissatisfied and Very Dissatisfied, respectively, while 15 respondents 12% remained Neutral. Secondly, comfort and interior features including reliability and durability, consumer satisfaction remained high, though slightly less pronounced than with performance. 64 respondents i.e. 54% were Satisfied, and 36 respondents i.e. 30% were Very Satisfied, accounting for 84% positive feedback. Neutral responses were at 14%, and a minimal 2% each, which is 1 and 2 respondents, respectively, were Dissatisfied or Very Dissatisfied. In terms of overall cost-effectiveness, satisfaction levels were also positive but showed a larger Neutral segment. 50 respondents i.e., 42% were Satisfied, and 36 respondents i.e., 30% were "Very Satisfied, combining for 72% overall satisfaction. The Neutral category here was 27 respondents i.e. 22%, while 5 respondents i.e. 4% were Dissatisfied and 2 respondents 2% were Very Dissatisfied. In summary, the

survey indicates a generally high level of consumer satisfaction with electric vehicles in Belagavi City, particularly concerning acceleration, performance, driving experience, comfort, and interior features. While overall cost-effectiveness also garnered positive feedback, a notable portion of consumers remained neutral on this aspect.

Hypotheses Testing

H_0: There is no significant difference in consumer perception regarding showroom price, mileage anxiety, and charging infrastructure for electric vehicles in Belagavi City.

H_1: There is a significant difference in consumer perception regarding showroom price, mileage anxiety, and charging infrastructure for electric vehicles in Belagavi City.

Table 5. Observed frequency (O)

Observed frequency	Showroom price	Mileage anxiety	Charging infrastructure	Row total
Very Satisfied	39	35	38	112
Satisfied	59	60	43	162
Neutral	19	17	28	64
Dis satisfied	02	06	10	18
Very Dissatisfied	01	02	01	04
Column total	120	120	120	360

Table 6. Expected frequency (E)

Expected frequencies were calculated using the formula:

E = (Row Total * Column Total) / Grand Total

Expected frequency	Showroom price	Mileage anxiety	Charging infrastructure	Row total
Very Satisfied	37.33333	37.33333	37.33333	112
Satisfied	54	54	54	162
Neutral	21.33333	21.3333	21.3333	64
Dis satisfied	6	6	6	18
Very Dissatisfied	1.333333	1.333333	1.333333	4
Column total	120	120	120	360

Table 7. Chi-square Statistic Calculation

The test statistic was computed using chi-square (χ^2) = (O-E)^2/E

(O-E)^2/E	Showroom Price	Mileage Anxiety	Charging Infrastructure
Strongly Agree	0.074405	0.145833	0.011905
Agree	0.462963	0.666667	2.240741
Neutral	0.255208	0.880196	2.083357
Disagree	2.666667	0	2.666667
Strongly Disagree	0.083333	0.333333	0.083333

Chi-square value (χ^2): 12.6546

Degrees of Freedom (df): (r - 1)(c - 1) = (5 - 1)(3 - 1) = 8

p-value = 0.124299
significant value: 5%

The Chi-square test yields a value of 12.6546 with 8 degrees of freedom and a p-value of 0.124299, which is greater than the 0.05 significance level. Hence, the researcher fails to reject the null hypothesis, indicating that there is no significant difference in consumer perception regarding showroom prices, mileage anxiety, and charging infrastructure.

Findings

1. A majority of respondents exhibited a strong understanding of electric vehicles, with 51 respondents accounting for 43% indicating familiarity with the EV concept, and 55 respondents making up 46% being aware of the available EV brands. In contrast, familiarity was notably low among a small group of 3 respondents who were unfamiliar with the concept, accounting for 2%, and 6 respondents were unaware of EV brands, accounting for 5%. Awareness of government incentives and subsidies was moderate; 42 respondents reported being very familiar, making up 35%, while 4 respondents had no awareness at all, representing 3%.
2. Several key factors influencing consumer perception were identified. Showroom price emerged as a major concern, with 59 respondents, representing 49%, agreeing that high upfront costs are a barrier, and only 1 respondent, representing 1%, strongly disagreeing. Mileage anxiety was also a prevalent issue, with 60 respondents expressing concern about the limited driving range of EVs, comprising 50% of the sample. Opinions on charging infrastructure were mixed 43 respondents felt it was adequate, accounting for 36%, while 1 respondent strongly disagreed, representing 1%, indicating that infrastructure still needs improvement to meet broader expectations.
3. Multiple factors significantly impact purchase intentions. Aesthetic appeal was considered important by 44 respondents, making up 37%, speed and handling were prioritized by 56 respondents, representing 46%, charging infrastructure was a consideration for 47 respondents, comprising 39%, and mileage was viewed as crucial by 56 respondents, accounting for 47%. The low number of respondents expressing strong disagreement across these factors reflects a general consensus on their importance in EV purchase decisions.
4. Overall, consumer satisfaction with EVs was relatively high. Regarding acceleration and performance, 52 respondents reported being very satisfied, making up 43%. Comfort and interior features received even stronger approval, with 64 respondents expressing satisfaction, comprising 54%. In terms of cost-effectiveness, 50 respondents reported satisfaction, accounting for 42%. Across all aspects evaluated, dissatisfaction levels remained consistently low, with fewer than 3% of respondents expressing negative views, indicating a generally favorable user experience among current EV users.

Suggestions

1. There is a need for targeted awareness campaigns highlighting the environmental benefits of EVs, along with information on government incentives, subsidies, and long-term cost savings. Public engagement through roadshows, exhibitions, and media can help bridge knowledge gaps, especially regarding specific policy schemes.
2. Manufacturers should focus on improving battery capacity to address mileage anxiety and extend the range of EVs, which currently limits their use to short distances. Technological advancements in this area can significantly boost consumer confidence.
3. Perceptions of public charging infrastructure are moderately positive; expansion is necessary to improve convenience and accessibility, particularly in suburban and high-traffic areas.

4. Additionally, the high initial cost remains a major barrier. Manufacturers should adopt cost-reduction strategies such as mass production and advanced manufacturing technologies, supported by government subsidies or tax incentives to enhance affordability.
5. There is also a need to establish more EV service centers across key locations in Belagavi to provide accessible and timely maintenance support, which is essential for building trust in the technology.
6. Organizing interactive public events, such as EV roadshows and live demonstrations, can enhance public understanding and showcase improvements, especially in charging efficiency, an area that remains a concern for many potential buyers.

Conclusion

The study shows that consumers in Belagavi are very interested in E-Vehicles. Their interest is mainly driven by environmental awareness and the benefits these vehicles offer. However, several practical issues are slowing down the adoption of EVs. First, high upfront costs worry many consumers. Second, there aren't enough charging stations, which raises concerns about how far EVs can travel without running out of battery. To tackle these problems, we need a clear plan. We should invest in building more and better charging stations to ease concerns about range and availability. We also need to keep improving battery technology to provide better mileage and performance, which will satisfy consumers. Furthermore, effective advertising and public awareness campaigns will help create positive views and increase demand for EVs. Finally, government support through financial incentives and subsidies is essential to make EVs more affordable for more people. By addressing these important issues, policymakers, manufacturers, and other stakeholders can create a better environment for EV adoption in Belagavi. This will contribute to a cleaner and more sustainable future for transportation. The insights gained from this study will help shape targeted strategies that meet consumer expectations and speed up the shift toward electric vehicles.

References

1. Ali, M. M. M., & Deshmukh, A. A. (2023). A Study on Consumer Perception towards Adoption of E-Vehicle in Sangli City. The Online Journal of Distance Education and e-Learning, 11(2).
2. Ali, I., & Naushad, M. (2022). A study to investigate what tempts consumers to adopt electric vehicles. World Electric Vehicle Journal, 13(2), 26.
3. Bera, R., & Maitra, B. (2021). Analyzing prospective owners' choice decision towards plug-in hybrid electric vehicles in urban India: a stated preference discrete choice experiment. Sustainability, 13(14), 7725
4. Bhalla, P., Ali, I. S., & Nazneen, A. (2018). A study of consumer perception and purchase intention of electric vehicles. European Journal of Scientific Research, 149(4), 362-368.
5. Chakraborty, Amrit. (2023**).** Impact of client perception of electric vehicles on EV sales in India. 10.13140/RG.2.2.11718.89920.
6. Chawla, U., Mohnot, R., Mishra, V., Singh, H. V., & Singh, A. K. (2023). Factors influencing customer preference and adoption of electric vehicles in India: a journey towards more sustainable transportation. Sustainability, 15(8), 7020.
7. Digalwar, A. K., & Rastogi, A. (2023). Assessments of social factors responsible for the adoption of electric vehicles in India: a case study. International Journal of Energy Sector Management, 17(2), 251-264.
8. Dsouza, J. (2023). A Study on the Impact of Perceived Benefits on Customer Preference for Electric Vehicles. SDMIMD Journal of Management, 15-26.
9. Digalwar, A. K., & Rastogi, A. (2023). Assessments of social factors responsible for the adoption of electric vehicles in India: a case study. International Journal of Energy Sector Management, 17(2), 251-264.

10. Ghasri, M., Ardeshiri, A., & Rashidi, T. (2019). Perception towards electric vehicles and the impact on consumers' preference. Transportation Research Part D: Transport and Environment, 77, 271-291.
11. Higueras-Castillo, E., Singh, V., Singh, V., & Liébana-Cabanillas, F. (2024). Factors affecting adoption intention of electric vehicle: a cross-cultural study. Environment, Development and Sustainability, 26(11), 29293-29329.
12. Jain, N. K., Bhaskar, K., & Jain, S. (2022). What drives adoption intention of electric vehicles in India? An integrated UTAUT model with environmental concerns, perceived risk and government support. Research in Transportation Business & Management, 42, 100730.
13. Khurana, A., Kumar, V. R., & Sidhpuria, M. (2020). A study on the adoption of electric vehicles in India: The mediating role of attitude. Vision, 24(1), 23-34.
14. KV, S., Michael, L. K., Hungund, S. S., & Fernandes, M. (2022). Factors influencing adoption of electric vehicles–A case in India. Cogent Engineering, 9(1), 2085375.
15. Liao, F., Molin, E., & van Wee, B. (2017). Consumer preferences for electric vehicles: a literature review. Transport Reviews, 37(3), 252-275.
16. Nayaab, M. T., & Kumar, R. S. (2022). Do Consumer Preferences Leads to Adoption Intention For Electric Vehicles? A Literature Review on Indian Studies. Journal of Positive School Psychology, 8503-8510.
17. Pamidimukkala, A., Kermanshachi, S., Rosenberger, J. M., & Hladik, G. (2024). Barriers and motivators to the adoption of electric vehicles: A global review. Green Energy and Intelligent Transportation, 3(2), 100153.
18. Peters, A., & Dütschke, E. (2014). How do consumers perceive electric vehicles? A comparison of German consumer groups. Journal of Environmental Policy & Planning, 16(3), 359-377.
19. Sahoo, D., Harichandan, S., Kar, S. K., & Sreejesh, S. (2022). An empirical study on consumer motives and attitude towards adoption of electric vehicles in India: Policy implications for stakeholders. Energy Policy, 165, 112941.
20. Singh, Rashika & Gupta, Nimish & Yadav, G. (2023). Scope of electric vehicles and the automobile industry in Indian perspective. The Scientific Temper. 14. 563-569. 10.58414/scientific temper. 2023.14.3.01.
21. Singh, V., Singh, V., & Vaibhav, S. (2020). A review and simple meta-analysis of factors influencing adoption of electric vehicles. Transportation Research Part D: Transport and Environment, 86, 102436.
22. Shakeel, U. (2022). Electric vehicle development in Pakistan: Predicting consumer purchase intention. Cleaner and Responsible Consumption, 5, 100065.
23. Tupe, O., Kishore, S., & Johnvieira, A. (2020). Consumer perception of electric vehicles de i8o0[j3#A2` `a`s1ws2q13ein India. European Journal of Molecular & Clinical Medicine, 7(8), 4861-4869.
24. Umamaheswari Sankar, D. U. S., Rajasekaran, R., & Rajasekaran, R. (2019). Customer perception and buying for E-Vehicle with reference to Passenger Car Market in the Changing Environment. AIMS International journal for management, 542-547.
25. Verma, M., Verma, A., & Khan, M. (2020). Factors influencing the adoption of electric vehicles in Bengaluru. Transportation in Developing Economies, 6(2), 17.
26. Wang, S., Wang, J., Li, J., Wang, J., & Liang, L. (2018). Policy implications for promoting the adoption of electric vehicles: do consumer's knowledge, perceived risk and financial incentive policy matter?. Transportation Research Part A: Policy and Practice, 117, 58-69.
27. Yadav, R., & Yadav, R. (2024). Are consumers ready to adopt electric vehicles? Analyzing the barriers and motivators associated with electric vehicle adoption in India: Policy implications for various stakeholders. Energy Policy, 190, 114173.
28. Zhang, W., Wang, S., Wan, L., Zhang, Z., & Zhao, D. (2022). Information perspective for understanding consumers' perceptions of electric vehicles and adoption intentions. Transportation Research Part D: Transport and Environment, 102, 103157.