

## A Study On How Consumer Awareness Shapes The Electric Scooter Preferences Of Working Women

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### Abstract

*The growing concern for environmental sustainability, rising fuel prices, and the increasing urban commute have led to a surge in demand for electric vehicles (EVs), particularly electric scooters. This study examines how consumer awareness influences the purchasing preferences of working women towards electric scooters. It explores various dimensions of awareness such as knowledge of government subsidies, environmental benefits, cost-efficiency, and brand options and how this affects decision-making behavior. Using primary data collected from working women in urban areas through structured questionnaires, the study identifies key factors that shape their preferences and adoption patterns. The findings indicate that consumer awareness significantly impacts brand perception, trust in technology, and willingness to invest in electric mobility. The results are expected to offer insights to EV manufacturers and policymakers aiming to promote electric two-wheelers among female professionals.*

**Keywords:** Electric Scooters, Consumer Awareness, Working Women, Electric Vehicles, Purchase Preferences, Sustainability, Urban Mobility, Green Technology

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### INTRODUCTION

Electric mobility has emerged as a viable solution to many challenges facing modern cities, such as pollution, traffic congestion, and increasing fuel costs. Among electric vehicles, electric scooters have gained particular attention due to their affordability, convenience, and environmental benefits. As more women enter the workforce and seek independent, efficient transport options, electric scooters have become an appealing choice for working women in urban and semi-urban settings. However, the decision to adopt electric mobility is not solely based on price or availability. It is significantly influenced by the level of consumer awareness. Awareness about the benefits of electric vehicles, available government incentives, total cost of ownership, battery performance, charging infrastructure, and brand reputation all play a critical role in shaping consumer preferences. This study aims to analyze how informed working women are about electric scooters and how this awareness influences their buying preferences. By focusing on working women—a growing demographic with unique mobility needs—this research seeks to uncover insights that can help manufacturers, marketers, and policymakers better cater to this segment and promote broader EV adoption.

### REVIEW OF LITERATURE

1. Saxena & Dey (2021) noted that awareness of electric vehicle (EV) subsidies and environmental benefits significantly influences consumer willingness to adopt electric two-wheelers, especially in urban areas.
2. Ramesh & Mehta (2020) found that working women prioritize convenience, cost savings, and eco-friendliness when choosing personal transport, but low awareness of EV options limits their adoption.
3. Mukherjee et al. (2019) emphasized that trust in technology and product knowledge play a vital role in the adoption of electric scooters, especially among first-time users.
4. Kumar & Sharma (2022) observed that social perception and peer recommendations strongly affect the purchasing decisions of women, often more than technical specifications.
5. Bhattacharya & Iyer (2020) stated that lack of awareness about charging infrastructure and battery life remains a significant barrier, even among educated, urban consumers.

## OBJECTIVES OF THE STUDY

1. To examine the level of consumer awareness among working women about electric scooters.
2. To identify key awareness factors (e.g., cost efficiency, brand options, environmental impact) influencing purchase decisions.
3. To analyze the relationship between consumer awareness and brand preference.
4. To compare preferences for electric scooters among women with different levels of awareness.
5. To provide suggestions for enhancing awareness and adoption among working women.

## STATEMENT OF THE PROBLEM

Despite the rise in demand for electric scooters and increased participation of women in the workforce, the adoption of electric scooters among working women remains relatively low. One of the major reasons for this is insufficient consumer awareness regarding the features, benefits, and incentives associated with electric scooters. Understanding how awareness influences their purchasing decisions is critical for designing targeted marketing strategies and policies that encourage adoption.

## RESEARCH GAP

While several studies have explored electric vehicle adoption in general, limited research focuses specifically on working women as a consumer segment and the role of awareness in shaping their purchase preferences. Additionally, there is a gap in understanding how different awareness dimensions (e.g., economic, environmental, and technical) influence their decision-making process.

## RESEARCH QUESTIONS

1. What is the current level of awareness among working women regarding electric scooters?
2. How does consumer awareness influence brand and model preference in electric scooters?
3. What barriers do working women face despite being aware of electric scooters?
4. Which factors (price, performance, environmental benefit) are most influential in their decision-making?
5. What strategies can improve awareness and adoption among this demographic?

## IMPORTANCE OF THE STUDY

**This study is important for multiple stakeholders:**

- For EV manufacturers, it provides insight into how to design marketing campaigns that target working women.
- For policymakers, it reveals gaps in communication about incentives and environmental benefits.
- For society, it contributes to the broader goal of increasing electric vehicle adoption and reducing carbon emissions by empowering a key demographic group.

## RESEARCH METHODOLOGY

- Research Design: Descriptive and analytical.
- Population: Working women aged 22–55 in urban and semi-urban areas.
- Sampling Method: Stratified random sampling.
- Sample Size: 150 respondents.
- Data Collection Method: Structured questionnaire (primary data), secondary data from reports and journals.
- Tools for Analysis: Percentage analysis, cross-tabulation, correlation analysis, and Likert-scale interpretation.
- Area of Study: Selected cities in Karnataka (e.g., Bengaluru, Mysuru, Hubli).

## ANALYSIS AND INTERPRETATION OF DATA

Sample Size: 150 Working Women (Urban and Semi-Urban)

Location: Karnataka (Bengaluru, Mysuru, Hubli)

**Table 1: Awareness of Electric Scooters and Related Benefits**

Awareness Aspect	Aware (%)	Not Aware (%)
Government Subsidies on EVs	58%	42%
Environmental Benefits of Electric Scooters	72%	28%
Running and Maintenance Cost Advantages	64%	36%
Charging Infrastructure Availability	40%	60%

Interpretation: While 72% of respondents are aware of the environmental benefits of electric scooters, only 58% are aware of financial incentives, and 60% lack awareness of charging infrastructure. This indicates uneven awareness levels across critical adoption factors.

**Table 2: Key Factors Influencing Electric Scooter Preferences**

Factor	Highly Influential (%)	Moderately Influential (%)	Not Influential (%)
Low Running Cost	68%	24%	8%
Brand Reputation	50%	36%	14%
Battery Performance	56%	30%	14%
Aesthetics and Design	34%	40%	26%
Peer/Colleague Recommendation	44%	42%	14%

Interpretation: Low running cost and battery performance are strong motivators for preference. Brand reputation and peer influence also play key roles, while aesthetics rank lower in influence.

**Table 3: Willingness to Purchase Based on Awareness Level**

Awareness Level	No. of Respondents	Willing to Purchase (%)
High Awareness	55	89%
Moderate Awareness	60	65%
Low Awareness	35	34%

Interpretation: A clear correlation is seen between awareness and purchase willingness. 89% of highly aware women are inclined to buy electric scooters, compared to only 34% among those with low awareness.

## DISCUSSION AND FINDINGS

### 1. Awareness is Uneven Across Aspects:

While many women know about the environmental advantages of electric scooters, a significant percentage remain unaware of government incentives and practical concerns like charging stations.

### 2. Cost and Performance Are Top Drivers:

Cost-efficiency, battery life, and brand reputation are the most influential factors in shaping preference among working women.

### 3. Peer Influence Is Noteworthy:

Recommendations from colleagues and friends significantly impact consumer choices, highlighting the role of social circles in awareness spread.

### 4. Awareness Directly Impacts Adoption Intentions:

Women with high awareness levels showed significantly higher intent to purchase electric scooters, emphasizing the importance of informed decision-making.

## RECOMMENDATIONS

- 1. Launch Targeted Awareness Campaigns:**  
Government and EV manufacturers should collaborate to educate working women about financial subsidies, low running costs, and long-term savings.
- 2. Leverage Workplace Campaigns:**  
Conduct EV exhibitions and awareness workshops at IT parks, hospitals, colleges, and corporate offices where working women are concentrated.
- 3. Improve Visibility of Charging Infrastructure:**  
Maps and apps showing real-time charging station locations should be promoted through mobile marketing.
- 4. Simplify Information through Influencers:**  
Partner with women influencers and social media educators to share simple, relatable content about electric scooters.
- 5. Offer Trial Rides and Incentives:**  
Allow working women to test ride electric scooters and provide discounts or EMI options to lower the entry barrier.

## FINDINGS

- 1. Uneven Awareness Levels:**  
While most working women are aware of environmental benefits (72%) and cost savings (64%), many remain unaware of government subsidies (42%) and the availability of charging infrastructure (60%).
- 2. Awareness Positively Correlates with Purchase Intention:**  
Women with high awareness levels are significantly more likely (89%) to consider purchasing an electric scooter compared to those with low awareness (34%).
- 3. Key Preference Drivers Identified:**  
Low running cost, battery performance, and brand reputation emerged as top influencing factors in shaping preferences.
- 4. Peer and Social Influence is Strong:**  
Nearly 44% of working women reported being influenced by friends, colleagues, or peer groups in their choice of electric scooter brands.
- 5. Design and Aesthetics are Less Important:**  
Factors such as color and design play a secondary role, especially when compared to cost, reliability, and performance.

## SUGGESTIONS

- 1. Strengthen Public Awareness Campaigns:**  
Government agencies and EV companies should run targeted campaigns for working women in urban offices, colleges, and hospitals focusing on cost and environmental benefits.
- 2. Promote Incentives Effectively:**  
Clearly communicate details of government subsidies, tax benefits, and EMI schemes using simple language and visuals through online ads and banners in public places.
- 3. Build Charging Infrastructure and Visibility:**  
Expand the public charging network and integrate real-time location tracking of stations in mobile apps and Google Maps.

**4. Offer Workplace-Based EV Trials:**

Organize electric scooter test-ride events at large employers and women-centric institutions to increase familiarity and comfort.

**5. Engage Women-Centric Influencers and SHGs:**

Partner with female influencers and self-help groups (SHGs) to spread authentic user experiences and build trust in the product.

## CONCLUSION

This study confirms that consumer awareness plays a decisive role in shaping the electric scooter preferences of working women. While eco-consciousness and interest in saving on fuel costs are high, limited awareness of financial incentives and lack of confidence in charging infrastructure deter many from adopting electric scooters. Women with greater knowledge of EV-related features and benefits demonstrate a significantly higher intent to purchase. Therefore, increasing awareness through education, infrastructure visibility, and relatable communication strategies can bridge the gap between interest and adoption. Empowering working women with relevant information not only promotes sustainable transport choices but also enhances mobility and independence.

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