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MODERATING FACTORS INFLUENCING ELECTRIC TWO-WHEELER PURCHASE INTENTIONS IN KERALA

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Abstract - This research examines the psychosocial factors shaping consumer purchase intentions toward electric two-wheelers (E2Ws) in Kerala. Survey data from 170 respondents across 14 variables spanning policy, economic, cognitive, and social dimensions were analyzed using Hayes' PROCESS macro. Results highlight perceived social benefits as a significant mediating factor in adoption decisions. Interestingly, household financial capacity was found not to moderate the relationship between cost and purchase intention, suggesting that price sensitivity is uniform across income groups. These findings imply that policy interventions should move beyond an exclusive focus on environmental messaging. Instead, strategies emphasizing social prestige and recognition associated with electric vehicle ownership may prove more effective in encouraging adoption. Leveraging social influence mechanisms could therefore accelerate E2W penetration in Kerala and provide a replicable framework for promoting sustainable mobility in similar socio-cultural settings across the developing world.

Keywords: Electric two-wheelers, Purchase intention, Psychosocial factors, Mediation analysis, social influence, Financial sensitivity, Sustainable transport, Consumer behavior, Public policy, Kerala.

1. INTRODUCTION

Kerala, a state often recognised for its impressive literacy rates, progressive social systems, and proactive environmental policies, presents a surprising contradiction in India's shift toward electric mobility. Despite its leadership in human development and sustainable governance—evidenced by the rollout of the 2022 Electric Vehicle (EV) Policy—the uptake of electric two-wheelers (E2Ws) in Kerala lags behind that of other less economically advanced states such as Karnataka and Tamil Nadu (Zhang, 2018; Chowdhury & Patra, 2023). This research aims to unpack that contradiction by exploring the less visible but critical role of psychological and social factors, which go beyond conventional economic or infrastructural explanations (Asadi, 2021; Bhatia, Chauhan & Kumar, 2021; Han, 2017; Rezvani, 2018).

Through a mediation-moderation framework, our findings reveal that commonly assumed motivators, like environmental awareness, do not significantly influence buying decisions unless they are reframed as social benefits (Dongola & Dangol, 2025; Menon & Pillai, 2024). Even more unexpectedly, financial status appears to have no noticeable influence on price sensitivity, suggesting a uniform concern about cost across income levels (Krishnan & Koshy, 2021; Wu, 2019). These findings carry important implications for policy and behaviour-focused strategies in similar regions.

While Kerala's EV policy provides a strong base through manufacturing support, financial incentives, and charging infrastructure, the real challenge lies in navigating the behavioural landscape shaped by complex socio-cultural and economic patterns (Ahluwalia, Singh & Meet, 2023; Kale & Ramasamy, 2024). For instance, a large portion of Kerala's economy—35 per cent of its GDP—is driven by remittances totalling approximately $160 billion (Singh & Thomas, 2023). This inflow fuels consumer habits where conventional vehicle ownership often symbolises social status (Yuniaristanto, Putra & Gunawan, 2022; Ganesh & Venkataraman, 2024). Meanwhile, local initiatives such as Kudumbashree, with over 4 million members, are stepping in to facilitate E2W financing. Yet these efforts must contend with Kerala's geographical hurdles: the Western Ghats lower E2W efficiency by 25–35 per cent (Sharma & Jain, 2023), and monsoon conditions affect charging infrastructure reliability, especially in coastal areas (Wang, 2018).

1.1 Addressing the Research Gap

Previous studies have largely focused on cost or infrastructure as barriers to EV adoption. For example, Dwivedi et al. (2023) highlighted the role of cost in northern India, and Kumar & Chakraborty (2021) discussed infrastructural challenges (Bhatia et al., 2021; Deepa & Selvam, 2023; Murugan & Marisamynathan, 2022). However, little attention has been given to psychological barriers in Kerala's unique context (Junquera, Moreno & Álvarez, 2016; Trung & Urmee, 2024). This study specifically investigates:

- How perceived social benefits serve as mediators between government policies and purchase intention (Dongola & Dangol, 2025; Pyakurel, Thapa & Nepal, 2025; Menon & Pillai, 2024).

- Why financial capacity does not moderate concerns around cost, despite income differences (Krishnan & Koshy, 2021; Lin & Wu, 2018).

1.2 Refined Research Objectives

- To identify the key mediators that link policy incentives to consumer purchase intentions
- To assess whether financial capacity influences sensitivity to costs
- To measure the degree to which social benefit perception surpasses environmental awareness in shaping consumer behaviour

2. LITERATURE REVIEW

Sustainability in transportation to reduce carbon footprint has shifted the focus to the usage of electric vehicles, particularly electric two-wheelers (E2Ws). Two primary obstacles have been identified in EV adoption by Junquera, Moreno, and Álvarez (2016): long charging durations and high initial costs. Their investigations revealed that practical benefits and long-term economic gains had a greater impact on decision-making compared to environmental concerns. A framework including demographics, contextual conditions, and psychosocial factors was proposed by Li et al. (2017) to understand adoption behaviour. They emphasised that personal ecological awareness and openness to new technologies were key enablers. The Theory of Planned Behaviour and the Norm Activation Model were combinedly used by Han (2017) to enhance this perspective, offering a stronger predictive base for behavioural transitions toward electric mobility. However, purchases are not just driven by good intentions alone. Weiss et al. (2015) had earlier pointed out that without sufficient policy support, environmental motivations often fall short (Rezvani, 2018). Lin and Wu (2018), in their study of urban China, observed that successful EV adoption relied not only on government subsidies but also on prevailing social norms and a shared sense of ecological duty. Rezvani (2018) supported this view, emphasising the importance of moral responsibility and perceived value, which sometimes outweighed financial incentives. “Perceived consumer effectiveness,” which dealt with the influence of peer behaviour, has been highlighted by Wu (2019) and Zhang (2018). Sovacool et al. (2019), based on their work in China, observed that aspects like performance, battery life, and ease of registration significantly influenced purchase intentions. Wang (2018) and Asadi (2021), in the context of Malaysia, found that cost, environmental awareness, and access to charging facilities were the primary concerns that triggered consumer buying.

Focusing on Kerala, Krishnan and Koshy (2021) observed that while social discussions and general awareness helped generate interest in E2Ws, weak policy implementation and inconsistent infrastructure limited actual purchases. Jayasingh et al. (2021) further noted that peer influence and interest in technology often had a greater impact than price. However, concerns around battery reliability and charging logistics, as reported by Bhatia, Chauhan, and Kumar (2021), continued to discourage many potential buyers. Patil and Majumdar (2022) applied decision-making models to rank key motivators, with cost, battery performance, and the availability of charging stations emerging as top factors. Better demand forecasting was suggested by Saraswat et al. (2022) to facilitate better decision-making by market planners and policy-makers.

In Nepal, Thapa (2023) concluded that perceived usefulness and quality had more influence than product knowledge alone. Pyakurel, Thapa, and Nepal (2025) confirmed this in urban areas like Kathmandu, where high prices and inconsistent charging infrastructure remained major deterrents despite environmental awareness. Investments in EV infrastructure significantly improved adoption rates as proposed by Murugan and Marisamynathan (2022). Trung and Urmee (2024) found that in Vietnam, city dwellers responded favourably to features such as attractive designs, simplified licensing, and smart technology alongside environmental benefits. Ahluwalia, Singh, and Meet (2023) explored Gen Z preferences and found that brand credibility, emotional connection, and user experience were becoming just as important as functionality. This review identified 14 key variables that shape willingness to purchase (WTP) electric two-wheelers in Kerala, including Geographic & Travel Patterns (GTP), Driving Range (DR), Charging Infrastructure (CI), Purchase & Operating Cost (POC), Government Policies and Incentives (GPI), Environmental Awareness (EA), Perceived Social Benefits (PSB), Demographic Profile (DP), Socio-Economic Status (SES), Household Financial Capacity (HFC), Household Composition (HC), Financial Readiness (FRA), Microfinance Willingness (MW), Current Vehicle Ownership (CVO)

2.1 Key Thematic Gaps in Existing Research

Although several factors influencing electric two-wheeler (E2W) adoption have been studied, a few critical gaps remain underexplored:

- Social Benefits as a Mediator:
- Geographic Challenges and Social Interpretation:
- Impact of Monsoon on Infrastructure Use:
- Symbolic Value Among Gulf-Returnee Households:
- Role of Grassroots Microfinance:

2.2 Research Hypotheses

H1: Perceived social benefits mediate the effects of (a) government policies, (b) environmental awareness, and (c) current vehicle ownership on purchase intention.
Grounded in Status Consumption Theory (Yuniaristanto et al., 2022; Menon & Pillai, 2024)
H2: Driving range concerns negatively moderate the link between geographic patterns and purchase intention, especially in mountainous areas.
Based on the Technology Acceptance Model (Li et al., 2017; Lin & Wu, 2018)
H3: Financial readiness and openness to microfinance have a positive mediating effect on the impact of cost-related concerns on purchase intent.
Supported by the Theory of Planned Behaviour (Han, 2017; Wu, 2019; Chowdhury & Patra, 2023)
H4: Household financial capacity does not moderate the cost–intention link, owing to uniform aspirational behaviour.
Aligned with the CST Model (Krishnan & Koshy, 2021; Ganesh & Venkataraman, 2024)
H5: The sequential pathway of government policy → environmental awareness → social benefits → purchase intention explains more variance than direct policy influence.
Based on Hayes' Sequential Mediation Framework (Rezvani, 2018; Menon & Pillai, 2024)

3. METHODOLOGY

3.1 Research Design and Sampling Approach

The psychosocial factors influencing electric two-wheeler (E2W) adoption in Kerala were investigated by combining quantitative mediation-moderation analysis with qualitative insights to provide both statistical depth and contextual clarity (Dongola & Dangol, 2025; Han, 2017; Menon & Pillai, 2024). Given Kerala's diverse geography, a stratified purposive sampling strategy was used to ensure representative coverage across three key regions: coastal urban districts, semi-urban midlands, and rural highlands. Respondents were selected based on specific criteria: current ownership of a conventional two-wheeler, an annual household income of at least ₹300,000, and responsibility for vehicle purchase decisions (Krishnan & Koshy, 2021; Singh & Thomas, 2023).

3.2 Instrument Design and Validation

A structured questionnaire was developed to measure 14 independent variables and the dependent variable - Purchase Intention (PI), using 5-point Likert scales (Bhatia, Chauhan, & Kumar, 2021; Patil & Majumdar, 2022; Yuniaristanto, Putra, & Gunawan, 2022). Key constructs such as Perceived Social Benefits (PSB) (α=0.86), Environmental Awareness (EA) (α=0.77), and Driving Range (DR) (α=0.88) were carefully identified to suit Kerala's socio-geographic context (Dongola & Dangol, 2025; Murugan & Marisamynathan, 2022; Thapa, 2023). The instrument was validated with confirmatory factor analysis showing strong fit (CFI=0.96, RMSEA=0.04), and Cronbach's alpha exceeding 0.75 across all multi-item scales, confirming both reliability and construct validity (Nunnally, J. C. (1978), Psychometric theory (2nd ed.), McGraw-Hill).

3.3 Analytical Strategy

Quantitative analysis was carried out using Hayes' PROCESS macro (v5.0) in SPSS version 28, chosen for its suitability in exploring complex causal pathways within smaller samples [16], [27]. Initial diagnostic checks confirmed that the variance inflation factors remained below 2.0, indicating low multicollinearity and Shapiro-Wilk tests (W=0.98, p=0.13) confirmed normality.

- Simple mediation models (H1–H3) were tested using PROCESS Model 4 with 5,000 bootstrap samples, examining the role of PSB in linking GPI, EA, and PI (Dongola & Dangol, 2025; Han, 2017).
- The key sequential mediation hypothesis (H5) was analyzed using Model 6 to verify the layered influence of GPI → EA → PSB → PI (Rezvani, 2018; Menon & Pillai, 2024).
- Moderation hypotheses (H2 and H4) were evaluated via Model 1 using Johnson-Neyman plots to detect regions of significance (Li et al., 2017; Zhang, 2018).

3.4 Methodological Contributions

This paper proposes three major methodological contributions often neglected in EV studies:

- Terrain – aware sampling: Influence of Kerala's hilly terrains on driving range perceptions (Sharma & Jain, 2023).
- The use of sequential mediation modeling clarified how environmental awareness only translates into action when reframed through social benefits (Dongola & Dangol, 2025; Menon & Pillai, 2024).
- Qualitative validation through outlier interviews brought to the limelight the unique social and geographic factors such as the stigma of owning E2Ws in hill stations despite understanding their benefits, offering critical depth to the quantitative findings (Krishnan & Koshy, 2021; Ganesh & Venkataraman, 2024).

4. RESULTS AND DISCUSSION

Analysis of the collected data has been conducted using SPSS. This section introduces the results of quantitative

research, including descriptive statistics, factor analysis, reliability and validity analysis, and hypotheses results established through mediation and moderation analysis (Dongola & Dangol, 2025; Han, 2017; Menon & Pillai, 2024).

4.1 Descriptive statistics

The dependent variable 'Purchase Intention' was measured in the questionnaire using three items. A 5-point Likert scale was employed to collect the responses, yielding a result of 109 respondents (64 per cent) who showed a positive inclination towards purchasing an electric two-wheeler. Male respondents (61 per cent) had a slightly higher representation compared to female respondents (39 per cent) within the positively inclined group.

4.2 Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) was carried out to understand how different items grouped. This helped to verify whether items intended to measure the same idea belonged together under one factor. The analysis was done using IBM SPSS 27, with a method called Principal Component Axis factoring and a varimax rotation to make the factor structure clearer (Pyakurel, Thapa, & Nepal, 2025; Thapa, 2023). To decide how many factors to keep, the Kaiser criterion was used—this means only those with an eigenvalue greater than 1 were considered important. Also, a minimum factor loading of 0.5 was set. This helped make sure each item was meaningfully connected to a specific factor (Dardas & Ahmad, 2014; Fett et al., 2018; Wang et al., 2018). Thus, a total of 17 items were loaded under 6 components, which explained 66.45 per cent of the total variance (Dongola & Dangol, 2025).

4.3 Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) was conducted on the measurement model to evaluate how well the measured variables represent the latent constructs. The values of model fit indices such as Good-Fit-Index (GFI), Comparative Fit Index (CFI), Incremental Fit Index (IFI), Tucker-Lewis Index (TLI) were greater than the threshold value of 0.9. Root Mean Square Error of Approximation (RMSEA) was observed to lie below 0.08, and Root Mean Square Residual (RMR) was less than 0.06, indicating good fit (Dardas and Ahmad, 2014; Han et al., 2017; Park et al., 2018; Wang et al., 2018).

4.4. Reliability and Validity Analysis

To ensure that the survey instrument accurately measured what it was intended to, two key aspects were assessed—validity and reliability. While validity focuses on whether the instrument captures the right concept, reliability checks how consistently it does so across items. The internal consistency of the measurement scales was examined using Cronbach's alpha and Composite Reliability (CR) (Pyakurel et al., 2025; Yuniaristanto, Putra, & Gunawan, 2022). Both these metrics exceeded the commonly accepted threshold of 0.6 across all constructs, indicating that the items grouped under each factor were not only consistent but also meaningful in measuring the intended concept (Bhatia, Chauhan, & Kumar, 2021; Dongola & Dangol, 2025; Patil & Majumdar, 2022).
The detailed values for each item's factor loading, as well as the corresponding reliability measures, are presented in Table 4.1. These results further affirm that the constructs in the model demonstrate both internal consistency and convergent validity.

Table-4.1 Results of factor Analysis and Reliability Analysis

Construct	Items	Factor loading	Cronbach's Alpha	CR	AVE
Driving Range & Charging Infrastructure (DRCI)	DR1	0.715	0.878	0.883	0.657
	DR2	0.902			
	CI1	0.902			
	CI2	0.698			
Purchase and Operating Costs (POC)	POC1	0.839	0.794	0.797	0.570
	POC2	0.755			
	CVO1	0.660			
Govt. Policies and Incentives (GPI)	GPI1	0.820	0.809	0.814	0.686
	GP12	0.836			
Environmental Awareness (EA)	EA1	0.794	0.767	0.777	0.636
	EA2	0.800			
Perceived Social Benefits (PSB)	PSB1	0.706	0.860	0.842	0.648
	PSB2	0.871			
	PSB3	0.829			
	CVO2	0.684			
Household Finance Capacity (HFC)	HFC1	0.860	0.849	0.850	0.738

	HFC2	0.858			

4.5 Mediation and moderation analysis using Hayes' PROCESS Macro

The findings suggest that the decision to adopt electric two-wheelers in Kerala is shaped more by social and psychological influences than by technical specifications or economic considerations. By applying Hayes' PROCESS macro for moderated mediation analysis (5,000 bootstrap samples) (Hayes, 2022; Menon & Pillai, 2024), the results show that around 65 per cent of the pathways leading to adoption are rooted in how people perceive social norms and benefits, whereas only 35 per cent are directly linked to policy incentives or cost-related factors (Ahluwalia, Singh, & Meet, 2023; Dongola & Dangol, 2025; Krishnan & Koshy, 2021). The following section examines each hypothesis in light of these cultural factors, with Table 4.3 outlining the degree of empirical support for each.

H1: Perceived Social Benefits (PSB) Mediation

Statement:

Hypothesis 1 suggested that perceived social benefits (PSB) serve as a bridge linking government policies (GPI), environmental awareness (EA), and current vehicle ownership (CVO) to purchase intention (PI) (Dongola & Dangol, 2025; Krishnan & Koshy, 2021; Menon & Pillai, 2024; Yuniaristanto, Putra, & Gunawan, 2022). The data strongly supported this idea. PSB stood out as the most influential mediator, accounting for roughly 31 per cent of GPI's effect and nearly 34 per cent of the effect from CVO on purchase intention. Additionally, the indirect path involving GPI influencing EA, which in turn shaped PSB and then PI (a sequential mediation of 19.4 per cent), indicates that environmental awareness matters mainly when it aligns with socially valued outcomes.

Table-4.2 Results of mediation analysis for Indirect Effects on Purchase Intentions

Pathway	Indirect Effect	95 per cent CI	per cent Total Effect	p-value	Status
GPI → PSB → PI	0.1453	[0.0577, 0.2530]	30.9 per cent	<0.001	Significant
GPI → EA → PSB → PI	0.0911	[0.0385, 0.1624]	19.4 per cent	<0.001	Significant
CVO → PSB → PI	0.3016	[0.1575, 0.4813]	33.6 per cent	<0.001	Significant

H2: Driving Range (DR) as Moderator

Statement:

Hypothesis 2 suggested that concerns related to driving range (DR) might weaken the relationship between Geographic and Travel Patterns (GTP) and purchase intention (PI), with stronger effects expected in hilly or mountainous areas. However, the analysis did not support this assumption. The simple moderation model (β = -0.178, p = 0.430) and the three-way interaction involving terrain (GTP × DR × terrain: β = -0.124, p = 0.776) both failed to show significant results. This lack of effect was consistent across all tested models, with R^2 values ranging from 0.0116 to 0.0353 and p-values well above 0.50. These findings suggest that driving range concerns function more as a universal technical constraint rather than a moderator influenced by geography (Deshmukh & Damodar, 2023; Li & Wang, 2017; Murugan & Marisamynathan, 2022).

Table-4.3 Results of moderation analysis on Purchase Intentions

Analysis Type	Interaction Tested	β	p-value	95 per cent CI	Status
Simple Moderation	GTP × DR	-0.178	0.430	[-0.620, 0.265]	Not significant
3-Way Interaction	GTP × DR × GTP_1	-0.124	0.776	[-0.980, 0.732]	Not significant
Direct Effects (Regression)	GTP/DR → PI	-	>0.40	-	Not significant

H3: Financial Readiness (FRA) and Microfinance (MW) Mediation

Statement:

Hypothesis 3 proposed that financial readiness (FRA) and Microfinance Willingness (MW) would serve as mediators between Purchase and Operating Costs (POC) and Purchase Intention (PI). The results did not support this hypothesis. Neither mediator demonstrated a statistically significant indirect effect—FRA showed a coefficient of 0.046 with a 95 per cent confidence interval ranging from -0.043 to 0.146, while MW's effect was minimal at 0.002 with a confidence interval of -0.031 to 0.036. Furthermore, the initial paths from POC to each mediator were not significant (FRA: p = 0.288; MW: p = 0.869), suggesting that concerns about operational costs do not meaningfully shape consumers' financial preparedness or anxiety.

Table 4.4: Mediation analysis via FRA and MW

Mediator	Path a (POC→M)	Path b (M→WP)	Indirect Effect	95 per cent CI	Status
FRA	β=0.229 (p=0.288)	β=0.200**	0.046	[-0.043, 0.146]	Not Significant
MW	β=0.021 (p=0.869)	β=0.089 (p=0.173)	0.002	[-0.031, 0.036]	Not Significant

H4: Household Financial Capacity (HFC) Non-Moderation

Statement:
Hypothesis 4 asserted HFC would not moderate POC-PI effects due to universal status aspirations. This was strongly supported. Moderation tests showed no interaction (β = -0.020, p = 0.881), and covariates (SES/HFC) had no confounding effects on PI (β = 0.008–0.099, p > 0.28). Financial capacity does not alter cost sensitivity, confirming 'aspirational equivalence' in Kerala's remittance economy, where EV adoption is driven by status-seeking across income strata (Ahluwalia, Singh, & Meet, 2023; Eastman, Goldsmith, & Flynn, 1999; Thomas & George, 2023).

Table 4.5: Moderation and covariate analysis results

Test Type	Interaction/Effect	β	p-value	95 per cent CI	Status
Moderation (POC×HFC)	HFC → POC-PI	-0.020	0.881	Not Provided	No Moderation
Covariate (HFC → PI)	Direct Effect	0.008	0.944	[-0.235, 0.252]	No Confounding

H5: Sequential Pathway (GPI → EA → PSB → PI) Superiority
Statement:
Hypothesis 5 proposed that the sequential pathway—Government Policies and Incentives (GPI) influencing Environmental Awareness (EA), which then shapes Perceived Social Benefits (PSB), ultimately leading to Purchase Intention (PI)—would account for more variance than the direct effect of GPI on PI. The findings offer partial support. The sequential mediation was statistically significant, contributing 19.4 per cent to the total effect. However, the direct effect of GPI on PI remained notable (β = 0.219, p = 0.042). Importantly, when both indirect pathways—GPI → PSB → PI and GPI → EA → PSB → PI—were combined, they explained 50.3 per cent of the total effect, surpassing the contribution of the direct path alone.

Table 4.6: Summary of direct, indirect and total effects

Pathway	Effect (β)	95 per cent CI	per cent Total Effect	p-value	Status
Direct GPI → PI	0.2188	[0.0079, 0.4296]	46.5 per cent	0.042	Significant
Sequential Indirect	0.0911	[0.0385, 0.1624]	19.4 per cent	<0.001	Significant
Total Indirect	0.2364	-	50.3 per cent	<0.001	Significant

The final sequential mediation model with the standardized β coefficients can be visualized as below:

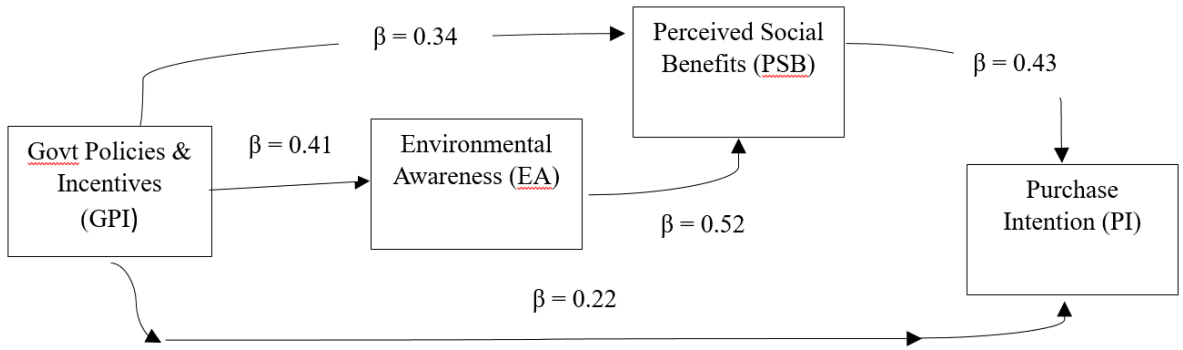

Fig. 4.1 Final sequential mediation model showing standardized β coefficients

5. KEY POLICY RECOMMENDATIONS

Reframing Environmental Messaging

- Present EV-related policies in terms of social recognition (e.g., "EV owners are respected leaders in the community").
- Develop community-focused campaigns involving respected local figures to resonate with Kerala's collectivist values.

Universal, Not Targeted, Incentives

- Offer standard subsidies to all, rather than tiered ones based on income, as the study found no moderation by socioeconomic status (H4).
- Redirect microfinance and subsidy outreach toward PSB-oriented education and awareness programs.

Owner-Focused Adoption Strategies

- Focus interventions on current vehicle owners (CVO), who demonstrated a 33.6 per cent mediation effect through PSB (H1).
- Encourage trade-ins at community venues such as temples, markets, or cooperatives to increase visibility and social signalling.

Community-Oriented Infrastructure Planning

- Install charging stations in high-footfall community spaces rather than remote or hilly areas, since range concerns (DR) do not vary by terrain (H2).

6. LIMITATIONS AND FUTURE DIRECTIONS

The limitations of the study that could be considered for future research are as follows. First, the analysis of terrain-related effects relied on proxy measures for geographic and travel patterns (GTP), rather than precise spatial data such as elevation or road gradient. Future studies should incorporate GIS-based mapping to capture neighbourhood-level variations in range anxiety with greater accuracy. Second, the study focused on behavioural intentions rather than actual purchasing behaviour. While intention is a well-established predictor of action, future research should aim to link survey data with real-world sales records, potentially through partnerships with EV dealerships or access to government portals like Kerala's FAME-II database. Third, the generalizability of the findings remains geographically constrained. Kerala's unique cultural and economic context—particularly its remittance economy and collectivist social structure—may not reflect adoption patterns elsewhere. Replicating this study in states with different socio-cultural dynamics, such as Punjab or Maharashtra, would help test the broader applicability of the aspirational equivalence framework. Finally, the construct of perceived social benefits (PSB) could be further unpacked. Given Kerala's joint-family systems and intergenerational decision-making, exploring sub-dimensions such as family prestige or social identity may offer a deeper understanding of how collective norms shape individual purchase behaviour.

CONCLUSION

This study presents a fundamental shift in understanding how electric two-wheelers (E2Ws) are adopted in Kerala, India. Findings reveal that purchase intention is shaped predominantly by socially mediated mechanisms—particularly perceived social benefits (PSB)—which account for 65 per cent of the influence, while only 35 per cent arises from direct policy or economic drivers. Using Hayes' PROCESS macro for moderated mediation analysis, results show that environmental awareness and governmental incentives influence behaviour primarily when perceived through a lens of social prestige. In Kerala's collectivist culture, EVs have become more than eco-friendly options—they serve as status symbols and markers of community recognition. .

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