

“Trusting the Transition: The Role of Policy Credibility and Institutional Support in EV Continuance Intention”

Ms. Sijimol Joshua¹, Rtd.Prof. Dr. Siby Zacharias²

¹ Research Scholar, School of Management and Business Studies, Mahatma Gandhi University Kottayam, Kerala, India
Sijimoljoshuamba@gmail.com

² Research Guide, School of Management and Business Studies, Mahatma Gandhi University Kottayam, Kerala, India
Sibymaya62@gmail.com

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ABSTRACT

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Introduction: Governments worldwide increasingly promote electric vehicles (EVs) as a strategy to reduce greenhouse gas emissions, decrease fossil fuel dependency, and improve urban air quality. While policy initiatives such as financial incentives, tax benefits, and charging infrastructure development have accelerated EV adoption, the long-term sustainability of electric mobility depends not only on initial adoption but also on users' continuance intention. In emerging EV ecosystems, uncertainty regarding policy stability and institutional readiness may influence users' post-adoption evaluations and their willingness to continue using EVs. .

Objectives: This study aims to examine how policy credibility and institutional support influence EV users' continuance intention through the mediating mechanisms of confirmation and satisfaction within the framework of Expectation-Confirmation Theory (ECT).

Methods: The study adopts a quantitative cross-sectional research design and collects survey data from registered electric vehicle users in Kerala, India. The relationships among policy credibility, institutional support, confirmation, satisfaction, and continuance intention are analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) through SmartPLS software.

Results: The results reveal that both policy credibility and institutional support significantly enhance confirmation of expectations among EV users. Confirmation shows a strong positive influence on satisfaction, and satisfaction emerges as the most significant determinant of continuance intention. The findings further indicate that confirmation and satisfaction act as key mediating mechanisms linking institutional and policy factors to sustained EV usage behaviour.

Conclusions: Mi tempus imperdiet nulla malesuada. Magna fermentum iaculis eu non diam phasellus vestibulum. Consectetur adipiscing elit dui tristique sollicitudin nibh sit amet commodo. Elit scelerisque mauris pellentesque pulvinar. Et malesuada fames ac turpis egestas maecenas pharetra convallis posuere. Elementum integer enim neque volutpat ac tincidunt vitae semper.

Keywords: Electric Vehicles; Policy Credibility; Institutional Support; Continuance Intention; Expectation-Confirmation Theory; Satisfaction; PLS-SEM

INTRODUCTION

Governments across the globe are increasingly promoting electric vehicles (EVs) as a key solution to reduce greenhouse gas emissions, dependence on fossil fuels, and urban air pollution. While policy interventions such as subsidies, tax exemptions, and charging infrastructure development have successfully accelerated EV adoption, sustaining continued usage remains a major challenge. In many emerging economies, EV users face uncertainty regarding policy continuity, incentive withdrawal, and institutional readiness, which may weaken their intention to continue using EVs over time.

Prior EV research has predominantly focused on adoption intentions using technology acceptance frameworks, offering limited insights into post-adoption decision-making. Continuance intention, however, is shaped not only by vehicle performance but also by users' trust in the policy and institutional environment supporting EV usage. In contexts where EV ecosystems are still evolving, policy credibility and institutional support become critical signals that shape users' post-adoption evaluations.

This study addresses this gap by examining EV continuance intention through the lens of policy credibility and institutional support, integrated within Expectation-Confirmation Theory (ECT). By doing so, the study responds to recent calls for extending post-adoption models beyond individual-level technological factors to include macro-level institutional influences.

Objectives

The primary objective of this study is to examine the role of policy credibility and institutional support in shaping the continuance intention of electric vehicle (EV) users within the framework of Expectation-Confirmation Theory (ECT).

Specifically, the study aims to:

1. To analyse the influence of policy credibility on confirmation of expectations among EV users.
2. To examine the effect of institutional support on confirmation in the context of EV usage.
3. To evaluate the relationship between confirmation and user satisfaction.
4. To assess the impact of satisfaction on continuance intention of EV users.
5. To investigate the mediating role of confirmation and satisfaction in linking policy credibility and institutional support with continuance intention.

LITERATURE REVIEW

EV Post-Adoption and Continuance Intention

Continuance intention refers to a user's willingness to persist with a technology after initial adoption based on accumulated usage experiences. In the EV context, continuance intention is particularly important because switching back to internal combustion engine vehicles remains a viable alternative. Studies indicate that dissatisfaction with charging availability, policy uncertainty, and maintenance support can negatively influence continued EV usage (Rezvani et al., 2018) [1].

Expectation-Confirmation Theory in EV Research

Expectation-Confirmation Theory posits that users form expectations prior to adoption, compare perceived performance with these expectations during use, and develop confirmation or disconfirmation judgments. Confirmation positively affects satisfaction, which subsequently determines continuance intention (Bhattacharjee, 2001) [2]. Recent EV studies have applied ECT to explain continuance intention, demonstrating the central role of satisfaction in sustaining EV usage (Wang et al., 2021) [3]. However, most of these studies focus on technological and economic expectations, neglecting policy-related expectations.

Policy Credibility and User Trust

Policy credibility reflects users' belief that government policies are stable, consistent, and reliably implemented over time. Credible policies reduce uncertainty and enhance confidence in long-term investments such as EVs. Empirical studies suggest that inconsistent subsidies and abrupt policy reversals can undermine consumer trust and negatively affect long-term technology use (Li et al., 2020) [4]. In EV ecosystems, policy credibility shapes expectations regarding cost savings, infrastructure expansion, and regulatory support.

Institutional Support in EV Ecosystems

Institutional support refers to the effectiveness of public infrastructure, administrative facilitation, information availability, and coordination among governmental agencies. Strong institutional support reduces operational barriers and enhances users' perceived control and convenience. Prior research highlights that inadequate charging infrastructure and weak institutional coordination are major deterrents to sustained EV usage (Sovacool et al., 2019) [5].

Satisfaction as a Post-Adoption Mechanism

Satisfaction represents an affective evaluation of users' overall experience with EV usage. ECT-based studies consistently show that satisfaction is the strongest predictor of continuance intention across technology contexts (Thong et al., 2006) [6].

HYPOTHESIS DEVELOPMENT

Policy Credibility and Confirmation

When EV users perceive government policies as credible and stable, their expectations regarding long-term benefits and institutional commitment are more likely to be confirmed during actual usage.

H01 : There is no significant relationship between policy credibility and confirmation among electric vehicle users.

H1: Policy credibility positively influences confirmation.

Institutional Support and Confirmation

Effective institutional support enhances users' experiences with charging access, administrative processes, and information availability, leading to stronger confirmation of expectations.

H02 : There is no significant relationship between institutional support and confirmation among electric vehicle users.

H2: Institutional support positively influences confirmation.

Confirmation and Satisfaction

Confirmation reflects a cognitive comparison process that directly shapes affective responses. Higher confirmation of expectations leads to greater satisfaction with EV usage.

H03: There is no significant relationship between confirmation and satisfaction among electric vehicle users.

H3: Confirmation positively influences satisfaction.

Satisfaction and Continuance Intention

Satisfied EV users are more likely to continue using their vehicles, even in the presence of infrastructural or market challenges.

H04: There is no significant relationship between satisfaction and continuance intention among electric vehicle users.

H4: Satisfaction positively influences continuance intention.

METHODS

Study Context and Research Design

This study adopts a quantitative, cross-sectional research design to examine the determinants of electric vehicle (EV) continuance intention from a post-adoption perspective. The research is grounded in Expectation-Confirmation Theory (ECT) and institutional trust literature, focusing on how policy credibility and institutional support shape users' post-adoption evaluations. A survey-based approach was employed, as it is appropriate for capturing perceptual constructs and behavioural intentions in technology continuance research.

Target Population

The target population of the study consists of registered electric vehicle (EV) users in the state of Kerala, India. According to official records published by the Motor Vehicles Department (MVD), Government of Kerala, the total number of registered electric vehicles in the state is 207,621 at the time of the study [7]. This population represents active EV users who are exposed to state and central government EV policies, incentives, and institutional support mechanisms.

Consistent with the post-adoption focus of the study, the population was conceptually restricted to EV users with a minimum of six months of continuous usage experience, ensuring that respondents had sufficient interaction with the EV ecosystem to form confirmation and satisfaction judgments.

Sampling Technique

Although the population size was known from official MVD registration statistics, probability sampling could not be implemented due to the non-availability of a publicly accessible sampling frame containing contact details of registered EV users. Therefore, the study employed a purposive sampling technique, which is widely accepted in post-adoption, sustainability, and transport research involving specialised user groups.

Purposive sampling enabled the deliberate selection of respondents who met predefined eligibility criteria and were capable of providing informed responses regarding EV continuance intention and policy-related perceptions.

Sample Size Determination

The sample size for the study was calculated using a population-based approach, as the total population of registered EV users in Kerala was known ($N = 207,621$) from MVD records [7]. Cochran's sample size formula with finite population correction was applied, assuming a 95% confidence level, a 5% margin of error, and maximum population variability ($p = 0.50$).

The calculation yielded a minimum required sample size of 383 respondents. The final usable sample collected for the study met and exceeded this threshold, thereby ensuring adequate representativeness of the registered EV user population and sufficient statistical power for model estimation.

Inclusion Criteria for Purposive Sampling

To ensure theoretical and empirical alignment with the post-adoption framework, respondents were included only if they satisfied all of the following criteria:

1. The respondent is a registered EV user in Kerala.
2. The respondent has at least six months of EV usage experience.
3. The respondent has direct exposure to EV-related government policies, such as purchase subsidies, tax benefits, or charging infrastructure initiatives.
4. The respondent is actively involved in day-to-day EV usage and charging decisions.

These criteria ensured that the collected data accurately reflected informed post-adoption evaluations rather than initial adoption perceptions.

Data Collection Procedure

Data were collected using a structured questionnaire administered through both online and offline modes. Respondents were approached via EV owner communities, authorised service centres, charging stations, and EV user networks across Kerala. Prior to full-scale data collection, the questionnaire was pre-tested to ensure clarity and contextual relevance.

RESULTS

The demographic profile indicates that the majority of respondents are male EV users (61.88%), while female users constitute 38.12% of the sample. This distribution reflects the current gender pattern observed in EV ownership in

emerging markets, where early adoption is still relatively higher among males due to mobility needs, purchasing autonomy, and exposure to new technologies.

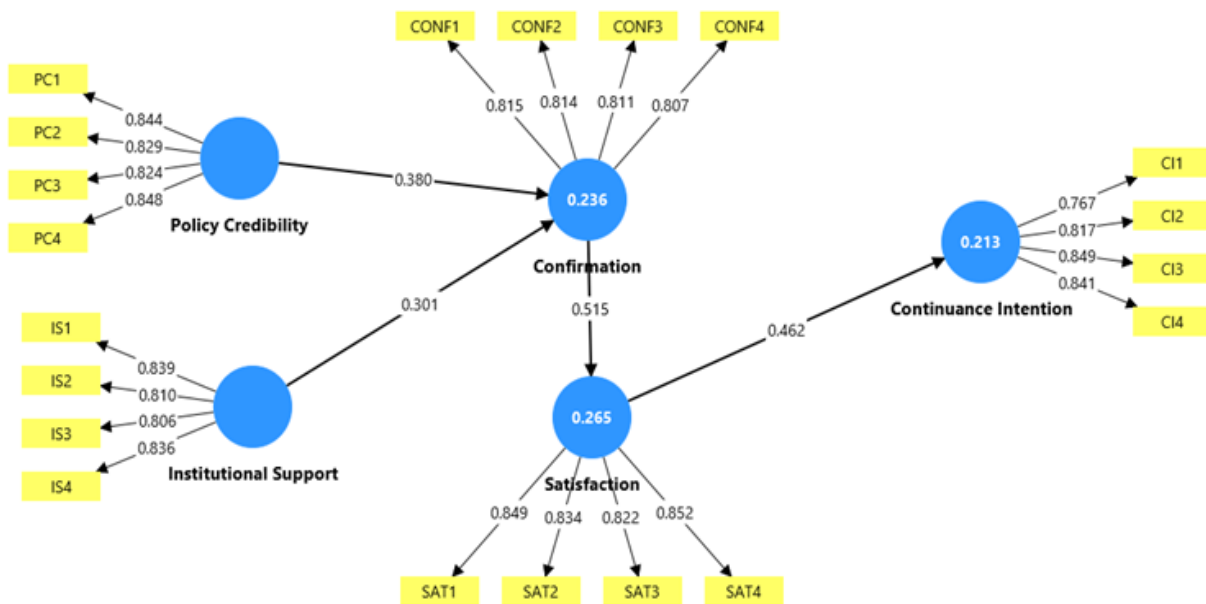
In terms of age, the sample is dominated by respondents in the 31–40 years age group (33.94%), followed by those aged 18–30 years (28.46%). This suggests that EV adoption and continued usage are particularly prominent among economically active and professionally engaged age groups, who are more likely to be receptive to policy incentives, long-term cost benefits, and sustainability considerations. The presence of users above 40 years further indicates growing diffusion of EVs across mature consumer segments.

The educational profile reveals a highly educated respondent base, with nearly 90% holding graduate or postgraduate qualifications, and an additional 10.44% possessing doctoral degrees. This indicates that EV continuance behaviour is strongly represented among individuals with higher educational attainment, who are more capable of evaluating policy credibility, institutional support mechanisms, and long-term technological implications.

Regarding EV usage experience, a substantial proportion of respondents report more than three years of EV usage (46.47%), while only 13.58% are recent users with less than one year of experience. This confirms that the sample predominantly consists of experienced EV users, making it well-suited for analysing post-adoption constructs such as confirmation, satisfaction, and continuance intention. The distribution also strengthens the validity of applying Expectation-Confirmation Theory in the present study.

Measurement Model

Image 1: Measurement Model



The measurement model demonstrates strong indicator reliability and construct validity. All observed indicators exhibit high outer loadings, exceeding the recommended threshold of 0.70, indicating that the items adequately represent their respective latent constructs. The consistency of loadings across Policy Credibility, Institutional Support, Confirmation, Satisfaction, and Continuance Intention confirms internal consistency reliability.

Indicator Reliability

The reliability and convergent validity results indicate a strong and well-specified measurement model. Cronbach’s alpha and composite reliability values for all constructs exceed the recommended threshold of 0.70, confirming high internal consistency reliability. The Average Variance Extracted (AVE) values are all above 0.50, demonstrating adequate convergent validity and indicating that each construct explains more than half of the variance in its indicators. Overall, the results confirm that the constructs are reliable, valid, and suitable for structural model analysis.

Table 1: Internal consistency & Convergent Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Confirmation	0.828	0.828	0.886	0.659
Continuance Intention	0.837	0.845	0.891	0.671
Institutional Support	0.842	0.857	0.893	0.677
Policy Credibility	0.857	0.860	0.903	0.700
Satisfaction	0.861	0.865	0.905	0.705

Discriminant Validity

The HTMT values for all construct pairs are below the conservative threshold of 0.85, indicating adequate discriminant validity among the latent constructs. The highest HTMT value is observed between Confirmation and Satisfaction (0.606), which is theoretically expected given their close conceptual relationship in Expectation–Confirmation Theory, yet it remains well within acceptable limits

Table 2: Discriminant Validity

	Confirmation	Continuance Intention	Institutional Support	Policy Credibility
Confirmation				
Continuance Intention	0.282			
Institutional Support	0.355	0.152		
Policy Credibility	0.451	0.127	0.031	
Satisfaction	0.606	0.537	0.287	0.194

Fornell – Larcker

Table 3: Fornell–Larcker criterion

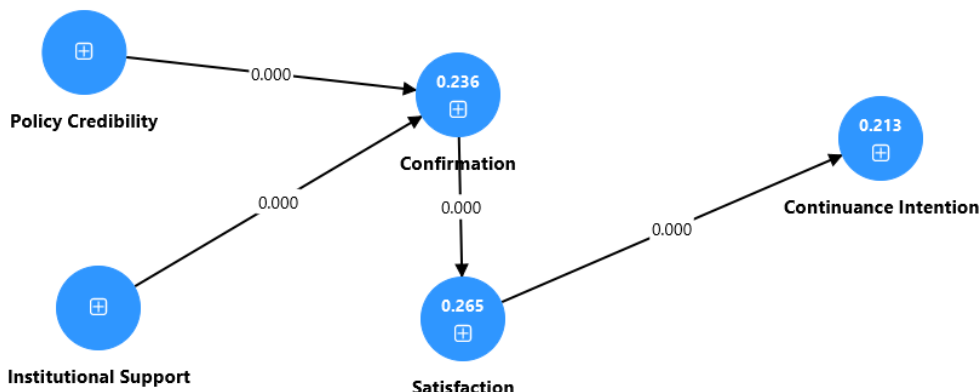
	Confirmation	Continuance Intention	Institutional Support	Policy Credibility	Satisfaction
Confirmation	0.812				
Continuance Intention	0.237	0.819			
Institutional Support	0.303	0.133	0.823		
Policy Credibility	0.382	0.107	0.005	0.837	
Satisfaction	0.515	0.462	0.248	0.166	0.839

The results satisfy the Fornell–Larcker criterion for discriminant validity, as the square root of the AVE for each construct (diagonal values) is greater than its correlations with other constructs. This indicates that each construct shares more variance with its own indicators than with other latent variables

Assessment of the structural model

Following the establishment of a satisfactory measurement model, the structural model was assessed to test the hypothesised relationships among constructs. The evaluation focused on collinearity diagnostics, path coefficients, coefficient of determination, effect sizes, and predictive relevance.

Image 2: Structural Model



Collinearity assessment

All variance inflation factor (VIF) values for the indicators are well below the recommended threshold of 3.0, indicating no multicollinearity issues in the measurement model. The VIF values are consistently low and closely clustered, suggesting that the indicators do not exhibit redundant information or excessive correlation. Overall, the results confirm that collinearity is not a concern, and the measurement model is stable and reliable for subsequent structural analysis.

Table 4: Collinearity assessment

	VIF
CI1	1.646
CI2	1.752
CI3	1.993
CI4	1.973
CONF1	1.755
CONF2	1.764
CONF3	1.811
CONF4	1.677
IS1	1.777
IS2	1.909
IS3	1.839
IS4	1.868
PC1	1.973
PC2	2.011
PC3	1.876
PC4	2.031
SAT1	2.015
SAT2	2.022
SAT3	1.931
SAT4	2.038

Path coefficients and hypothesis testing

Table 5 : Path coefficients and hypothesis testing

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Confirmation Satisfaction ->	0.515	0.516	0.036	14.384	0.000
Institutional Support -> Confirmation	0.301	0.304	0.037	8.022	0.000
Policy Credibility -> Confirmation	0.380	0.382	0.044	8.708	0.000
Satisfaction -> Continuance Intention	0.462	0.465	0.037	12.423	0.000

H1: Policy Credibility → Confirmation

The path coefficient from **Policy Credibility to Confirmation** is positive and statistically significant ($\beta = 0.380$, $t = 8.708$, $p < 0.001$). This result indicates that higher perceived credibility of EV-related government policies significantly enhances users’ confirmation of expectations. The strong t-value reflects the stability of this relationship across bootstrap samples, while the low standard deviation suggests minimal estimation error. This finding confirms that when EV users perceive policies as consistent, reliable, and transparent, their initial expectations regarding EV adoption are more likely to be confirmed during actual usage. Thus, **H1 is supported**.

H2: Institutional Support → Confirmation

The relationship between **Institutional Support and Confirmation** is also positive and statistically significant ($\beta = 0.301$, $t = 8.022$, $p < 0.001$). This result demonstrates that effective institutional mechanisms—such as charging infrastructure availability, administrative facilitation, and information support—play a crucial role in reinforcing users’ confirmation of expectations. Although the magnitude of this effect is slightly lower than that of policy credibility, it remains substantively meaningful and statistically robust. The findings suggest that institutional readiness complements policy credibility in shaping users’ cognitive evaluations of EV usage experiences. Therefore, **H2 is supported**.

H3: Confirmation → Satisfaction

The path from **Confirmation to Satisfaction** exhibits a strong and highly significant effect ($\beta = 0.515$, $t = 14.384$, $p < 0.001$). This represents the strongest relationship in the model and aligns closely with the core premise of Expectation-Confirmation Theory. The high path coefficient indicates that users’ cognitive confirmation of expectations translates directly into affective satisfaction with EV usage. The magnitude and significance of this relationship confirm that confirmation is the primary antecedent of satisfaction in the post-adoption phase. Accordingly, **H3 is strongly supported**.

H4: Satisfaction → Continuance Intention

The relationship between **Satisfaction and Continuance Intention** is positive and statistically significant ($\beta = 0.462$, $t = 12.423$, $p < 0.001$). This finding indicates that satisfied EV users exhibit a stronger intention to continue using electric vehicles over time. The substantial path coefficient underscores the central role of satisfaction in driving sustained EV usage behaviour. The high t-value and low standard deviation further confirm the robustness of this effect. Hence, **H4 is supported**, validating satisfaction as a key behavioural determinant in EV post-adoption research.

Indirect Effect

Table 6: Indirect Effect

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Confirmation -> Continuance Intention	0.238	0.240	0.027	8.675	0.000
Institutional Support -> Continuance Intention	0.071	0.073	0.013	5.442	0.000
Institutional Support -> Satisfaction	0.155	0.157	0.024	6.566	0.000
Policy Credibility -> Continuance Intention	0.090	0.092	0.015	6.033	0.000
Policy Credibility -> Satisfaction	0.196	0.197	0.026	7.508	0.000

The results indicate that **confirmation has a positive and statistically significant effect on continuance intention**, suggesting that when EV users perceive their expectations to be met, they are more inclined to continue using electric vehicles. This highlights the importance of cognitive evaluation in shaping post-adoption behavioural intentions.

Institutional support shows a significant positive influence on both **satisfaction and continuance intention**. Although the direct effect on continuance intention is modest, it remains statistically robust, indicating that the availability of charging infrastructure, administrative facilitation, and institutional responsiveness directly enhance users’ satisfaction and encourage continued EV usage.

Similarly, **policy credibility** exerts significant positive effects on **satisfaction and continuance intention**. This finding suggests that trust in the stability, consistency, and reliability of EV-related policies not only improves users’ affective evaluations but also directly strengthens their intention to persist with EV usage.

Overall, the results demonstrate that **cognitive (confirmation), affective (satisfaction), and institutional (policy credibility and institutional support) factors jointly shape EV continuance intention**, underscoring the critical role of both experiential and policy-related drivers in sustaining electric vehicle adoption.

Specific Indirect Effect - Mediation Effect

The mediation results demonstrate that **confirmation and satisfaction jointly play a central mediating role** in translating institutional and policy-related factors into continuance intention. The **serial indirect effects** of institutional support and policy credibility on continuance intention through confirmation and satisfaction are positive and statistically significant, indicating that these external drivers influence continued EV usage primarily by shaping users’ cognitive evaluations and affective responses.

Furthermore, the **indirect effects on satisfaction through confirmation** are significant for both institutional support and policy credibility, confirming that users’ perceptions of institutional and policy environments first strengthen confirmation, which subsequently enhances satisfaction. The significant indirect effect of **confirmation on continuance intention via satisfaction** reinforces the expectation–confirmation mechanism, highlighting satisfaction as the key channel through which cognitive assessments translate into sustained behavioural intention.

Table 7: Mediation Effect

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Institutional Support -> Confirmation -> Satisfaction -> Continuance Intention	0.071	0.073	0.013	5.442	0.000
Policy Credibility -> Confirmation -> Satisfaction -> Continuance Intention	0.090	0.092	0.015	6.033	0.000
Institutional Support -> Confirmation -> Satisfaction	0.155	0.157	0.024	6.566	0.000
Policy Credibility -> Confirmation -> Satisfaction	0.196	0.197	0.026	7.508	0.000
Confirmation -> Satisfaction -> Continuance Intention	0.238	0.240	0.027	8.675	0.000

Overall, the findings provide strong evidence that **EV continuance intention is predominantly driven by a cognitive–affective mediation process**, rather than by direct effects alone, underscoring the theoretical robustness of the proposed post-adoption model.

Coefficient of determination (R²)

Table 8: R Square

	R-square	R-square adjusted
Confirmation	0.236	0.232
Continuance Intention	0.213	0.211
Satisfaction	0.265	0.263

The R-square values indicate moderate explanatory power of the model. The predictors explain 23.6% of the variance in Confirmation, 26.5% of the variance in Satisfaction, and 21.3% of the variance in Continuance Intention. The minimal difference between R-square and adjusted R-square values suggests model stability and absence of overfitting, confirming that the proposed model provides a meaningful explanation of EV post-adoption behaviour.

Effect size (f²)

The f² values indicate that policy credibility (f² = 0.190) and institutional support (f² = 0.118) have small-to-moderate explanatory effects on confirmation, highlighting their meaningful contribution to users’ cognitive evaluations. Satisfaction shows a moderate effect on continuance intention (f² = 0.271), underscoring its central role in driving sustained EV usage. Overall, the effect sizes confirm that while institutional and policy factors contribute incrementally, satisfaction remains the most influential predictor of continuance intention in the model.

Table 9: F Square

	Confirmation	Continuance Intention	Institutional Support	Policy Credibility	Satisfaction
Confirmation					0.360
Continuance Intention					
Institutional Support	0.118				

Policy Credibility	0.190				
Satisfaction		0.271			

DISCUSSION

This study examined electric vehicle (EV) continuance intention by integrating policy credibility and institutional support within the Expectation–Confirmation Theory (ECT) framework. The findings provide clear evidence that EV continuance behaviour is shaped through a cognitive–affective mechanism, where external policy and institutional factors influence users’ confirmation and satisfaction, which subsequently determine continuance intention.

Policy Credibility and Confirmation

The findings indicate that policy credibility has a significant positive influence on confirmation among EV users. This suggests that when government policies related to electric vehicles are perceived as stable, transparent, and reliable, users are more likely to perceive that their initial expectations are fulfilled. In a policy-driven transition such as electric mobility, credible policies reduce uncertainty and strengthen users’ confidence in their adoption decision. This result extends ECT by demonstrating that confirmation in the EV context is shaped not only by system performance but also by users’ trust in the policy environment.

Institutional Support and Confirmation

The results further reveal that institutional support significantly enhances confirmation. This finding highlights the importance of practical support mechanisms, such as charging infrastructure availability, administrative facilitation, and institutional coordination, in validating users’ expectations during the post-adoption phase. EV users assess the effectiveness of the broader ecosystem alongside vehicle performance, and strong institutional support reinforces their belief that adopting an EV was a sound decision. This underscores the role of institutional readiness as a cognitive determinant of post-adoption evaluation.

Confirmation and Satisfaction

Consistent with the core premise of Expectation–Confirmation Theory, the study finds that confirmation exerts a strong positive effect on satisfaction. This result confirms that satisfaction arises from users’ cognitive evaluation of whether their expectations regarding EV usage and support mechanisms have been met. The strength of this relationship underscores confirmation as the primary antecedent of satisfaction in the post-adoption stage, reinforcing the theoretical validity of ECT in explaining EV user behaviour.

Satisfaction and Continuance Intention

The findings demonstrate that satisfaction significantly influences continuance intention. Satisfied EV users exhibit a stronger intention to continue using electric vehicles, indicating that affective evaluations play a central role in sustaining EV adoption over time. This result aligns with prior post-adoption studies, which consistently identify satisfaction as the most influential determinant of continued technology use. In the EV context, satisfaction reflects a comprehensive assessment of vehicle performance, policy support, and institutional facilitation.

Mediation of Confirmation and Satisfaction

The mediation analysis reveals that confirmation and satisfaction jointly mediate the effects of policy credibility and institutional support on continuance intention. This finding indicates that policy and institutional factors primarily influence continuance behaviour through a sequential cognitive–affective process rather than through direct effects alone. The results highlight that EV continuance intention is best understood as the outcome of a structured evaluation process, where external conditions shape confirmation, which in turn enhances satisfaction and leads to sustained usage.

Theoretical Implications

This study offers several important theoretical contributions to the literature on electric vehicle (EV) post-adoption behaviour and technology continuance. First, the study extends Expectation–Confirmation Theory (ECT) by explicitly incorporating policy credibility and institutional support as upstream antecedents of confirmation. While traditional ECT applications focus primarily on system performance and user experience, this study demonstrates that in policy-driven technologies such as EVs, macro-level institutional and policy factors play a critical role in shaping users' cognitive evaluations.

Second, the findings reinforce the cognitive–affective–behavioural sequence proposed by ECT, wherein confirmation influences satisfaction, which in turn determines continuance intention. The strong mediation effects observed in the model confirm that satisfaction fully operationalises the impact of cognitive confirmation on behavioural outcomes, thereby strengthening the explanatory power of ECT in sustainability-oriented contexts.

Third, by empirically validating the mediating roles of confirmation and satisfaction, the study contributes to post-adoption research by demonstrating that continuance intention is process-driven rather than outcome-driven. This insight advances existing EV literature, which has predominantly relied on direct-effect models, by highlighting the importance of sequential evaluation mechanisms in explaining long-term technology use.

Policy and Managerial Implications

The findings of this study offer several actionable implications for policymakers and institutional stakeholders involved in the promotion of electric mobility.

From a policy perspective, the results underscore the importance of maintaining credible, consistent, and transparent EV policies. Frequent policy changes, uncertainty regarding subsidies, or inconsistent regulatory signals may weaken users' confirmation of expectations and reduce satisfaction, ultimately undermining continuance intention. Policymakers should therefore prioritise long-term policy stability and clear communication to sustain user confidence.

From an institutional standpoint, the study highlights the critical role of effective institutional support mechanisms, such as reliable charging infrastructure, streamlined administrative procedures, and responsive service systems. Strengthening coordination among government agencies and improving the operational efficiency of EV-related institutions can significantly enhance users' post-adoption experiences and satisfaction.

For EV ecosystem stakeholders, including utilities, charging service providers, and manufacturers, the findings suggest that post-adoption engagement strategies should focus not only on technical performance but also on reinforcing users' trust in the broader institutional and policy environment. Enhancing satisfaction through reliable support services can directly contribute to sustained EV usage and long-term diffusion.

Limitations and Future Research Directions

Despite its contributions, this study has certain limitations that should be acknowledged. First, the study adopts a cross-sectional research design, which limits the ability to capture changes in user perceptions over time. Future research could employ longitudinal designs to examine how policy credibility and institutional support evolve and influence continuance behaviour across different stages of EV usage.

Second, the study focuses on EV users within a single regional context, which may limit the generalisability of the findings. Future studies could extend the model to other Indian states or cross-country contexts to compare institutional and policy effects across different regulatory environments.

Third, the model concentrates on cognitive and affective mechanisms proposed by ECT. Future research may enrich the framework by incorporating moderating variables such as risk perception, environmental concern, habit, or trust in government, which may condition the strength of post-adoption relationships.

Finally, future studies could explore additional post-adoption outcomes, such as loyalty, advocacy, and word-of-mouth intentions, to provide a more comprehensive understanding of sustainable EV diffusion.

Conclusion

This study examined electric vehicle continuance intention by integrating policy credibility and institutional support within the Expectation–Confirmation Theory framework. The findings demonstrate that EV continuance behaviour is primarily shaped through a sequential cognitive–affective process, where credible policies and effective institutional support enhance confirmation, which in turn fosters satisfaction and leads to sustained usage intentions.

By foregrounding the role of trust in policy and institutions, the study advances post-adoption research and provides a more holistic explanation of long-term EV diffusion in emerging economies. The results emphasise that trusting the transition is as important as adopting the technology itself, offering valuable insights for theory development, policy formulation, and the sustainable promotion of electric mobility.

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APPENDIX

Table 10: Questionnaire

Section	Construct / Variable	Code	Item Statement / Category	Scale
A	Gender	D1	Male / Female	Nominal
	Age Group	D2	18–30 / 31–40 / 41–50 / 51 and above	Ordinal
	Educational Qualification	D3	Graduate / Postgraduate / Professional	Ordinal
	EV Usage Experience	D4	<1 year / 1–2 years / 2–3 years / 3–4 years / >4 years	Ordinal
B	Policy Credibility	PC1	Government policies related to electric vehicles are consistent over time.	5-point Likert
		PC2	I trust the long-term commitment of the government toward electric vehicle promotion.	5-point Likert
		PC3	EV-related subsidies and incentives are implemented as announced.	5-point Likert
		PC4	Government EV policies provide a reliable environment for continued EV usage.	5-point Likert
B	Institutional Support	IS1	Public charging infrastructure for EVs is adequately available.	5-point Likert
		IS2	Government institutions provide sufficient support for EV users.	5-point Likert
		IS3	Administrative procedures related to EV usage are simple and efficient.	5-point Likert
		IS4	Information and guidance related to EV usage are easily accessible.	5-point Likert
B	Confirmation	CONF1	My experience with EV usage has met my initial expectations.	5-point Likert
		CONF2	The benefits of using an EV are better than I expected.	5-point Likert
		CONF3	Overall, my expectations regarding EV usage have been confirmed.	5-point Likert
		CONF4	EV usage has performed as I anticipated.	5-point Likert

Section	Construct / Variable	Code	Item Statement / Category	Scale
B	Satisfaction	SAT1	I am satisfied with my decision to use an electric vehicle.	5-point Likert
		SAT2	My experience with EV usage has been pleasant.	5-point Likert
		SAT3	Using an EV meets my expectations overall.	5-point Likert
		SAT4	I am happy with my EV usage experience.	5-point Likert
B	Continuance Intention	CI1	I intend to continue using an electric vehicle in the future.	5-point Likert
		CI2	I will not switch back to conventional vehicles.	5-point Likert
		CI3	I plan to keep using an EV as my primary mode of transport.	5-point Likert
		CI4	I expect to continue using electric vehicles for a long time.	5-point Likert