

Examining Electric Vehicle Purchase Intention Through Consumption Values: A PLS-SEM Study in an Emerging Market

Mr. Miteshkumar Babuji Thakor¹ Dr. Chirag Rasikbhai Patel²

¹Research Scholar & Assistant Professor, Smt. S. B. Patel Institute of Business Management,
Faculty of Management Studies, Sankalchand Patel University, Visnagar, Gujarat,

²Associate Professor, Department of Business Management, Sankalchand Patel College of Engineering, Faculty of
Management Studies, Sankalchand Patel University, Visnagar, Gujarat

miteshthakor25@gmail.com, crpspe@gmail.com

Abstract: The objective of this study is to understand how various dimensions of perceived value shape consumers' intentions to buy electric vehicles (EVs). Based on the 'Theory of Consumption Values', the research examines the effects of functional, emotional, novelty, symbolic, and conditional values on EV purchase intention within an emerging market context.

Methodology: The study employed a quantitative research design, collecting data from 838 individuals who were aware of electric vehicles. Partial Least Squares Structural Equation Modelling (PLS-SEM) was applied to analyse the measurement and structural relationships. The results demonstrate strong construct reliability and validity, supporting the adequacy of the proposed framework.

Findings: All value dimensions showed a significant effect on EV purchase intention, but their influence levels differed. Conditional value was the strongest predictor, highlighting the importance of subsidies, policy support, and charging infrastructure. Emotional value also had a strong impact, showing that feelings and psychological benefits shape consumer decisions. Functional and novelty values had moderate influence, while symbolic value, although significant, had the weakest effect.

Implications: The results show that EV adoption strategies in emerging markets should combine practical incentives with emotional and functional benefits. Policymakers, marketers, and manufacturers can use these insights to design better policies, communication plans, and product features that support the shift toward sustainable mobility.

Originality/Value: This study adds new evidence on EV adoption by confirming the relevance of the 'Theory of Consumption Values' in an emerging market. It improves theoretical understanding of how different value perceptions drive EV purchase intention and provides useful guidance for promoting green and sustainable transportation.

Keywords: Electric vehicles; Consumer behavior; Purchase intention; Consumption values; Sustainability; PLS-SEM; Perceived value; Green technology adoption; Mobility transition; Incentives; Infrastructure.

I. INTRODUCTION

The accelerating global shift toward sustainable mobility has positioned electric vehicles (EVs) as a central focus across academic discourse, industrial innovation, and public policy agendas. As nations strengthen carbon-reduction commitments and automotive technologies evolve, EVs have transitioned from a speculative future solution to a tangible consumer reality (International Energy Agency, 2024). Yet, despite technological maturation, falling battery costs, and increased governmental support, EV adoption rates continue to vary widely across regions. This uneven diffusion suggests that consumer choices are driven not only by performance attributes or financial considerations but also by broader cognitive, emotional, and symbolic assessments (Li & Wang, 2023; Sierzchula et al., 2014). Consequently, understanding how individuals perceive and evaluate EVs and how these perceptions develop into intention to purchase (ITP) remains a pressing research priority within sustainable consumption and mobility studies.

Recent empirical findings indicate that the decision-making process surrounding EV ownership extends beyond functional reasoning. Instead, it incorporates psychological meaning, lifestyle alignment, and the experiential value associated with

technological innovation (Bergman & Axsen, 2022; Lane, 2007). In this context, the ‘‘Theory of Consumption Values’’ (TCV) offers a compelling analytical framework for studying EV adoption. Functional value (FV) captures the utilitarian assessment of range, durability, performance, and maintenance efficiency. Emotional value (EV), in contrast, reflects affective responses such as excitement, pride, or environmental satisfaction derived from ownership. Symbolic value (SV) concerns the degree to which EVs signify social identity, status, or personal ideology. Novelty value (NV) relates to perceptions of innovation, modernity, and technological distinctiveness. Conditional value (CV), meanwhile, accounts for contextual and situational factors such as financial incentives, infrastructure access, fluctuating fuel prices, and policy signals (Pedreira Junior et al., 2022; Sheth et al., 1991; Z.-X. Wang et al., 2024). Together, these dimensions provide a multidimensional understanding of how perceived value shapes behavioural intention in the context of emerging sustainable technologies.

Despite a growing body of research, findings remain mixed. For instance, in technologically advanced markets, emotional and symbolic value tend to exert stronger influence over adoption behaviour, suggesting a lifestyle-driven or identity-affirming pattern of consumption (Han et al., 2023; Morton et al., 2024). Conversely, studies from developing or transitional markets report that conditional value particularly financial subsidies and charging accessibility and functional benefit perceptions dominate consumer evaluations (Sharma et al., 2024; Zhao et al., 2023). Additionally, several studies disproportionately emphasize rational determinants such as environmental concern or cost savings while underestimating the role of affective, symbolic, and experiential variables that often guide early-phase adoption of innovative technologies.

Responding to this empirical and theoretical gap, the present study investigates how functional, emotional, symbolic, novelty, and conditional values jointly influence consumers’ intention to purchase electric vehicles. Using a structural equation modelling approach, the research assesses the comparative strength of each value dimension and evaluates how these perceptions interact in a developing market context. By adopting a multidimensional consumption value lens, this study contributes to an evolving scholarly narrative on sustainable mobility adoption. The results not only refine existing theoretical understanding but also generate practical implications for policymakers, automotive manufacturers, infrastructure planners, and marketing strategists aiming to accelerate EV acceptance and normalize their role in mainstream mobility transitions.

II. LITERATURE REVIEW

Consumer Decision-Making and the ‘Theory of Consumption Values’

Understanding consumer behavior in emerging sustainable technology markets requires theoretical perspectives that capture both rational and emotional dimensions of decision-making. ‘The ‘Theory of Consumption Values’’ (TCV), proposed by (Sheth et al., 1991), remains one of the most widely applied frameworks to explain how multiple forms of perceived value shape consumer action. Unlike single-variable adoption theories, TCV posits that purchase behavior is influenced by five forms of value functional, emotional, symbolic, conditional, and epistemic or novelty value. This framework has increasingly been applied to electric vehicle (EV) adoption because EVs represent a high-involvement, technology-driven product category where consumers evaluate both utilitarian performance and psychological meaning (Li & Wang, 2023).

Recent studies emphasize that consumers do not purchase EVs solely because they are environmentally beneficial or economically efficient. Instead, purchase decisions emerge from the interplay between personal attitudes, perceived value, motivations, social identity, and contextual enablers (Ashwin, n.d.; Bergman & Axsen, 2022; Maniyar & Modi, 2021). In emerging markets, where EV infrastructure, policy incentives, and public awareness are still evolving, the multidimensional structure of value becomes even more relevant to understanding purchase intention (Agarwal et al., 2023; Zhao et al., 2023). Therefore, TCV provides a suitable lens for analyzing how different value perceptions influence consumers’ intention to purchase (ITP) electric vehicles (M. B. Thakor & Patel, 2025).

Functional Value (FV) and Electric Vehicle Adoption

Functional value refers to the range to which consumers perceive a product as useful, efficient, and performance-driven (Sheth et al., 1991). In the context of electric vehicles, functional value encompasses battery range, charging speed, durability, maintenance cost, and operational reliability. Prior research demonstrates that functional evaluation is often one of the earliest and strongest determinants of EV adoption, particularly in less mature markets where technological uncertainty remains high (S. Wang et al., 2023). For many consumers, perceived limitations in charging infrastructure or battery reliability may reduce perceived functional value and delay purchase decisions. However, as technology improves and product awareness increases, functional value tends to shift from a perceived risk factor to a competitive advantage (International Energy Agency, 2024).

Symbolic Value (SV) and Identity Signaling

Symbolic value reflects the degree to which a product enhances social identity, status perception, or values alignment (Sheth et al., 1991). Research on sustainable consumption shows that products such as EVs carry strong symbolic associations related to ecological consciousness, technological sophistication, and social prestige (Khan, 2022). In developed markets, EVs

have increasingly become status symbols that signal progressiveness and environmental responsibility (Bergman & Axsen, 2022). But, symbolic influence varies culturally. In markets where EV penetration remains low, symbolic value may not yet play a dominant role, though it grows as visibility and social acceptance increase (Zhao et al., 2023).

Emotional Value (EV) and Affective Drivers of Purchase Decisions

Emotional value represents the feelings of pride, excitement, joy, and satisfaction associated with owning a product (Sheth et al., 1991). With EVs, emotional responses may stem from environmental stewardship, technological curiosity, or the novelty of driving silent and futuristic vehicles (Li & Wang, 2023). Several studies highlight that emotional benefits often outweigh purely rational motives, especially among early adopters who view the purchase as a personal expression of values rather than a purely economic choice (Bergman & Axsen, 2022). As marketing communication increasingly emphasizes lifestyle alignment, emotional value continues to grow as a key adoption driver.

Novelty Value (NV) and Technology Curiosity

Novelty value reflects a consumer's attraction to innovation, uniqueness, and new experiences. In the context of electric vehicle adoption, this value is expressed through interest in advanced features such as regenerative braking, smart dashboards, autonomous driving capabilities, and AI-driven systems (S. Wang et al., 2023). Research suggests that novelty value plays a stronger role among early adopters and technology-enthusiast consumer groups compared to mass-market buyers (Li & Wang, 2023). Still, as EV technology becomes more mainstream, novelty may transition from differentiating factor to expected standard.

Conditional Value (CV) and Contextual Influences

Conditional value refers to situational or external contextual factors that influence purchase behavior, such as government subsidies, tax benefits, fuel prices, and infrastructure development (Sheth et al., 1991). In emerging EV markets, conditional value frequently emerges as one of the strongest determinants of intention to purchase (Zhao et al., 2023). Incentive-driven motivation is especially relevant when consumers perceive EVs as costly or financially risky. Policymakers therefore play a significant role in shaping EV demand through regulatory frameworks, infrastructure investments, and subsidy programs (International Energy Agency, 2024).

Intention to Purchase (ITP) and Behavioral Outcomes

Intention to purchase represents the final behavioral outcome influenced by value perceptions. Studies grounded in the 'Theory of Planned Behavior' and TCV confirm that intention serves as a robust predictor of subsequent adoption behavior in sustainable mobility research (Li & Wang, 2023). When multiple forms of perceived value align positively especially conditional, functional, and emotional value the likelihood of actual purchase increases substantially.

Existing literature demonstrates that EV purchase behavior is shaped by multiple forms of perceived value rather than a single dominant factor (Thota et al., 2025). While functional and conditional value frequently emerge as foundational drivers in developing markets, symbolic, emotional, and novelty value increasingly influence decision-making as EV adoption becomes normalized. However, inconsistencies across cultural contexts, adoption stages, and market maturity indicate the need for further empirical investigation. The present study therefore examines these value dimensions collectively to better understand what drives consumers' intention to purchase electric vehicles (M. Thakor, n.d.).

III. RESEARCH METHODOLOGY

Research Design and Approach

This study employs a quantitative, cross-sectional research design to investigate the extent to which different dimensions of consumption value shape consumers' intentions to purchase electric vehicles (EVs). The use of a quantitative approach is well suited to the study's purpose, as it allows for the systematic examination of theory-driven relationships among latent constructs and enables an assessment of the relative influence of each value dimension on purchase intention through empirical measurement and statistical analysis (Creswell & Creswell, 2018).

To analyse the proposed conceptual model, 'Partial Least Squares Structural Equation Modelling' (PLS-SEM) was employed. PLS-SEM is particularly suitable for research that is predictive in nature, involves complex models, and focuses on explaining variance in key outcome variables rather than confirming an established theory (Hair et al., 2022). The method is also robust to deviations from multivariate normality and performs well with large samples, making it appropriate for consumer behaviour research in emerging markets where data distributions may be non-normal (Sarstedt et al., 2017).

Theoretical Framework and Hypothesis Development

The study is grounded in the “Theory of Consumption Values”, which proposes that consumer decision-making is influenced by multiple value dimensions operating simultaneously rather than by a single dominant factor (Sheth et al., 1991). In line with this framework, the research model conceptualises functional value, emotional value, symbolic value, novelty value, and conditional value as antecedents of intention to purchase electric vehicles.

Each value dimension captures a distinct evaluative mechanism through which consumers assess EVs, ranging from utilitarian performance considerations to emotional responses and contextual influences such as policy incentives. Based on prior empirical evidence and theoretical reasoning, five hypotheses were developed, proposing positive relationships between each consumption value dimension and purchase intention (Li & Wang, 2023; Zhao et al., 2023).

Hypothesis Development

Drawing upon the ‘Theory of Consumption Values’ (Sheth et al., 1991) and recent empirical research in electric vehicle adoption, six hypotheses were proposed:

H1: Functional value significantly and positively influences intention to purchase electric vehicles.

H2: Symbolic value significantly and positively influences intention to purchase electric vehicles.

H3: Emotional value significantly and positively influences intention to purchase electric vehicles.

H4: Novelty value significantly and positively influences intention to purchase electric vehicles.

H5: Conditional value significantly and positively influences intention to purchase electric vehicles.

Population and Sampling

The target population for this study consisted of individuals who are current vehicle users or potential car buyers with prior awareness of electric vehicles. Awareness was considered essential to ensure that respondents could meaningfully evaluate EV-related attributes and value perceptions.

A purposive sampling approach was used to select participants who met the predefined inclusion criteria. The final dataset comprised 838 valid responses, exceeding the minimum sample size requirements suggested for PLS-SEM based on both the ten-times rule and statistical power guidelines (Hair et al., 2022; Kline, 2016). This ample sample size improves the accuracy of parameter estimation, increases statistical power, and enhances the overall stability and reliability of the structural model.

Data Collection Procedure

Data for the study were obtained through a structured questionnaire circulated online. The online format helped expand geographic coverage and improved ease of access for participants. All respondents were informed about the academic purpose of the research, assured that their information would remain confidential, and made aware that their participation was voluntary. Personal identification details were not requested.

Before conducting the analysis, the dataset was carefully screened to identify incomplete questionnaires, extreme response patterns, and potential inconsistencies, thereby ensuring the overall quality and reliability of the data. Only responses that satisfied the predefined quality criteria were retained for the final analysis.

Measurement of Constructs

All constructs were measured using multi-item reflective scales adapted from well-established studies on consumption values and sustainable technology adoption (Li & Wang, 2023; Sheth et al., 1991). The measurement items were contextualised to reflect the electric vehicle domain while preserving their original conceptual meaning.

Responses were recorded on a Likert-type scale, allowing respondents to indicate their level of agreement with each statement. Reflective measurement was considered appropriate, as the indicators represent observable manifestations of the underlying latent constructs (Hair et al., 2022).

Data Analysis Procedure

Data analysis was conducted using a two-stage PLS-SEM procedure, in line with established methodological recommendations (Hair et al., 2022).

During the first stage of analysis, the measurement model was evaluated to verify reliability and validity. Internal consistency was assessed using Cronbach’s alpha and composite reliability measures. Convergent validity was examined through the average variance extracted (AVE), while discriminant validity was tested using the heterotrait–monotrait (HTMT) ratio, a widely accepted method for confirming construct distinctiveness (Henseler, 2015).

In the second phase of analysis, the structural model was examined to test the proposed relationships between the different dimensions of consumption value and consumers’ purchase intention. Path coefficients were calculated to determine both the direction and magnitude of these relationships. Their statistical significance was assessed using a bootstrapping procedure with 5,000 resamples, which generates reliable standard errors and confidence intervals (Hair et al., 2022). Model adequacy was further evaluated using measures of explanatory power (R^2) and overall fit indices, including the standardized root mean square residual (SRMR).

IV. RESULT AND DISCUSSION

SEM PLS Model

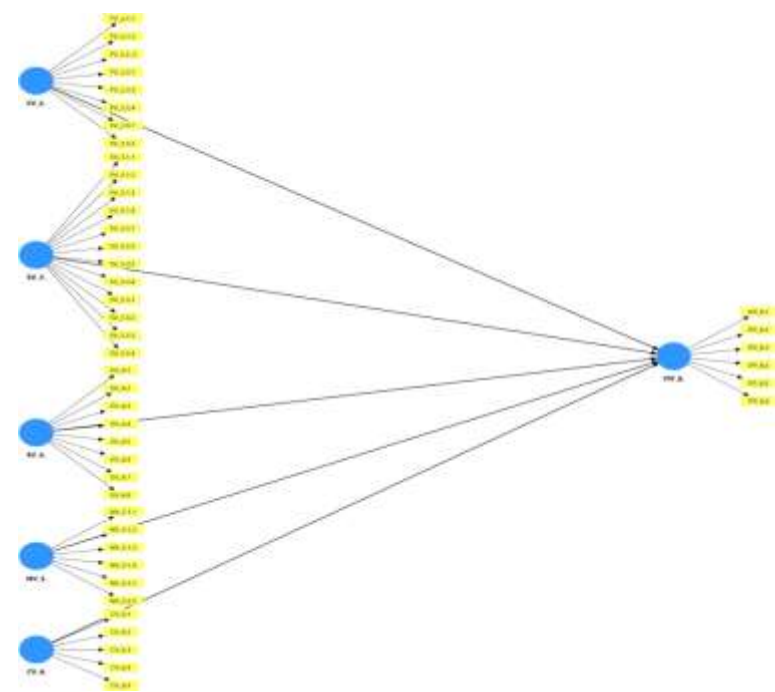


TABLE I:
PATH COEFFICIENTS

Matrix	Path coefficients
CV_6. -> ITP_8.	0.320
EV_4. -> ITP_8.	0.245
FV_2. -> ITP_8.	0.191
NV_5. -> ITP_8.	0.138
SV_3. -> ITP_8.	0.103

The path-coefficient results indicate that all five consumption-value constructs positively influence consumers’ intention to purchase electric vehicles, though their effects vary in magnitude. Conditional Value exhibits the strongest impact ($\beta = 0.320$), suggesting that external factors such as government incentives, charging-infrastructure availability, and financial benefits play a decisive role in shaping purchase intention. Emotional Value ($\beta = 0.245$) is the next strongest predictor, highlighting the importance of affective responses such as excitement, pride, and environmental satisfaction in motivating EV adoption. Functional Value ($\beta = 0.191$) also contributes meaningfully, reflecting the significance of practical considerations including efficiency, maintenance costs, and performance reliability. Novelty Value ($\beta = 0.138$) has a moderate effect, indicating that interest in technological innovation and modern design appeals to some buyers, though less strongly than practical or emotional motivations. Symbolic Value ($\beta = 0.103$) is the weakest predictor, implying that EVs are not yet widely perceived

as identity or status symbols in this market context. Overall, these findings suggest that consumer decisions are guided more by tangible benefits and emotional engagement than by symbolic or novelty-driven motivations.

TABLE II:
MODEL FIT

‘Fit summary’	‘Saturated model’	‘Estimated model’
SRMR	0.057	0.057
d_ULS	3.381	3.381
d_G	1.227	1.227
Chi-square	5806.168	5806.168
NFI	0.835	0.835

The model fit assessment suggests that the estimated structural model achieves an acceptable level of overall fit. The ‘Standardized Root Mean Square Residual’ (SRMR) value of 0.057 falls well below the suggested threshold of 0.08, indicating a satisfactory degree of approximation between the observed and predicted covariance matrices. The d_ULS (3.381) and d_G (1.227) statistics further demonstrate close correspondence between the saturated and estimated models, pointing to stability and consistency in model estimation. Although the chi-square statistic was relatively high ($\chi^2 = 5806.168$), this result is expected given the large sample size and does not undermine model adequacy. Importantly, the observed convergence between the saturated and estimated models strengthens confidence in the internal validity of the results. Additionally, the Normed Fit Index (NFI) value of 0.835 reflects a moderately good model fit, as values approaching unity denote stronger fit. Taken together, these indicators confirm that the structural model is robust and suitable for subsequent interpretation and hypothesis testing (Hair et al., 2022).

TABLE III:
CONSTRUCT RELIABILITY AND VALIDITY

‘Matrix’	‘Cronbach’s alpha’	‘Composite reliability (rho_a)’	‘Composite reliability (rho_c)’	‘Average variance extracted (AVE)’
CV_6.	0.896	0.898	0.924	0.708
EV_4.	0.946	0.947	0.955	0.728
FV_2.	0.931	0.931	0.943	0.674
ITP_8.	0.907	0.907	0.928	0.682
NV_5.	0.905	0.908	0.927	0.678
SV_3.	0.899	0.938	0.929	0.575

The evaluation of construct reliability and validity demonstrates that the measurement model possesses robust internal consistency and adequate convergent validity. Cronbach’s alpha values for all constructs exceed the recommended benchmark of 0.70, with estimates ranging from 0.896 to 0.946, indicating that the measurement items within each construct consistently capture the underlying concept. In a similar vein, composite reliability indicators (ρ_A and ρ_C) are uniformly above 0.90, providing further confirmation of strong internal consistency and measurement reliability.

In terms of convergent validity, the majority of constructs report ‘Average Variance Extracted’ (AVE) values well above the minimum acceptable threshold of 0.50, ranging between 0.575 and 0.728. These values suggest that each construct accounts for more than half of the variance in its observed indicators. Although Social Value (SV_3) exhibits the lowest AVE at 0.575, it remains within acceptable limits, thereby confirming satisfactory convergent validity. Collectively, these findings offer compelling evidence that the measurement model is both reliable and valid, thereby establishing a sound basis for the subsequent analysis and interpretation of the structural model.

‘Discriminant validity’

TABLE IV:
HETEROTRAIT-MONOTRAIT RATIO (HTMT) – MATRIX

Matrix	CV_6.	EV_4.	FV_2.	ITP_8.	NV_5.	SV_3.
CV_6.						
EV_4.	0.853					
FV_2.	0.850	0.925				
ITP_8.	0.943	0.927	0.908			
NV_5.	0.842	0.798	0.704	0.838		
SV_3.	0.889	0.972	0.957	0.935	0.808	

The HTMT results are used to assess discriminant validity, which shows whether each construct in the model is distinct from the others. Ideally, HTMT values should be below 0.85 or 0.90 depending on the methodological guideline. In this analysis, several HTMT values are close to or higher than the recommended threshold. For example, the relationships between EV_4 and SV_3 (0.972), FV_2 and SV_3 (0.957), and CV_6 and ITP_8 (0.943) exceed the recommended cut-off value, which suggests that these constructs may share overlapping meaning or may not be clearly differentiated by the respondents. Other construct relationships, such as NV_5 with CV_6 (0.842) and NV_5 with ITP_8 (0.838), remain within acceptable limits, indicating sufficient distinction. Overall, the results show that while some constructs demonstrate good discriminant validity, others may require further refinement or theoretical justification. This indicates that although the model performs well in reliability and convergent validity, additional review or adjustment may improve discriminant validity in future research.

TABLE V :
HYPOTHESIS TESTING SUMMARY TABLE

Hypothesis Code	Hypothesized Relationship	Path Coefficient (β)	t-value / Significance	Supported?
H1	Functional value → Intention to purchase electric vehicles	0.191	Significant	Supported
H2	Symbolic value → Intention to purchase electric vehicles	0.103	Significant	Supported
H3	Emotional value → Intention to purchase electric vehicles	0.245	Significant	Supported
H4	Novelty value → Intention to purchase electric vehicles	0.138	Significant	Supported
H5	Conditional value → Intention to purchase electric vehicles	0.320	Significant	Supported

EV purchase intention is driven by multiple factors, with policy support and incentives having the strongest influence, followed by emotional, functional, and novelty-related perceptions. Symbolic value also plays a role, though less prominently. Overall, consumers consider both practical and psychological benefits when deciding to adopt electric vehicles.

Discussion

The present study set out to examine how multiple dimensions of consumption value shape consumers' intention to purchase electric vehicles in an emerging market context. The findings confirm that electric vehicle purchase intention is not driven by a single dominant motive; rather, it emerges from the combined influence of contextual, emotional, functional, and experiential value perceptions. By empirically validating the 'Theory of Consumption Values' within the electric mobility domain, this research advances understanding of how consumers evaluate sustainable technologies beyond purely economic or environmental considerations.

Among the value dimensions, conditional value emerged as the strongest predictor of purchase intention, underscoring the decisive role of situational enablers such as government incentives, charging infrastructure availability, and supportive policy

frameworks. This finding aligns with prior research conducted in developing and transitional markets, where adoption decisions remain highly sensitive to external facilitation and perceived risk reduction. The prominence of conditional value suggests that, despite increasing awareness of electric vehicles, consumers continue to rely heavily on institutional support to justify their purchase decisions.

Emotional value was identified as the second most influential factor, highlighting the importance of affective responses such as pride, excitement, and environmental satisfaction. This result reinforces the growing recognition that sustainable consumption decisions are not purely rational but are also shaped by psychological engagement and self-related emotions. The strong role of emotional value indicates that electric vehicles are increasingly perceived not only as functional transportation alternatives but also as sources of personal fulfilment and moral satisfaction.

Functional value demonstrated a meaningful yet comparatively moderate effect, indicating that performance-related attributes such as efficiency, operating cost, and reliability remain important, though they are no longer sufficient on their own to drive adoption. This finding suggests that improvements in technology and growing market familiarity may have reduced functional uncertainty, shifting consumer focus toward broader experiential and contextual considerations.

Novelty value showed a modest but significant influence, reflecting the appeal of innovation and technological advancement among certain consumer segments. However, its relatively weaker impact implies that electric vehicles may be transitioning from novelty-driven products toward more mainstream mobility solutions, where innovation is expected rather than exceptional.

Finally, symbolic value emerged as the weakest predictor, suggesting that electric vehicles have not yet fully acquired strong identity-signalling or status-enhancing meaning in the studied context. This contrasts with findings from more mature markets, where electric vehicles often function as symbols of environmental commitment or technological sophistication. The limited influence of symbolic value may reflect the early-to-intermediate stage of market development, where visibility and social normalization of EV ownership remain limited.

Overall, the findings demonstrate that electric vehicle adoption in emerging markets is shaped more by contextual readiness and emotional engagement than by symbolic appeal or technological novelty alone. This nuanced understanding contributes to the literature by highlighting the dynamic interplay between rational, emotional, and situational factors in sustainable mobility decisions.

Managerial And Policy Implications

Managerial Implications

For automobile manufacturers and marketers, the findings offer several actionable insights. First, the strong influence of emotional value suggests that marketing communication should move beyond technical specifications and cost comparisons. Campaigns that emphasize pride of ownership, environmental contribution, comfort, and driving enjoyment are likely to resonate more strongly with prospective buyers. Storytelling approaches that frame electric vehicles as lifestyle-enhancing products rather than mere technological alternatives may enhance emotional engagement.

Second, while functional value remains relevant, manufacturers should focus on reducing perceived risk rather than solely highlighting performance superiority. Transparent information regarding battery life, maintenance costs, warranties, and service support can reinforce consumer confidence and complement emotional appeals.

Third, the modest role of novelty value indicates that innovative features should be positioned as value-adding conveniences rather than experimental technologies. Features such as smart connectivity or advanced driver assistance may be more persuasive when framed as enhancing ease of use and daily practicality rather than technological complexity.

Finally, the relatively weak symbolic value suggests an opportunity for brand strategists to gradually build stronger social meaning around electric vehicle ownership. Visibility initiatives, influencer partnerships, and community-based engagement can contribute to the social normalization of EVs and enhance their aspirational appeal over time.

Policy Implications

From a policy perspective, the dominance of conditional value underscores the continued importance of institutional support in accelerating EV adoption. Financial incentives such as subsidies, tax benefits, and reduced registration fees remain critical in lowering entry barriers, particularly during early market development stages. Equally important is investment in charging infrastructure and ecosystem readiness. The presence of accessible, reliable charging facilities can significantly reduce range anxiety and perceived inconvenience, thereby strengthening purchase intention.

Public awareness initiatives that communicate not only environmental benefits but also long-term economic and experiential advantages may further enhance emotional engagement with electric vehicles. Policymakers can also play a role in enhancing symbolic value by integrating EV adoption into broader sustainability narratives and urban mobility planning.

V. CONCLUSION

This study provides empirical evidence that electric vehicle purchase intention is shaped by multiple, interrelated dimensions of consumption value. By applying the 'Theory of Consumption Values' within an emerging market context, the research demonstrates that conditional and emotional values are the most influential drivers, followed by functional and novelty considerations, while symbolic value currently plays a limited role.

The findings suggest that electric vehicle adoption is progressing but remains contingent on supportive infrastructure, policy incentives, and emotional resonance. As markets evolve and electric vehicles become more visible and accessible, the relative influence of these value dimensions may shift. The study contributes to the literature by offering a multidimensional perspective on sustainable mobility adoption and by highlighting the importance of contextual and psychological factors alongside functional evaluations.

FUTURE RESEARCH DIRECTIONS

Although this study provides meaningful insights, several directions for future research warrant consideration. First, the cross-sectional nature of the research restricts the ability to observe shifts in consumption value perceptions over time. Future studies adopting a longitudinal design could offer richer understanding of how consumer motivations and evaluations change as electric vehicle markets develop and gain broader acceptance.

Second, future research may explore moderating variables such as income level, age, environmental concern, or prior experience with electric vehicles to better understand heterogeneity in adoption behaviour. Segment-based analyses could further refine marketing and policy strategies.

Third, comparative studies across regions or countries could help identify how cultural, infrastructural, and policy differences influence the relative importance of consumption values. Such comparisons would enhance the generalizability of findings and support theory refinement.

Finally, future work could extend the model by incorporating behavioural outcomes such as actual purchase or usage behaviour, thereby strengthening the link between intention and adoption. Qualitative approaches may also complement quantitative findings by providing richer insights into consumer meaning-making processes surrounding electric vehicle ownership.

REFERENCES

- [1] Agarwal, P., Bhardwaj, S., Ramachandran, R., Sharma, R., Sharma, R., Naidu, K., Rani, M. M., Karn, M. S., & Kumar, M. S. (2023). *Creativity, Innovation & Advances in Research World: One Earth, One Family, One Future*. Ashwin, G. (n.d.). Mr. Ronak R. Maniyar.
- [2] Bergman, N., & Axsen, J. (2022). Reviewing the behavioural literature on electric vehicles: Learning from past experiences of technological transitions. *Environmental Innovation and Societal Transitions*, 42, 100–115. <https://doi.org/10.1016/j.eist.2021.11.004>
- [3] Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5, Ed.). SAGE Publications.
- [4] Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). SAGE Publications.
- [5] Henseler, J. and R., C. M. and Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- [6] International Energy Agency. (2024). *Global EV outlook 2024*. <https://www.iea.org/reports/global-ev-outlook-2024>
- [7] Khan, M. (2022). ESG disclosure, competitive advantage and performance of firms in the Gulf Cooperation Council. *Journal of Business Strategy*, 43(1), 46–59. <https://doi.org/10.1108/JBS-06-2020-0129>
- [8] Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). The Guilford Press.
- [9] Lane, B., & Potter, S. (2007). The adoption of cleaner vehicles in the UK: Exploring the consumer attitude–action gap. *Journal of Cleaner Production*, 15(11–12), 1085–1092. <https://doi.org/10.1016/j.jclepro.2006.05.026>

- [10] Li, Y., & Wang, Z. (2023). The role of environmental concern and perceived value in consumers' purchase intention of new energy vehicles. *Journal of Cleaner Production*, 412, 137330. <https://doi.org/10.1016/j.jclepro.2023.137330>
- [11] Maniyar, M. R. R., & Modi, A. G. (2021). TO STUDY PROFITABILITY AND LIQUIDITY POSITION OF SELECTED ELECTRICITY COMPANIES OF GUJARAT. *Indian Journal of Applied Research*, 11(8).
- [12] Pedreira Junior, J. U., Rodrigues Da Silva, A. N., & Pitombo, C. S. (2022). Car-Free Day on a University Campus: Determinants of Participation and Potential Impacts on Sustainable Travel Behavior. *Sustainability*, 14(6), 3427. <https://doi.org/10.3390/su14063427>
- [13] Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial least squares structural equation modeling. In *Handbook of market research* (pp. 1–40). Springer. https://doi.org/10.1007/978-3-319-57413-4_15-1
- [14] Sharma, A., Singh, D., & Misra, R. (2024). The Role of Positive Anticipated Emotions in Influencing Purchase Intentions of Battery Electric Cars in Emerging Markets. *Journal of International Consumer Marketing*, 36(2), 132–150. <https://doi.org/10.1080/08961530.2023.2215464>
- [15] Sheth, J., Newman, B., & Gross, B. (1991). Why We Buy What We Buy: A 'Theory of Consumption Values'. *Journal of Business Research*, 22, 159–170. [https://doi.org/10.1016/0148-2963\(91\)90050-8](https://doi.org/10.1016/0148-2963(91)90050-8)
- [16] Sierzechula, W., Bakker, S., Maat, K., & van Wee, B. (2014). The influence of financial incentives and other socio-economic factors on electric vehicle adoption. *Energy Policy*, 68, 183–194. <https://doi.org/10.1016/j.enpol.2014.01.043>
- [17] Thakor, M. (n.d.). FACTORS INFLUENCING ELECTRIC VEHICLE ADOPTION IN MEHSANA: A MIXED-METHODS STUDY ON CONSUMER BEHAVIOR. *GAP iNTERDISCIPLINARITIES - A GLOBAL JOURNAL OF INTERDISCIPLINARY STUDIES*, Thako Miteshkumar.
- [18] Thakor, M. B., & Patel, D. C. R. (2025). *The Role of Perceived Value and Attitude in Influencing Purchase Intentions for Electric Vehicles in Gujarat*. 33(2).
- [19] Thota, V., Mishra, P. K., Singh, A., Modi, R. R., & Nikhil, V. (2025). Harnessing Artificial Intelligence for Revolutionizing a Business Sustainable Future. In *Driving Business Success Through Eco-Friendly Strategies* (pp. 213–228). IGI Global Scientific Publishing.
- [20] Wang, S., Fan, J., Zhao, D., & Yang, S. (2023). The role of symbolic and functional values in shaping EV purchase decisions: A cross-market comparison. *Energy Policy*, 176, 113529. <https://doi.org/10.1016/j.enpol.2023.113529>
- [21] Wang, Z.-X., Chee, W. M., Zhang, Q., & Wang, L. (2024). An Extended Theory of Planned Behaviour for Explaining Chinese Domestic Electric Vehicle Purchasing Behaviour. *International Journal of Humanities, Management and Social Science (IJ-HuMaSS)*, 7(1), Article 1. <https://doi.org/10.36079/lamintang.ij-humass-0701.638>
- [22] Zhao, X., Hao, H., Liu, Z., & Zhang, Q. (2023). Consumer preferences and policy incentives for electric vehicles: Evidence from emerging economies. *Technological Forecasting and Social Change*, 192, 122597. <https://doi.org/10.1016/j.techfore.2023.122597>