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Mediating Effect of Personal Affluence and Brand Image on Customer Attitude and Purchase Intention Towards Electric Cars

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ABSTRACT

The study investigates the interaction between personal affluence, brand image, customer attitude, and purchase intention regarding electric cars. The research involves a purposive sampling design, drawing views from a sample of 500 customers affiliated with automobile dealers in the Tiruchirappalli district. Employing a cause and effect research design, the study aims to reveal the causal dynamics underpinning these interrelated constructs. Data collection is executed through a structured questionnaire encompassing Likert-scale items and close-ended inquiries. Socio-economic profiles are evaluated using percentage analysis. The research constructs' relationships are assessed through structural equation modeling, unveiling potential mediating paths. To explore the socio-economic impact, analysis of variance combined with post-hoc tests examines its effect on the constructs. Findings proved that social stimulus and vehicle exclusivity have significant effect on customer attitude. Customer attitude has significant effect on purchase intention. Personal affluence and brand image have significant partial mediation between customer attitude and purchase intention. The findings hold implications for devising marketing strategies and policies conducive to fostering electric vehicle adoption within the Tiruchirappalli district.

KEYWORDS: Electric cars, Customers, Personal Affluence, Brand Image, Customer Attitude, and Purchase Intention.

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1. INTRODUCTION AND BACKGROUND

In recent years, the global automobile industry has perceived a profound transformation driven by the increasing emphasis on sustainability and environmental consciousness. As concerns over climate change and the depletion of fossil fuels intensify, electric cars have emerged as a pivotal solution to mitigate the environmental impact of traditional internal combustion engine vehicles. The adoption of electric cars not only offers a promising path towards reducing greenhouse gas emissions but also signifies a technological shift that holds the potential to revolutionize transportation systems worldwide. Understanding the factors that influence customers' attitudes and purchase intentions towards electric cars is crucial for automakers, policymakers, and marketers alike. Customer attitudes play a pivotal role in shaping their willingness to embrace new technologies and make environmentally responsible choices. Additionally, purchase intention is a key indicator of potential market demand for electric cars, impacting the future trajectory of the automobile industry's eco-friendly evolution. Personal affluence refers to an individual's financial capability and disposable income, while brand image encapsulates the perception customers have of a brand's reputation, values, and offerings (Sankar and Kumar, 2020). The study seeks to explore whether personal affluence and brand image mediate the relationship between customer

attitude and purchase intention towards electric cars. The interplay of these variables is pivotal in comprehending the underlying motivations that drive consumers' decisions to embrace electric vehicles, as well as the role of brand perception and financial considerations in shaping these choices.

Customer Attitude: In the contemporary automobile industry, the integration of sustainable solutions has spurred a revolution in the perception of vehicles. At the forefront of this transformation are electric cars, vehicles that intertwine innovation, environmental consciousness, and cutting-edge technology. Central to the embrace of electric cars is customer attitude, a complex interplay of perceptions that encompasses elements ranging from performance to charging infrastructure. The attitudes customers hold towards these pivotal aspects are steering the course of electric car adoption (Jose et al., 2022). A fundamental facet shaping customer attitude is the perceived performance of electric cars. Gone are the days when electric vehicles were synonymous with compromise. Today, the acceleration, handling, and overall driving experience of electric cars rival their combustion-engine counterparts. Positive customer attitudes are fostered when electric cars are perceived as dynamic and enjoyable to drive, dispelling misconceptions and enhancing the appeal of these eco-conscious options. The anxiety associated with battery range is a critical element influencing customer attitude towards electric cars (Ahmed and Dawood, 2020). Range anxiety has historically been a concern, potentially deterring potential adopters. However, advancements in battery technology and the expansion of charging infrastructure have alleviated this concern for many customers.

Positive attitudes towards electric cars are nurtured when individuals believe that the vehicle's range aligns with their daily driving needs and longer journeys. Electric cars are at the crossroads of innovation, showcasing modern technology that transcends traditional automobile norms. The incorporation of advanced infotainment systems, autonomous driving features, and futuristic design elements lends electric cars an air of technological superiority. Positive customer attitudes are cultivated when these vehicles are perceived as harbingers of innovation, reflecting a lifestyle that embraces the future (Lakshmi and Kumar, 2022). The ease of charging an electric car is pivotal in shaping customer attitudes. Charging infrastructure, from home charging stations to public charging networks, has a direct impact on how convenient electric cars are for daily use. When individuals believe that charging an electric car is as seamless as refueling a traditional vehicle, their attitudes towards adopting electric cars become more favorable.

Social Stimulus: In an era marked by increasing environmental concerns and technological advancements, the automobile industry is undergoing a paradigm shift towards sustainability and innovation. Among the vanguard of this transformation are electric cars, promising a cleaner and greener future for transportation. Beyond the technical and ecological aspects, the decision to adopt electric cars is also significantly influenced by social factors that extend beyond individual preferences. Peer influence has always played a pivotal role in shaping consumer behavior, and the adoption of electric cars is no exception. Peer endorsement, involving the recommendations, experiences, and opinions of friends, family, colleagues, and acquaintances, can sway an individual's perspective on electric cars. When people within one's social circle vouch for the benefits of electric vehicles, they not only lend credibility to these vehicles but also create a sense of social norm and acceptance (Acharya, 2019). The positive experiences and advocacy of peers can foster a feeling of reassurance, making the transition to electric cars seem less daunting and more socially aligned.

The omnipresence of social media platforms has transformed how information is disseminated and consumed. Social media wields immense power to influence public opinion and shape trends. When electric cars are prominently featured on social media through informative content, reviews, and even endorsements by influencers, it can spark interest and curiosity among potential consumers (Chawla et al., 2023). The portrayal of electric cars as a part of an urban, trendy, and forward-thinking lifestyle can hold immense appeal, especially among younger generations keen to be associated with progressive technologies and eco-friendly choices. In today's interconnected world, the concept of community extends beyond geographical proximity. Online forums, clubs, and gatherings centered around electric cars create virtual communities where enthusiasts and owners can engage in discussions, share experiences, and provide valuable understandings. Such community engagement fosters a sense of belonging and shared

values, influencing individuals to be more receptive to electric car adoption (Higueras-Castillo et al., 2019). Moreover, word of mouth remains a potent force in consumer decision-making. Positive experiences and anecdotes shared by peers or community members who already own electric cars can dispel myths, alleviate concerns, and offer firsthand perspectives that encourage potential buyers to take the leap.

Vehicle Exclusivity: As the world shifts towards sustainable transportation solutions, the automobile industry is undergoing a profound transformation. Electric cars have emerged as a focal point of this evolution, not only for their eco-friendly attributes but also for their potential to redefine the concept of automobile exclusivity. The allure of exclusivity has long been associated with luxury cars, and this allure is now seamlessly merging with the novel world of electric vehicles. Luxury car manufacturers have traditionally been synonymous with opulence, craftsmanship, and cutting-edge technology. The convergence of these qualities with electric cars presents a compelling proposition for consumers seeking both environmental responsibility and high-end experiences (Hoang et al., 2022). The integration of premium features, such as advanced infotainment systems, plush interiors, and superior driving dynamics, adds a touch of extravagance to the electric car industry. The combination of luxury and eco-consciousness appeals to consumers who are uncompromising in their pursuit of refinement and sustainability.

The advent of electric cars has ushered in a new era of personalization. Electric car manufacturers are offering customers the ability to customize various aspects of their vehicles, from color schemes to interior finishes and advanced tech features. This level of personalization transforms the purchase of an electric car into a bespoke experience, where customers can tailor their vehicles to align with their unique tastes and preferences. The exclusive approach fosters a sense of ownership that transcends the tangible, making the electric car a reflection of individual identity. The visual appeal of a luxury car is often tied to its design, which seamlessly marries form and function (Hiremath et al., 2022). The design of electric cars, with their sleek lines, aerodynamic profiles, and attention to detail, aligns with the aesthetic expectations of luxury enthusiasts. Moreover, the suitability of electric cars for urban environments adds an additional layer of exclusivity. The combination of elegant design and practicality speaks to those who seek sophistication without compromising on adaptability to their lifestyle (Kumar and Tashwanth, 2022).

Personal Affluence: As the automobile industry embraces the epochal shift towards sustainability, electric cars have taken center stage as heralds of a cleaner, greener future. The allure of electric vehicles extends beyond their eco-friendly attributes to encompass a dynamic interplay with personal affluence. The intersection of financial capability and environmental consciousness paints a compelling canvas, where electric car adoption transcends mere transportation to become a statement of prosperity and responsibility. The association between high income levels and the potential to afford electric cars is undeniable (Das, 2020). Electric vehicles, often priced at a premium due to advanced technology and innovation, can be comfortably embraced by individuals with substantial financial resources. However, the synergy between high income levels and the decision to purchase electric cars becomes more compelling when augmented by purchase incentives. Government subsidies, tax credits, and rebates not only reduce the financial burden of electric car ownership but also accentuate the attractiveness of these vehicles to a broader range of affluent consumers.

The background of electric car ownership has evolved beyond traditional modes, offering a range of leasing and financing options that democratize access to these vehicles. Leasing, with its lower upfront costs and flexible terms, appeals to affluent individuals who may seek to experience the latest technological innovations without committing to long-term ownership. Financing options, tailored to accommodate various financial profiles, bridge the gap between aspiration and affordability. These avenues align with personal affluence, providing avenues for enjoying electric cars without substantial capital outlay. The attraction of electric cars for affluent consumers is not limited to their financial viability. It extends to the realm of upward mobility aspirations, where the decision to adopt electric vehicles resonates with the desire to project an image of success and responsibility (Vashisth and Gupta, 2021). Owning an electric car signifies a commitment to both innovative technology and environmental stewardship, reflecting a lifestyle that balances achievement with ethical considerations. This alignment

with upward mobility aspirations positions electric cars as a symbol of achievement that harmonizes with personal values.

Brand Image: In the dynamic realm of modern transportation, brand image has emerged as a commanding force shaping consumer choices. This is particularly evident in the unfolding narrative of electric cars, where perceptions of performance, technology, and sustainability coalesce under the umbrella of brand identity. As the automobile industry evolves, the brand image associated with electric cars has become a beacon guiding potential consumers towards an electrifying future. The surrounding an electric car brand's perceived performance is a critical determinant of brand image. Electric vehicles have transcended their early reputation, offering swift acceleration, agile handling, and an engaging driving experience. Brands that project an image of exhilarating electric performance evoke positive associations, nurturing consumer attitudes that position them as leaders in the electric vehicle domain. A brand that is perceived as investing in advanced battery technology and expansive charging infrastructure can alleviate these concerns. When a brand's image communicates a commitment to addressing range limitations, it resonates positively with consumers who prioritize practicality and reassurance (Yegin and Ikram, 2022).

The nucleus of electric car adoption orbits around innovation and modern technology. Brand images are instrumental in conveying a brand's position at the forefront of technological advancement. Brands that are associated with groundbreaking features, seamless connectivity, and autonomous driving capabilities are poised to draw consumers seeking an electrified driving experience that integrates seamlessly with their digital lives. Charging infrastructure is the lifeblood of electric car utilization. Brand images play an influential role in assuaging concerns related to charging convenience. Brands that demonstrate a commitment to expanding charging networks, both public and private, engender confidence in potential buyers (Roy and Jain, 2022). Projecting a brand image that champions the ease of charging, companies can resonate with consumers seeking hassle-free electric car ownership.

Purchase Intention: In the ever-evolving scene of transportation, electric cars have emerged as a beacon of innovation, sustainability, and forward-thinking mobility. The transition towards electric vehicles hinges on a pivotal factor: purchase intention. This multidimensional concept encompasses affordability, incentives, driving experience, charging accessibility, and the holistic impact of features and performance. As the world gravitates towards cleaner and more responsible modes of transportation, understanding purchase intention is instrumental in steering the course of this electrifying journey. Affordability forms the bedrock of purchase intention. The willingness of consumers to embrace electric cars hinges on their perception of the upfront cost. Brands that position their electric vehicles competitively in terms of pricing tend to garner more positive purchase intentions, offering a gateway for a wider spectrum of consumers to access sustainable transportation solutions (Maiti and Dutta, 2021). Incentives and rebates are powerful catalysts for electric car adoption. Governments and organizations worldwide offer financial incentives that mitigate the initial cost of purchase. The availability of such incentives often becomes a pivotal factor shaping purchase intention. Brands that communicate the advantageous financial implications of adopting electric cars can influence consumers' decisions and encourage them to tread the path of sustainability (Ram, 2020).

The driving experience is a cornerstone of purchase intention. Consumers seek vehicles that not only align with their environmental values but also offer a seamless and enjoyable driving journey. Brands that deliver electric cars with responsive acceleration, smooth handling, and a comfortable ride can kindle purchase intentions, appealing to those who seek both sustainability and driving pleasure. Charging infrastructure is the lifeblood of electric car adoption. Consumers are more likely to embrace electric vehicles if they have confidence in the accessibility and convenience of charging stations (Shang and Feng, 2019). Brands that showcase their commitment to expanding charging networks and fostering a seamless charging experience cultivate purchase intentions by assuaging the concerns of potential buyers. Features, performance, and environmental impact converge to form a trifecta that shapes purchase intention. Consumers gravitate towards electric vehicles that seamlessly blend cutting-edge technology, impressive performance, and a reduced environmental footprint. Brands that communicate

the harmonious alignment of these elements can sway purchase intentions by presenting electric cars as holistic solutions that cater to diverse needs (Tu and Yang, 2019).

2. STATEMENT OF THE PROBLEM

In the ever-growing environment of the automobile industry, the adoption of electric cars has gained momentum as a critical step towards sustainable mobility. As the world grapples with environmental concerns and strives to reduce carbon emissions, electric cars offer a promising solution. However, the adoption of these vehicles is influenced by a complex interplay of factors that extend beyond their environmental benefits. Among these factors, customer attitude and purchase intention stand as pivotal drivers of electric car adoption. While customer attitude plays a central role in shaping individuals' perceptions and receptiveness towards electric cars, purchase intention encapsulates the decisive step towards actual adoption. However, the intricate mechanisms underlying these relationships warrant a deeper exploration. A gap exists in understanding how personal affluence and brand image intercede in the connections between customer attitude and purchase intention towards electric cars. The mediating role of personal affluence can potentially shape the translation of positive customer attitudes into tangible purchase intentions. Similarly, brand image can amplify the effects of customer attitude, further influencing purchase intentions. The visions derived from this research could potentially inform strategies that accelerate the transition towards a more sustainable and environmentally conscious future in the automobile industry.

3. NEED FOR THE STUDY

The global automobile industry is undergoing a paradigm shift towards sustainability, and electric cars have emerged as a prerequisite in this transformation. As concerns over climate change, air quality, and energy conservation intensify, the adoption of electric vehicles has gained prominence as a vital solution. However, the embrace of electric cars is influenced by a confluence of intricate factors that extend beyond their environmental benefits. To accelerate this pivotal shift towards cleaner transportation, there is an imperative need to delve into the nuanced relationships between customer attitudes, purchase intentions, personal affluence, and brand image. The decision to adopt electric cars is not solely rooted in their eco-friendliness; it is a multifaceted choice influenced by a blend of perceptions, financial considerations, and brand associations. Understanding the interplay of these factors is essential to encourage wider adoption. In light of these factors, this study seeks to bridge the knowledge gap by investigating the mediating effect of personal affluence and brand image on the relationship between customer attitudes and purchase intentions towards electric cars. The acumens derived from this research have the potential to guide policymakers, marketers, and automakers in fostering an environment conducive to increased electric car adoption, thereby contributing to a more sustainable and eco-conscious future for the automobile industry and beyond.

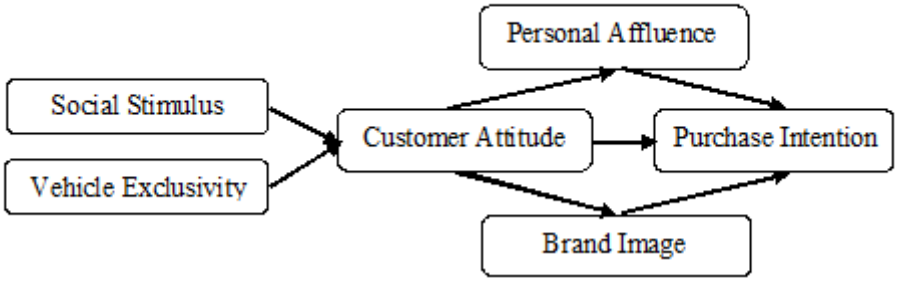
4. REVIEW OF THE LITERATURE

The global automobile industry has witnessed a significant shift towards sustainable and environmentally friendly transportation options, with electric cars gaining traction as a viable alternative to conventional internal combustion engine vehicles (Buhmann and Criado, 2023). Social inducement, which includes social norms, peer influence, and community engagement, has been identified as a crucial driver in shaping individuals' attitudes towards electric car purchase (Parmar and Pradhan, 2022). Perceptions about electric vehicles within one's social circle can significantly impact purchase decisions (Adhikary et al., 2022). The influence of social media, where users share experiences and information about electric cars, also plays a pivotal role in shaping consumers' opinions (Ranjan et al., 2022). Owning an electric vehicle can be perceived as a status symbol due to its association with innovation and environmental responsibility. This perception of exclusivity contributes to consumers' willingness to invest in electric cars (Pandey et al., 2021). Consumer attitudes towards electric vehicles are influenced by a range of factors such as environmental concerns, fuel efficiency, and the overall driving experience

(Kim et al., 2022). Positive attitudes are more likely to result in higher purchase intentions. Attitudes are shaped not only by personal beliefs but also by broader environmental and societal concerns, emphasizing the role of education and awareness campaigns (Kumar, 2023).

The adoption of electric cars is a complex decision influenced by a multitude of interconnected factors. Purchase intention refers to the inclination of consumers to buy a particular product (Rajesh et al., 2022). Factors like government incentives, charging infrastructure availability, and perceived cost savings can significantly impact consumers' intentions to buy electric cars (Secinaro et al., 2022). Concerns related to battery range and charging time remain important barriers to address to enhance purchase intention. Brand image influence consumer perceptions and decisions (Lokare et al., 2021). Established automobile brands that introduce electric models benefit from their existing reputation, while new entrants in the electric vehicle market must work to build trust and credibility (Zamil et al., 2023). Consumers tend to associate electric cars with attributes like innovation, technological advancement, and sustainability, which further influence their purchase choices (Selva and Arunmozhi, 2020). Personal prosperity, which encompasses income, wealth, and economic status, is a critical factor in the electric car purchase decision (Ullah et al., 2018). Higher income individuals are often more willing to invest in electric vehicles due to their affordability and long-term cost benefits. However, efforts are being made to develop more affordable electric car options to broaden their appeal across different income segments (Robinson an Rajavignesh, 2020). Review of earlier studies helped to formulate the ensuing framework (Figure 1) to test with the suitable hypotheses proposed below.

Figure 1: Conceptual Framework



Hypotheses:

- $H_{1.1}$: Antecedents have significant effect on social stimulus, vehicle exclusivity, customer attitude, personal affluence, brand image and purchase intention.
- $H_{1.2}$: Social stimulus and vehicle exclusivity have significant effect on customer attitude.
- $H_{1.3}$: Customer attitude has significant effect on purchase intention.
- $H_{1.4}$: Personal affluence and brand image have significant mediation between customer attitude and purchase intention.
- $H_{1.5}$: Socio-economic profile has significant effect on social stimulus, vehicle exclusivity, customer attitude, personal affluence, brand image and purchase intention.

5. RESEARCH METHODOLOGY

The study intended to investigate the mediating effects of personal affluence and brand image on customer attitude and purchase intention towards electric cars. The study involves a sample of 500 customers sourced from automobile dealers within the Tiruchirappalli district. A purposive sampling design is utilized to ensure the selection of participants with relevant exposure to electric cars. Utilizing

a purposive sampling approach, this study targets a specific subset of participants. The sample frame consists of automobile dealers within the Tiruchirappalli district, ensuring access to individuals with first-hand experience regarding electric cars. With a sample size exceeding the minimum requirement of 384 participants, as determined by the Cochran formula. Data collection involves the administration of a comprehensive questionnaire designed to capture information on personal affluence, brand image perception, customer attitude, and purchase intention towards electric cars. The questionnaire comprises Likert-scale items and close-ended questions. The research design adopted is a cause-and-effect research design. The approach facilitates the examination of causal relationships between variables, allowing for understandings into the mediating effects of personal affluence and brand image on customer attitude and purchase intention towards electric cars. Socio-economic characteristics of participants are evaluated using percentage analysis. The mediating relationships among the research constructs are assessed through structural equation modeling, elucidating the direct and mediated paths. Furthermore, analysis of variance followed by post-hoc tests are applied to explore the influence of socio-economic profiles on the identified research constructs. The study adheres to ethical guidelines concerning human participation. The research is delimited by its focus on a specific district and potential response bias. Furthermore, the findings might be context-dependent and not universally applicable.

6. RESULTS AND DISCUSSIONS

6.1 Socio-Economic Characteristics of Customers

The socio-economic characteristics of electric car customers are portrayed in Table 1.

Table - 1: Socio-Economic Characteristics

Profile	Distribution	Number	Percentage
Gender	Male	279	55.8%
	Female	221	44.2%
Age	Below 30 years	192	38.4%
	30 – 50 years	246	49.2%
	Above 50 years	62	12.4%
Education	School level	209	41.8%
	Under Graduate	140	28.0%
	Post Graduate	151	30.2%
Monthly Income	Below Rs.50,000	367	73.4%
	Rs.50,000 – 1,00,000	84	16.8%
	Above Rs.1,00,000	49	9.8%
Occupation	Business	109	21.8%
	Employed	176	35.2%
	Retired/Farmer	215	43.0%

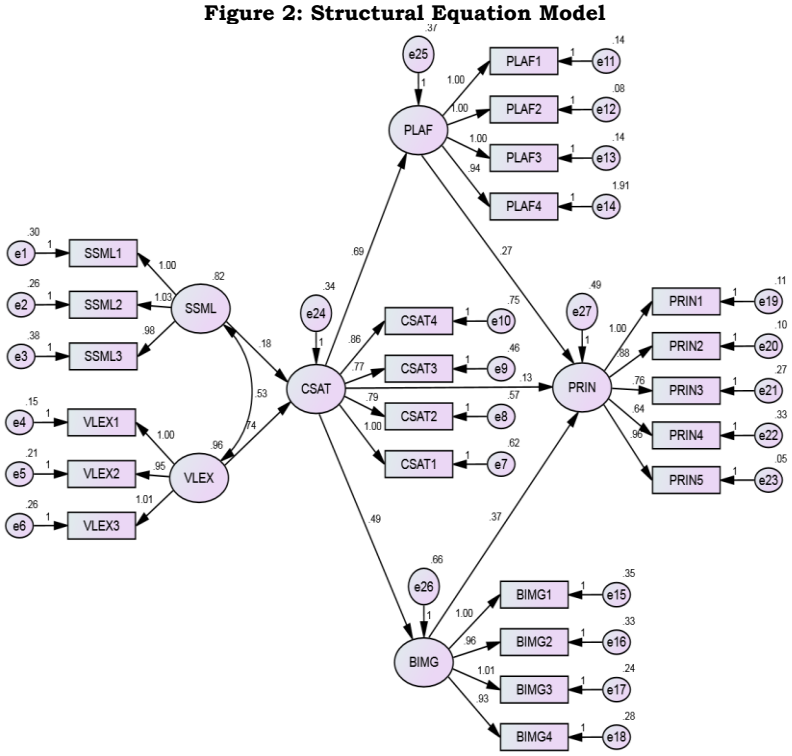
Table 1 presents that gender consists of male customers are 55.8% and female customers are 44.2% participated in the survey. Age shows that 38.4% of customers are in below 30 years of age, 49.2% of customers are in 30 – 50 years of age and 12.4% of customers are in above 50 years of age. Education discloses that 41.8% of customers are in school level education, 28.0% of customers are qualified with under graduate and 30.2% of customers are qualified with post graduate. Monthly income indicates that 73.4% of customers are in below Rs.50,000 income, 16.8% of customers are in Rs.50,000 – 1,00,000 income and 9.8% of customers are in above Rs.1,00,000 income. Occupation reveals that 21.8% of customers are engaged in business, 35.2% of customers are employed and 43.0% of customers are retired and involved in farming.

6.2 Causal Association among Research Variables

The cause and effect links among the social stimulus (SSML), vehicle exclusivity (VLEX), customer attitude (CSAT), personal affluence (PLAF), brand image (BIMG) and purchase intention (PRIN). The model

proposed to test contains 56 variables, the variables are classified as 23 observed and 33 unobserved variables. Further, 29 variables are classified as exogenous and 27 are endogenous variables. SSML1 – SSML3, VLEX1 – VLEX3, CSAT1 – CAST4, PLAF1 – PLAF4, BIMG1 – BIMG4, and PRIN1 – PRIN5. In this way, CAST, PLAF, BIMG and PRIN are unobserved, endogenous variables. SSML, VLEX and e1 – e27. The structural model is depicted in Figure 2.

Figure 2: Structural Equation Model



The unstandardized and standardized estimates are presented each path relationship in table 2.

Table 2: Path Analysis

Path			Unstd. Estimate	Std. Estimate	t	p
SSML3 - Community engagement and word of mouth	<---	SSML	.983	.820	21.609	***
SSML2 - Social media influence and urban trendiness	<---		1.029	.877	23.329	***
SSML1 - Peer endorsement on electric cars	<---		1.000	.856		
VLEX3 - Premium design and suitability	<---	VLEX	1.007	.886	31.546	***
VLEX2 - Personalized customization	<---		.951	.896	32.393	***
VLEX1 - Luxury affiliation with premium features	<---		1.000	.931		
CSAT4 - Ease of charging of battery	<---	CSAT	.861	.711	16.434	***
CSAT3 - Innovative and modern technology	<---		.771	.755	17.633	***
CSAT2 - Range anxiety of battery	<---		.794	.729	16.916	***
CSAT1 - Perceived performance of car	<---		1.000	.790		
PLAF1 - High income levels and purchase incentives	<---	PLAF	1.000	.927		
PLAF2 - Leasing and financing options	<---		1.004	.958	41.708	***
PLAF3 - Upward mobility aspirations	<---		1.000	.926	37.520	***
PLAF4 - Long-term savings perspective	<---		.943	.535	13.418	***
BIMG1 - Reliable and high-quality vehicles	<---	BIMG	1.000	.851		
BIMG2 - Luxury, prestige, and high social status	<---		.961	.846	23.741	***
BIMG3 - Commitment to sustainability and clean energy	<---		1.008	.890	25.760	***
BIMG4 - Brand heritage and legacy	<---		.925	.858	24.265	***
PRIN1 - Affordable to buy	<---	PRIN	1.000	.942		

PRIN2 - Availability of incentives and rebates	<---		.884	.935	41.840	***
PRIN3 - Enjoyable driving experience	<---		.755	.801	26.527	***
PRIN4 - Accessibility of charging infrastructure	<---		.635	.715	21.106	***
PRIN5 - Features, performance, and environmental impact	<---		.964	.971	49.355	***
CSAT	<---	SSML	.180	.161	3.563	***
CSAT	<---	VLEX	.741	.713	14.021	***
BIMG	<---	CSAT	.487	.519	10.567	***
PLAF	<---	CSAT	.689	.754	16.541	***
PRIN	<---	BIMG	.373	.384	8.359	***
PRIN	<---	PLAF	.269	.270	4.422	***
PRIN	<---	CSAT	.125	.137	3.968	***

**** Significant at 1%*

Computation of fit index values is important, so as to check the model fit with the data. Therefore, the values of baseline comparison index (0.932 for NFI, 0.952 for IFI, 0.923 for RFI, 0.952 for CFI and 0.945 for TLI) and goodness of fit index values (0.905 for GFI and 0.902 for AGFI) are higher than the benchmark limit of 0.9. The CMIN/df value is 3.222 is found in the limit of 3 – 5, it confirms the strong fit. Furthermore, RMSEA values if 0.058, it is safely lesser than the benchmark level of 0.06.

Table 2 presents the cause and effect relationship amongst the social stimulus, vehicle exclusivity, customer attitude, personal affluence, brand image and purchase intention of electric cars. It is observed that antecedents have significant impact on its relevant research construct, the computed values are significant at 1% level. The first hypothesis ($H_{1.1}$) asserted that antecedents have significant effect on social stimulus, vehicle exclusivity, customer attitude, personal affluence, brand image and purchase intention. The results corroborate that social stimulus is mostly formed through social media influence and urban trendiness and community engagement and word of mouth has least effect on social stimulus. Under vehicles exclusivity dimension, luxury affiliation with premium features attracts more attention in market, but premium design and suitability lacks to grab attention. Customer attitude to purchase electric car is mainly shaped by perceived performance of car but ease of charging of battery gets lowest effect on forming customer attitude. Personal affluence in the form of leasing and financing options permits the customers to buy electric cars. The long-term savings perspective has least effect with regard to personal influence.

Brand image of electric car is largely associated with commitment to sustainability and clean energy but luxury, prestige, and high social status has poor impact on brand image. Features, performance, and environmental impact is the prime cause to form purchase intention towards electric cars. Accessibility of charging infrastructure has least effect to form purchase intention. The hypothesis ($H_{1.2}$) asserted that social stimulus and vehicle exclusivity have significant effect on customer attitude. Results validate the hypothesis at 1% significant level, the coefficient shows that one-unit gain in social stimulus leads to 0.180-unit upsurge in customer attitude, similarly one-unit gain vehicle exclusivity leads to 0.741-unit upsurge in customer attitude. The social stimulus and vehicle exclusivity vigorously shapes the customer attitude. The hypothesis ($H_{1.3}$) disclosed that customer attitude has significant effect on purchase intention. Result authenticates the hypothesis at 1% significant level, the coefficient shows that one-unit gain in customer attitude leads to 0.125-unit upsurge purchase intention of electric cars.

The findings affirm the essential role of antecedents in shaping various aspects of customer attitude. Antecedents, which encompass a range of factors such as individual characteristics, prior experiences, and environmental influences, exhibit a substantial impact on critical elements like social stimulus, vehicle exclusivity, customer attitude, personal affluence, brand image, and purchase intention. Furthermore, result highlights the interconnected nature of these factors within the customer decision-making process. It highlights that social stimulus and vehicle exclusivity, which are influenced by antecedents, play a crucial role in shaping customer attitudes. These attitudes, in turn, significantly influence purchase intentions. The chain of influence emphasizes the need for businesses to not only address individual components in isolation but to consider the holistic picture of customer behavior. On account of recognizing the interdependence of these variables, electric car makers can develop more comprehensive marketing strategies that effectively enhance customer attitudes and, ultimately, drive

purchase intentions. The knowledge can be particularly valuable in the highly competitive marketplace, where a deep understanding of customer behavior can be a strategic advantage.

6.3 Mediation of PLAF and BIMG between CSAT and PRIN

The mediation effect of personal affluence and brand image between customer attitude and purchase intention is examined. The hypothesis ($H_{1.4}$) proclaims that personal affluence and brand image have significant mediation between customer attitude and purchase intention.

Table 3: PLAF and BIMG between CSAT and PRIN

Mediating Path		Path			Estimate	p
PLAF	Indirect Effect – Path A	PLAF	<---	CSAT	.689	***
	Direct Effect	PRIN	<---	CSAT	.125	***
	Indirect Effect – Path B	PRIN	<---	PLAF	.269	***
BIMG	Indirect Effect – Path A	BIMG	<---	CSAT	.487	***
	Direct Effect	PRIN	<---	CSAT	.125	***
	Indirect Effect – Path B	PRIN	<---	BIMG	.373	***

Table 3 discloses the direct effect of customer attitude on purchase intention of electric cars is observed at 0.125. The mediation shows that the observed value for customer attitude on personal affluence is 0.689 and personal affluence on purchase intention is 0.269. The observed mediation value is 0.185341 (0.689 x 0.269), and total effect is 0.310341. The variance value is 0.5972, it surpasses 0.2, hence it has partial mediation. Similarly, the observed value for customer attitude on brand image is 0.487 and brand image on purchase intention is 0.373. The observed mediation value is 0.181651 (0.487 x 0.373), and total effect is 0.306651. The variance value is 0.5924, it surpasses 0.2, hence it has partial mediation. Therefore, personal affluence and brand image have significant partial mediation between customer attitude and purchase intention.

6.4 Effect of Socio-Economic Profile on Research Constructs

The effect of socio-economic profile of electric car customers on research constructs are analyzed using One-way ANOVA. The hypothesis ($H_{1.6}$) reveals that socio-economic profile has significant effect on social stimulus, vehicle exclusivity, customer attitude, personal affluence, brand image and purchase intention.

Table 4: One-way ANOVA

	Gender		Age		Education		Income		Occupation	
	F	**Sig.**	**F**	**Sig.**	**F**	**Sig.**	**F**	**Sig.**	**F**	**Sig.**
SSML	3.082	.080	0.324	.723	2.417	.090	12.495	.000***	1.468	.231
VLEX	0.073	.787	8.617	.000***	5.402	.005***	13.724	.000***	1.734	.178
CSAT	0.308	.579	11.619	.000***	6.335	.002***	17.996	.000***	1.835	.161
PLAF	1.201	.274	4.160	.016**	0.476	.621	10.588	.000***	0.727	.484
BIMG	0.216	.642	5.774	.003***	5.243	.006***	22.258	.000***	0.107	.898
PRIN	0.378	.539	5.256	.006***	.943	.390	8.701	.000***	0.578	.562

**** Significant at 1%, ** Significant at 5%*

Table 4 presents that gender don't have significant effect on social stimulus, vehicle exclusivity, customer attitude, personal affluence, brand image and purchase intention. Age has significant effect on vehicle exclusivity, customer attitude, personal affluence, brand image and purchase intention. Further, the significant values of constructs are adhered to post-hoc test. Student-Newman-Keuls post-hoc test formed two parallel subsets like 30 – 50 years in subset *a*; and below 30 years and above 50 years in subset *b* for vehicle exclusively and customer attitude. The test also formed two parallel subsets like 30 – 50 years and below 30 years in subset *a*; and above 50 years in subset *b* for personal affluence, brand image, and purchase intention. Education has significant effect on vehicle exclusivity, customer attitude and brand image. Ryan-Einot-Gabriel-Welsch F post-hoc test form two parallel subsets like under graduate in subset *a*; post graduate and school level in subset *b* for vehicle exclusivity, customer attitude, and brand image. Monthly income has significant effect on social stimulus, vehicle exclusivity, customer

attitude, personal affluence, brand image and purchase intention. Scheffe post-hoc test form two parallel subsets like below Rs.50,000 and Rs.50,000 – 1,00,000 in subset *a*; above Rs.1,00,000 in subset *b* for social stimulus, vehicle exclusivity, customer attitude, personal affluence, brand image and purchase intention. It is witnessed that occupation don't have significant effect on social stimulus, vehicle exclusivity, customer attitude, personal affluence, brand image and purchase intention.

7. CONCLUSION

The study focused on several critical factors that influence customer attitudes and purchase intentions towards electric cars. It was evident that social stimulus and vehicle exclusivity exert a significant impact on customer attitudes, suggesting that the perception of electric vehicles as a social trend and the exclusivity associated with them play a crucial role in shaping customers' attitudes. Additionally, the study confirmed the importance of customer attitudes as a driver of purchase intentions, emphasizing the need for businesses to prioritize strategies aimed at improving customer perceptions. The notable outcome is the role of personal affluence and brand image as mediators between customer attitude and purchase intention. The result implies that enhancing personal affluence and fostering a positive brand image can further bolster the link between customer attitudes and purchase intentions. Therefore, businesses in the electric car industry should focus on developing marketing and branding strategies that emphasize affluence and positively influence brand image to foster customer intent to purchase electric cars.

The study found that gender and occupation had no significant effect on the variables studied, indicating that these factors may not play a significant role in shaping customer perceptions and intentions in the context of electric cars. However, age and education emerged as influential demographic variables. Age significantly impacted vehicle exclusivity, customer attitude, personal affluence, brand image, and purchase intention, suggesting that different age groups may have varying preferences and perceptions. Education had a significant effect on vehicle exclusivity, customer attitude, and brand image, emphasizing the importance of tailoring marketing strategies to education levels. Lastly, monthly income significantly impacted all the variables, indicating that income levels can be a crucial determinant of customer behavior in the electric car market. In summary, the findings have provided valuable discernments for businesses in the electric car industry. To effectively enhance customer attitudes and purchase intentions, they should focus on leveraging the influence of social stimulus, vehicle exclusivity, personal affluence, and brand image. Furthermore, they should consider the socio-economic factors of age, education, and income when crafting marketing strategies to target specific customer segments effectively. These views can aid businesses in developing effective marketing approaches for the promotion of electric cars, ultimately contributing to the growth of the electric vehicle market.

8. RESEARCH IMPLICATIONS

The research into the mediating effect of personal affluence and brand image on customer attitude and purchase intention towards electric cars carries broad implications for academia, industry, and policymakers. Academically, it advances understanding of consumer behavior in the context of sustainable transportation, shedding light on the intricate relationships at play. Industry-wise, the findings inform marketing strategies by revealing how different consumer segments respond to personal affluence and brand image interplay, aiding product positioning and enhancing the appeal of electric cars. Policymakers can benefit by tailoring incentive programs to complement consumers' financial capabilities and using insights into brand image to guide charging infrastructure policies. The research also accelerates the transition to sustainable transportation by encouraging a wider range of consumers to

choose electric cars, contributing to environmental goals and carbon emissions reduction. Moreover, brands can utilize these views to reinforce their image and differentiate themselves in the market, while also catering to consumers' desire for personalized features and design.

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