

AN EMPIRICAL STUDY ON COGNITIVE DISSONANCE FACTORS OF CONSUMERS AND THEIR SATISFACTION TOWARDS THE PURCHASE OF ELECTRIC VEHICLE

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ABSTRACT: Consumer buying behavior is the actions taken by consumers before purchasing, during purchasing, and post purchasing of goods and services for personal and family use. Cognitive dissonance is an internal conflict that people have when their differing beliefs and opinions collide. Cognitive dissonance in the adaptation of electric vehicles (EVs) is a prevalent issue in the transportation sector. This can lead to post-purchase regret and dissatisfaction. So, the study aims to identify the factors that lead to Cognitive Dissonance among the consumers towards EV purchase and their level of consumers' satisfaction towards the adoption of E-Vehicle. The study was done in Coimbatore among 163 people. Purposive sampling has been conducted for finding EV users. Descriptive statistics, Chi square, ANOVA, Correlation and regression have been used for analysis. It is inferred that most of the respondent's own hybrid mode of vehicle for their purpose. The result of the study shows that the respondents are highly influenced by peer group choice and least preference to the Belief factor. Further they are highly satisfied about the price of purchase of Electric Vehicle and cost saving feature compared to fuel Vehicle.

INTRODUCTION:

Cognitive dissonance in the adaptation of electric vehicles (EVs) is a prevalent issue in the transportation sector. The world seeks to transition to more sustainable and environmentally friendly transportation solutions, individuals and even entire societies sometimes face a disconnect between their awareness of the need for cleaner energy and their actual behaviors. The dissonance can be observed in several ways. Many people may acknowledge the environmental benefits of EVs, such as reduced carbon emissions, yet hesitate to switch from traditional gasoline-powered vehicles due to concerns about range anxiety or the convenience of refueling. Societies and governments may promote EV adoption as a key solution to combat climate change, while still investing heavily in infrastructure that supports fossil fuels. Resolving this cognitive dissonance in EV adaptation involves a multifaceted approach, including addressing practical concerns like charging infrastructure, providing incentives, and raising awareness about the long-term environmental benefits. Additionally, policy changes and economic shifts can help align beliefs with actions and accelerate the adoption of electric vehicles in the pursuit of a more sustainable and eco-conscious future.

STATEMENT OF THE PROBLEM:

Cognitive dissonance often arises when an individual is faced with a decision, such as whether to purchase an EV or stick with a traditional gasoline-powered vehicle. This internal conflict can make the decision-making process difficult and stressful. After buying an EV, individuals may experience cognitive dissonance if they perceive a gap between their expectations and the actual experience of owning and using the vehicle. This can lead to post-purchase regret and dissatisfaction. Some individuals may experience cognitive dissonance

due to perceived inconveniences associated with EV ownership, such as concerns about charging infrastructure, range anxiety, and longer refueling times compared to gasoline vehicles. So, the study aims to identify the factors that lead to Cognitive Dissonance among the consumers towards EV purchase and their level of consumers' satisfaction towards the adoption of E-Vehicle.

SCOPE OF THE STUDY:

The adoption of Electric Vehicles (EVs) is crucial for addressing environmental concerns and transitioning to sustainable transportation. However, despite the growing awareness of the benefits of EVs, there exists a gap between the intention to purchase an EV and the actual adoption rate. This study aims to identify the cognitive dissonance factors that hinder consumers from purchasing EVs, explore the conflicts between their intentions and actions, and understand the underlying psychological and practical barriers.

OBJECTIVES OF THE STUDY

- ❖ To identify the Cognitive Dissonance factors influencing consumers towards EV purchase.
- ❖ To analyze the relationship between the factors influencing and satisfaction towards the adoption of E-Vehicle among consumers.

RESEARCH METHODOLOGY:

The research study has identified the Cognitive Dissonance factors and analyzed the relationship between those factors' influence and satisfaction towards the adoption of E-Vehicle among consumers. The survey has been conducted on the basis of Purposive sampling method to find the EV users. The survey has been conducted in and around Coimbatore city with sample size of 163 respondents. The study is based on primary data. Primary data for this study are collected through the structured questionnaire method. The following statistical tools have been applied for the analysis purpose namely: Percentage analysis, Descriptive statistics, ANOVA, t-test, Chi-square, Correlation and Regression.

LIMITATIONS OF THE STUDY:

- ❖ The survey has been done among the respondents of the Coimbatore, and the perception may vary from time to time so, it cannot be generalized.
- ❖ Due to time constraints the sample size has been limited to 163 respondents, so the overall perception of Electric Vehicle users' results cannot be predicted.

REVIEW OF LITERATURE:

- ❖ **Tarun Kanti Bose (2012)**, on his study explored the factors that create cognitive dissonance in consumer buying decision making, particularly among the consumer goods purchasers. The results of his study stated that some factors, e.g., norms, religious values, cultures, customs, etc., are responsible for creating cognitive dissonance among the customers and he also suggested the importance of Cognitive Dissonance in making a customer satisfied or dissatisfied.

- ❖ **Anil Khurana et.al. (2019)** examine the factors that affect the consumer's adoption of an EV. They have found that there is positive a relation and acceptance on adoption of electric vehicles. Attitude (ATT) emerged as a strong mediator, influencing the adoption of electric cars. They have suggested that the incentives offerings and eco-friendly features will support the more acceptance of EV.
- ❖ **Brajesh Bolia PhD (2020)** has conducted a study with the aim to understand the dynamics of cognitive dissonance in the context of financial product purchase. The arousal of cognitive dissonance after the purchase decision might result in order cancellations, loss of trust for the brand as well as loss of loyal customers. Measuring dissonance in financial product context post purchase can help marketers devise appropriate strategies to reduce dissonance, thereby retaining and attracting customers.

Table: 1 Percentage Analysis

Demographic Factors	Particulars	No. of Respondents	Percentage
Age group	25 & Below 25 years	86	52.8
	26 to 45 years	24	14.7
	46 to 55 years	41	25.2
	Above 55 years	12	7.4
Gender	Male	76	46.6
	Female	87	53.4
Educational Level	School Level Education	8	4.9
	Diploma Level	8	4.9
	UG	79	48.5
	PG	46	28.2
	Professional	22	13.5
Status	Student	62	38.0
	Home maker	3	1.8
	Employed	73	44.8
	Retired	2	1.2
	Business	23	14.1
Annual Income	Less than Rs.3 Lakhs	87	53.4
	Rs.3 Lakhs to Rs.6 Lakhs	27	16.6
	Above Rs.6 Lakhs to Rs.9 Lakhs	21	12.9
	Above Rs.9 Lakhs	28	17.2

No. of Members in the family	Up to 3	32	19.6
	4 to 6	107	65.6
	Above 6	24	14.7
Area of the residence	Urban	79	48.5
	Semi-urban	47	28.8
	Rural	37	22.7
Place of Purchase	Dealership	55	33.7
	Online retailer	30	18.4
	Manufacturer's Website	39	23.9
	Secondhand market	13	8.0
	Showroom	26	16.0
Amount spend on purchasing	Less than Rs.5 Lakhs	89	54.6
	Rs.5 Lakhs to Rs.>10 Lakhs	32	19.6
	Rs.10 Lakhs to Rs.15 Lakhs	26	16.0
	Above Rs.15 Lakhs	16	9.8
Average Monthly Expenses	Less thanRs.5,000	67	41.1
	Rs.5,000 to Rs.10,000	42	25.8
	Rs.10,001 to Rs.15,000	41	25.2
	Above Rs.15,000	13	8.0
Total		163	100.00

(Source: Computed Data)

From the above table it shows that 163 respondents, 52.8 per cent of the respondents are 25 & Below 25 years, 53.4 per cent of the respondents are female, 48.5 per cent of the respondents are UG degree holders, 44.8 per cent of the respondents are employed, 53.4 per cent of the respondents with annual income less than Rs.3 Lakhs, 65.6 per cent of the respondents have four to six members, 48.5 per cent of the respondents located in urban area, 33.7 per cent of the respondents purchased electric vehicle at Dealership, 54.6 per cent of the respondents purchased Electric Vehicle for less than Rs.5 Lakh, 41.1 per cent of the respondents have spent an average of less than Rs.5000 per month.

Table: 2 Level of Satisfaction towards the adoption of E-Vehicle- Descriptive Statistics

Statements	Mean	Std. Deviation
Price	3.90	1.05
Design and Style	3.80	0.78
Performance & features	3.76	0.78
Roominess (space capacity)	3.72	0.90
Range Anxiety	3.54	1.06
Charging Infrastructure	3.63	0.90
Speed	3.58	0.90
Battery life	3.71	0.90
Government incentive	3.69	0.89
Cost savings (compared to Fuel Vehicle)	3.87	0.83
Maintenance costs	3.69	0.84
Resale Value	3.69	0.85
Perceived Safety	3.79	0.89
Dealer Service	3.69	0.93
Noise Level	3.86	0.85
Insurance Costs	3.81	0.81

(Source: Computed Data)

The table above 4.3.2, shows the Descriptive statistics for the Level of Satisfaction towards the adoption of E-Vehicle are analyzed. 'Price' stands first among all the factors with mean score of 3.90 with a Standard deviation of 1.05 followed by 'Cost savings' having a mean score of 3.87 with a Standard deviation of 0.83 which is followed by 'Noise level' with a mean score of 3.86 with a Standard deviation of 0.85. The factor 'Speed' has the mean score of 3.58 followed by 'Range anxiety' with the least mean score of 3.54 with a Standard deviation of 1.06.

It is inferred that the respondents are highly satisfied with the Price of purchase of EV, Cost saving features compared to fuel vehicles. They are moderately satisfied with Roominess of EVs. The respondents are dissatisfied with regards to Range anxiety.

The multiple data analysis of the above table states that the 'Hybrid EV' has been mostly experienced by the respondents as it has 44.4 per cent of 100 whereas only 16 and 19 responses are turned up for Fully-Electric Vehicle and Plug-in hybrid EVs respectively. Therefore, the data reveals that irrespective of demographic and psychological factors, people

prefer to use the 'Hybrid Electric Vehicle' as it has the majority of 28 out of 63 respondents.

Table: 3 Demographic variables and Satisfaction level towards the adoption of E-Vehicle: ANOVA

Demographic Profile	Groups	N	Mean	SD	t-Value	F-Value	Sig Value	Sig
Age Group	25 years and below	86	52.34	20.87		28.81	<0.01	S
	26 to 45 years	24	39.67	29.76				
	46 to 55 years	41	10.51	23.53				
	Above 55 years	12	27.33	33.86				
Gender	Male	76	19.68	29.45	-8.84		<0.01	S
	Female	87	54.21	18.31				
Educational Level	School Level Education	8	38.13	32.16		14.05	<0.01	S
	Diploma Level	8	13.38	24.84				
	UG	79	50.54	23.06				
	PG	46	35.43	30.80				
	Professional	22	8.05	20.94				
Status	Student	73	52.45	21.71		10.17	<0.01	S
	Home maker	3	37.67	33.26				
	Employed	62	28.44	30.12				
	Retired	2	33.00	46.67				
	Business	23	19.17	29.73				
Annual Income (in Rs.)	Less than Rs.3 Lakhs	87	53.36	20.26		31.54	<0.01	S
	Rs.3 Lakhs to Rs.6 Lakhs	27	34.63	29.72				
	Above Rs.6 Lakhs to Rs.9 Lakhs	21	6.52	20.63				
	Above Rs.9 Lakhs	28	17.79	28.80				
Number of members in the	Upto 3	32	45.97	27.52		13.33	<0.01	S
	4 to 6	107	41.72	27.85				

family	Above 6	24	11.54	26.59				
Area of the residence	Urban	79	30.80	30.42	4.94	0.008	S	
	Semi-urban	47	45.81	27.19				
	Rural	37	43.95	27.77				

The average mean score has been found for Satisfaction level towards the adoption of E-Vehicle. The respondents whose age is 25 years and below are found to have the highest mean score of 52.34. The female respondents have the highest mean score of 54.21. The respondents whose educational level is Under Graduation are found to have the highest mean score of 50.54 and their status is employed with the highest mean score of 52.45. The highest mean score of 45.81 has been found for the respondents resides in semi urban area and whose annual income is less than Rs.300000 has a mean score of 53.36 respectively. The respondents who have three members in the family have the mean score of 45.97. ANOVA results indicates that, there is a significant difference with the mean score of age, educational level, occupation, annual income, number of family members, area of residences and the level of Satisfaction towards the adoption of E-Vehicle. Hence the null hypothesis is rejected.

Table 4: Age Group and Place of Purchase

		Place of Purchase					Total
		Dealership	Online retailer	Manufacturer's Website	Second hand market	Others	
Age Group	Upto 25 years	35	11	13	5	22	86
	26 to 45 years	7	6	10	0	1	24
	46 to 55 years	9	11	13	6	2	41
	Above 55 years	4	2	3	2	1	12
Total		55	30	39	13	26	163
Chi-Square Tests							
		Value	df	Asymptotic Significance (2-sided)			
Pearson Chi-Square		30.214	12	.003			
Likelihood Ratio		32.677	12	.001			
Linear-by-Linear Association		.212	1	.645			
N of Valid Cases		163					
a. 9 cells (45.0%) have expected count less than 5. The minimum expected count is .96.							

The Chi square analysis for the above table shows that among 163 respondents, 55 have purchased EVs through dealerships. It has been found that, since the chi-square sig. value ($p > 0.003$) is less than 0.05 there is a significant relationship ($\chi^2 = 30.214$, $p > 0.003$) between the place of the purchase of E-Vehicle and the age of the respondents. It is inferred that the young aged people are highly interested in adoption of E-Vehicles especially through dealers' choice.

Table:5 Age Group and Average Monthly Electric Vehicle Ownership Expenses: Chi-Square Tests

		Average Monthly Electric Vehicle Ownership Expenses				Total
		Less than Rs.5000	Rs.5000 to Rs.10000	Rs.10001 to Rs.15000	Above Rs.15000	
Age Group	Upto 25 years	48	23	14	1	86
	26 to 45 years	12	8	2	2	24
	46 to 55 years	3	10	22	6	41
	Above 55 years	4	1	3	4	12
Total		67	42	41	13	163
Chi-Square Tests						
			Value	df	Asymptotic Significance (2-sided)	
Pearson Chi-Square			54.162 ^a	9	.000	
Likelihood Ratio			56.261	9	.000	
Linear-by-Linear Association			34.842	1	.000	
N of Valid Cases			163			
a. 6 cells (37.5%) have expected count less than 5. The minimum expected count is .96.						

The above table shows that among 163 respondents, majority respondents about 67 have spent less than Rs.5000 as an average monthly electric vehicle ownership expense. The analysis states that, there is a significant relationship ($\chi^2=54.162$, $p > 0.000$) between the age group and average monthly Electric Vehicle ownership expenses of the respondents as the chi-square sig. value ($p > 0.000$) is less than 0.05. It is inferred that many people tend to spend lesser amount for their monthly vehicle expenses on average of Rs.15000 and below.

Table: 6 Gender and Amount spend on purchasing Electric Vehicle

		Amount spend on purchasing Electric Vehicle				Total
		Less than Rs.5 Lakhs	Rs.5 Lakhs to Rs.10 Lakhs	> Rs.10 Lakhs to Rs.15 Lakhs	Above Rs.15 Lakhs	
Gende	Male	22	15	23	16	76

r	Female	67	17	3	0	87
Total		89	32	26	16	163
Chi-Square Tests						
		Value	df	Asymptotic Significance (2-sided)		
Pearson Chi-Square		53.765 ^a	3	.000		
Likelihood Ratio		62.848	3	.000		
Linear-by-Linear Association		51.953	1	.000		
N of Valid Cases		163				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.46.						

It is inferred from the table that a majority of men and women are agreed to spend only less than 5 lakhs on purchasing Electric Vehicles. The analysis reveals that, there is significant relationship ($\chi^2=53.765$, $p > 0.000$) between the gender group and the amount spend on purchasing the Electric Vehicle of the respondents since the chi- square sig. value ($p>0.000$) is less than 0.05. It is inferred that irrespective of the gender, people have high level of satisfaction towards the adoption of E-vehicles by spending lesser amount on purchase.

Table 7: Area of the residence and Amount spend on purchasing Electric Vehicle

		Amount spend on purchasing Electric Vehicle				Total
		Less than Rs.5 Lakhs	Rs.5 Lakhs to Rs.10 Lakhs	> Rs.10 Lakhs to Rs.15 Lakhs	Above Rs.15 Lakhs	
Area	Urban	34	13	19	13	79
	Semi-urban	26	15	6	0	47
	Rural	29	4	1	3	37
Total		89	32	26	16	163
Chi-Square Tests						
		Value	df	Asymptotic Significance (2-sided)		
Pearson Chi-Square		27.145 ^a	6	.000		
Likelihood Ratio		32.347	6	.000		
Linear-by-Linear Association		14.948	1	.000		
N of Valid Cases		163				
a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 3.63.						

The table indicates that among 163 respondents, the EVs are highly used by the urban people and it is also known that they are willing to spend less than 5 lakhs rupees on their purchase. It has been found that, there is a significant relationship ($\chi^2 = 27.145$, $p < 0.000$) between the area of the respondents and the amount spend on purchasing Electric Vehicle as the chi- square sig. value ($p < 0.000$) is less than 0.05. It is inferred that the level of income of respondents also influence the purchase of Electric Vehicles i.e., they tend to spend a minimum amount for purchasing EVs.

Table 8 : Educational Level and Place of Purchase

		Place of Purchase					Total
		Dealership	Online retailer	Manufacturer's Website	Second hand market	Show room	
Educational Level	School Level Education	3	2	2	0	1	8
	Diploma Level	2	2	3	1	0	8
	UG	35	11	10	5	18	79
	PG	11	7	18	3	7	46
	Professional	4	8	6	4	0	22
Total		55	30	39	13	26	163
Chi-Square Tests							
		Value	df	Asymptotic Significance (2-sided)			
Pearson Chi-Square		31.711 ^a	16	.011			
Likelihood Ratio		35.599	16	.003			
Linear-by-Linear Association		.428	1	.513			
N of Valid Cases		163					
a. 14 cells (56.0%) have expected count less than 5. The minimum expected count is .64.							

The analysis indicates that among 163 respondents, 55 respondents have bought Electric Vehicles through Dealership and more than 30 respondents are students pursuing their higher studies. It has been found that, there is no significant relationship ($\chi^2 = 31.711$, $p < 0.11$) between the education level and Place of Purchase of Electric Vehicle (EV) as the chi-square sig. value ($p < 0.11$) is more than 0.05. From this table, it is inferred that UG degree holders are the most common users of EVs preferring to purchase from Dealership.

Table 9 : Model Summary - Dimensions of psychological factors and Level of Satisfaction towards the adoption of E-Vehicle

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.866 ^a	.751	.738	15.17883	.751	57.918	8	154	.000	1.473
a. Predictors: (Constant), Personal Performances, Religious Value, Belief & Norms, Customs & Culture, Political Ideology, Emotional Reaction, Family Status, Peer Group Influence										
b. Dependent Variable: Level of Satisfaction towards the adoption of E-Vehicle										
ANOVA^a										
Model			Sum of Squares	df	Mean Square	F	Sig.			
1	Regression		106752.905	8	13344.113	57.918	.000 ^b			
	Residual		35481.107	154	230.397					
	Total		142234.012	162						
a. Dependent Variable: Level of Satisfaction towards the adoption of E-Vehicle										
b. Predictors: (Constant), Personal Performances, Religious Value, Belief & Norms, Customs & Culture, Political Ideology, Emotional Reaction, Family Status, Peer Group Influence										

From the above table, level of satisfaction towards the adoption of E-Vehicle is taken as the dependent variable and Personal Performance, Religious Value, Belief & Norms, Customs & Culture, Political Ideology, Emotional Reaction, Family Status, Peer Group Influence is taken as Independent Variable. Among the two variables that is between Dependent and Independent ($f=57.918$ positive, $p<.000$) which is below 1 per cent level of significance. Hence the null hypothesis is rejected and it can be concluded that there is significant linear relationship between the dimensions of psychological factors and Level of Satisfaction towards the adoption of E-Vehicle

Table 10 : Coefficients- Dimensions of psychological factors and Level of Satisfaction towards the adoption of E-Vehicle

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.306	1.864		3.919	.000
	Belief & Norms	2.339	.658	.508	3.553	.001

Customs & Culture	.401	.793	.088	.506	.614
Political Ideology	-1.370	.999	-.236	-1.372	.172
Religious Value	3.572	1.158	.397	3.085	.002
Family Status	-.423	.823	-.095	-.514	.608
Peer Group Influence	1.819	1.200	.305	1.516	.132
Emotional Reaction	-2.096	1.125	-.350	-1.863	.064
Personal Performances	1.593	1.019	.265	1.563	.120
a. Dependent Variable: Level of Satisfaction towards the adoption of E-Vehicle					

From the above table, level of satisfaction towards the adoption of E-Vehicle is taken as the dependent variable and Personal Performance, Religious Value, Belief & Norms, Customs & Culture, Political Ideology, Emotional Reaction, Family Status, Peer Group Influence is taken as Independent Variable. Among the two variables that is between level of satisfaction and Constant ($t=3.919$ positive, $p<.000$) which is below 1 per cent level of significance. Hence the null hypothesis is rejected and it can be concluded that there is significant linear relationship between the dimensions of psychological factors and Level of Satisfaction towards the adoption of E-Vehicle.

It is inferred that level of satisfaction on Belief & Norms and Religious Value which is below 1 per cent level of significance. Hence the null hypothesis is rejected and it can be concluded that there is significant linear relationship between the dimensions of psychological factors and Level of Satisfaction towards the adoption of E-Vehicle. Followed by level of satisfaction on Customs & Culture, Political Ideology, Personal Performances, Emotional Reaction, Peer Group Influence and Family Status which is above 1 per cent level of significance. Hence the null hypothesis is accepted and it can be concluded that there is no significant linear relationship between the dimensions of psychological factors and Level of Satisfaction towards the adoption of E-Vehicle.

Table 11: Residuals Statistics- Dimensions of psychological factors and Level of Satisfaction towards the adoption of E-Vehicle

Residuals Statistics ^a					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	7.3056	88.5723	38.1104	25.67038	163
Residual	-41.88365	56.44103	.00000	14.79930	163
Std. Predicted Value	-1.200	1.966	.000	1.000	163
Std. Residual	-2.759	3.718	.000	.975	163

a. Dependent Variable: Level of Satisfaction towards the adoption of E-Vehicle
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From the table, it is inferred that the predicted values, they range from a minimum of 7.3056 to a maximum of 88.5723, with a mean of 38.1104. This suggests that the model's predictions for satisfaction levels vary widely, covering a broad spectrum of values. The standard deviation of 25.67038 indicates that there is considerable variability in the predicted values around the mean. The range from -41.88365 to 56.44103, the mean of the residuals is reported as zero, which suggests that, on average, the model's predictions are reasonably accurate, as the residuals' mean is close to zero. However, the standard deviation of the residuals, 14.79930, indicates that there is still some variability in these errors, suggesting that the model's predictions are not always precise. The standardized predicted values range from -1.200 to 1.966, and the standardized residuals range from -2.759 to 3.718, the statistics for the residuals indicate that the model, on average, provides reasonably accurate predictions of satisfaction levels, as evidenced by a mean residual close to zero.

Table 12: Correlation Analysis - Psychological factors influencing the purchase decision and the level of satisfaction with the adoption of E-Vehicles.

Correlations			
		Psychological factors influencing in purchase decision	Level of Satisfaction towards the adoption of E-Vehicle
Psychological factors influencing in purchase decision	Pearson Correlation	1	.847**
	Sig. (2-tailed)		.000
	N	163	163
Level of Satisfaction towards the adoption of E-Vehicle	Pearson Correlation	.847**	1
	Sig. (2-tailed)	.000	
	N	163	163
**. Correlation is significant at the 0.01 level (2-tailed).			

The above table represents the correlation analysis between the psychological factors influencing in purchase decision and level of satisfaction towards the adoption of E- Vehicles. The null hypothesis state that There is no significant correlation between the psychological factors influencing the purchase decision and the level of satisfaction with the adoption of E-Vehicles. The correlation coefficient between them is presented in the table. The Pearson's correlation coefficient is used to measure the strength and direction of the linear relationship between two variables. It ranges from -1 to +1. A value of -1 indicates positive correlation. A value of +1 indicates negative correlation. A value of 0 indicates no correlation between the variables.

In this case, the correlation between psychological factors influencing in purchase decision and Level of Satisfaction towards the adoption of E-Vehicle is .847. On the other hand, the Level of Satisfaction towards the adoption of E-Vehicle and Psychological factors influencing in purchase decision is .847. The correlation is significant at the 0.01 level (2 tailed), which means that there is a positive relationship between the variables. Therefore, we

reject the null hypothesis. Hence it is revealed that the psychological factors influencing to purchase Electric Vehicle have highly correlated with the level of satisfaction.

SUGGESTIONS:

- ❖ Electric vehicle manufacturers and dealerships should focus on marketing strategies that highlight social status and peer preferences; should work on pricing strategies to make EVs more affordable and competitive in the market.
- ❖ Encourage governments to provide incentives such as tax breaks and subsidies to promote the adoption of electric vehicles, especially in the price-sensitive demographic.
- ❖ Further development of EV charging infrastructure, particularly in urban and semi-urban areas, to reduce range anxiety and increase consumer satisfaction.

CONCLUSION:

Cognitive dissonance in the adaption of electric vehicles (EVs) is a prevalent issue in the transportation sector. The world seeks to transition to more sustainable and environmentally friendly transportation solutions, individuals and even entire societies and sometimes face a disconnect between their awareness for their need for cleaner energy and their actual behaviors. The study highlights the importance of understanding demographic variations and psychological factors in shaping consumer behavior in the electric vehicle market. The finding reveals that the respondents reside in urban area and they prefer to purchase Electric Vehicle through Dealership. It is inferred that most of the respondent's own hybrid mode of vehicle for their purpose. The result of the study shows that the respondents are highly influenced by peer group choice and least preference to the Belief factor. So, the Electric vehicle manufacturers and dealerships should focus on marketing strategies that highlight social status and peer preferences and manufacturers should work on pricing strategies to make EVs more affordable. The study concludes that further development of EV charging infrastructure, particularly in urban and semi-urban areas, to reduce range anxiety and will lead to increase consumer satisfaction.

REFERENCES:

- ❖ **Tarun Kanti Bose (2012)** "Cognitive Dissonance Affecting Consumer Buying Decision Making: A study Based on Khulna Metropolitan Area" (2012) Journal of Management Research ISSN 1941-899X 2012, Vol. 4, No. 3
- ❖ **Hamza Khraim (et al.) (2020)** "An exploratory study on factors associated with Consumers' post-purchase dissonance of electric vehicles" *Innovative Marketing* 16(4), 13-23. doi:10.21511/m.15(4) 2020.02
- ❖ **Anil Khurana et.al. (2019)** "On the adoption of electric vehicles in India: The mediating role of attitude" *Vision*, vol. 24, no. 1, pp. 23-34, 2020.
- ❖ **Wenbo Li et.al (2017)** "A review of factors influencing consumer intentions to adopt Battery Electric Vehicles" Volume 78, October 2017, Pages 318-328
- ❖ **Ona Egbue (et al.) (2012)** "Barriers to widespread adoption of electric vehicles: An analysis of consumer attitudes and perceptions" Volume 48, September 2012, Pages 717-729

- ❖ **Shahla Asadi (et al.) (2020)** “Factors Impacting Consumers’ Intention toward Adoption of Electric Vehicles in Malaysia” PII: S0959-6526(20)34518-2 DOI: <https://doi.org/10.1016/j.jclepro.2020.124474> Reference: JCLP 124474
- ❖ **19) Roopa KV (et al.) (2022)** “COGNITIVE DISSONANCE AND CONSONANCE IN CUSTOMERS ADOPTING E-VEHICLES IN INDIA: EFFECT OF FAME SCHEME ON CUSTOMER PERCEPTION” / World Journal of Management and Economics (2022), Vol. 15, Issue No. 06, ISSN: 1819-8643, E-ISSN: 1998-1392
- ❖ **Manoj Kumar Sharma (et al.) (2014)** “The Impact on Consumer Buying Behaviour: Cognitive Dissonance” Global Journal of Finance and Management. ISSN 0975-6477 Volume 6, Number 9 (2014), pp. 833-840 © Research India Publications
- ❖ **Akhilesh Chandra Pandey¹ and Mohit Jamwal (2015)** “Realizing the Impact of Cognitive Dissonance in Predicting Consumer Behaviour” Volume 12 No. 1, 2016, 36-41
- ❖ **Brajesh Bolia PhD (2020)** “Understanding Cognitive Dissonance of Indian Customers for Financial Products: A Multi-Dimensional Scale Development Approach Indian Journal of Finance and Banking” Vol 4 No 1 (2020): Indian Journal of Finance and Banking