



CONSUMER BEHAVIOURS TOWARDS ECO-CARS: A CASE OF MAURITIUS

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Abstract:

Mankind has always relied on transportation to move from one place to the other; be it by horse carriage or modernized vehicles. With rising environmental issues such as global warming, the transport industry had to evolve so as to provide greener means of transportation and satisfy demands for eco-friendly technologies. This study has shed light on consumer behaviours towards eco-cars, known as hybrid vehicles. This research was in the context of Mauritius and respondents who already drive a vehicle were targeted so as to prevent lack of information about key questions such as habits on fuel expenses and vehicle features. The survey method used, had 100% response rate and permitted the researcher to get fruitful insights about: the extent of introduction and penetration of hybrid vehicles, the factors influencing the purchase of eco-cars, the perceived benefits of owning a hybrid vehicle and the relationship between age and hybrid vehicles' characteristics. One revelation of this study is that hybrid vehicles do not have the expected impacts on Mauritian consumers like they have on the international markets; though the younger generation- the leaders of tomorrow- are interested with eco-friendly automobiles.

Key words: *hybrid, vehicles, consumer, behaviour, Mauritius*

1. Introduction

Hybrid Vehicle is one of today's revolutions. Greening of the society and rising trends of sustainable development have urged producers to come up with remarkable car features that are eco-friendly with lower carbon monoxide emission. Bhunnoo (2011) outlined that the automobile industry has progressed and due to high rivalry from players around the world, choosing the right car has become quite difficult. New demand of vehicle mostly covers the following features: fuel efficiency, lower carbon monoxide emission, environmental friendliness, high security whilst being

technologically equipped, and hybrid vehicles are the answer to such demand (Bhunnoo, 2011). The aim of this research was to investigate about the financial and economic implications of such hybrid vehicles also known as eco-cars in Mauritius. Concepts of sustainable development proposed by the Mauritian government, effects of global warming and fluctuating fuel prices would be some of the factors to be incorporated in this study so as to know their effects on consumer purchasing behaviours. Business magazine (2012) stated that commercialisation of hybrid vehicles have halted due to its retail price being too high on the market; indirectly implying that such vehicles might be possibly at the introductory stage in the market and they do not have the expected effects on consumers in Mauritius compared to those in other countries. Yet, slowly but surely, hybrid cars will become a popular choice amongst Mauritian drivers, due to the numerous advantages associated with driving a hybrid car instead of a conventional one (<http://www.mauritiuscarsales.com>, 2014). This signifies that the findings of this study can aid car dealers to better market hybrid vehicles while at the same time, promoting the concept of sustainable development which will further brighten the future of such vehicles in the Mauritian economy. The study was grounded on the following objectives:

- To identify the extent of introduction and penetration of hybrid cars in the Mauritian market,
- To evaluate the factors influencing the purchase of eco-cars in Mauritius,
- To recognise the benefits of owning a hybrid vehicle as perceived by Mauritians,
- To determine the relationship between age and hybrid vehicles' characteristics

The automobile industry is a key sector in the economy of a country as almost everyone- the individual customer has his car and the business customer has a fleet of vehicles. Thus it is important to innovate in this particular field and introducing hybrid vehicles might change the people's perspective about being environmental friendly and fuel efficient. In 2008, the Prime Minister, announced the Maurice Ile Durable (MID) concept, as being the new long term vision for making Mauritius a sustainable island and thus, several laws and regulations have been introduced to combat pollution and promote sustainable development and in 2011, the government introduced a carbon tax on vehicles, which is calculated on emissions; whereby the least polluting vehicles receive a rebate of excise duties, while the amount is higher for those with high emission (Soogund, 2013). Even the population is becoming more caring about the environment and find ways to contribute to the benefit of the latter. One way to support this would be the implementation of hybrid vehicles but, marketers should know how to anticipate the desired customer changes and then, promote equivalent products so as to attract much more clientele. This study will certainly aid in understanding the current status of hybrid vehicles and their potential on the Mauritian market. The study has thus, elaborated on relevant literatures pertaining to hybrid vehicles followed by a concise research methodology; whereby fruitful insights were gathered which aided in devising rich recommendations and suggestions for different stakeholders of hybrid vehicles.

2. Literature Review

For Edmunds (2013), a vehicle is a hybrid if it utilizes more than one engine to achieve motion. He also stated that hybrids are habitually modified conventional vehicles that utilize electric charges to collect and recycle the energy, which is wasted in standard cars. As per Gerbis (2010), although the industry continues to grow with technological advance, hybrid cars still constitute a very small percentage of the automobiles manufactured and sold worldwide. He clarifies that hybrid cars cover much more distance and are also more fuel efficient than traditional cars but, in terms of repair and maintenance they tend to cost more than their counterparts. Various campaigns encourage adopting the hybrid trend, particularly in countries with air pollution problems and also attract much more clientele by proposing several advantages of possessing a hybrid vehicle such as fuel economy. Even now in the automobile industry there are not enough hybrid vehicles on the market as manufacturers do not currently produce and commercialize a variety of such cars as these vehicles are not in a sufficient amount to allow economies of scale to reduce their prices (Gerbis, 2010). According to Friedman (2003), the most effective way to measure a hybrid's energy security and environmental performance is on their fuel economy and emissions performance directly on the road.

With all benefits that these vehicles offer, the market may face an economic boom such as more Mauritians shifting from classic transportation to the greener one to be more eco-friendly. The government of Mauritius supports those who choose to run hybrid cars on our roads. If you own a hybrid car, this comes with major financial advantages due to rebates being as high as thousands of rupees on hybrid cars and no taxes when trying to import a hybrid car into Mauritius (anon., 2014). Still in Mauritius, a developing country, in spite of the good intents, the full scale commercialization of these vehicles is visibly really slow. Nevertheless few major automobile retailers such as Toyota, Honda and ABC Motors Ltd have introduced a variety of these vehicles in the Mauritian market so as to arouse the interest and curiousness of the population. There are different models of hybrid vehicles and they keep on evolving as modern technologies keep on improving and providing much more alternatives to standard vehicles.

Marketing of hybrid vehicles as an environmentally-better substitute to conservative vehicles finds much more business because it is fuel efficient and eco-friendly. Furthermore, the consumer buying decision process as per Silverman (2001) consist of five stages such as problem recognition, information search, and evaluation of alternatives, purchase decisions and post-purchase behaviour. This process greatly affects customers before they decide to acquire a vehicle either hybrid or not. The driving forces in customer buying behaviour are the intrinsic motives and extrinsic motives. Intrinsic motives seem to be the intention behind consumers' attitude to adopt eco-friendly products (Chan, 1996 & Bamberg, 2003 cited in Sadeque *et al.*, 2010) such as buying HVs to reduce the impact on the environment. On the other hand, it is

also probable that extrinsic reasons may be a more relevant motive for some consumers to purchase eco-friendly products (Jansson et al., 2009; Stern, 2000, Clark, Kotchen & Moore, 2003 cited in Sadeque *et al.*, 2010). Griskevicius et al. (2010) concluded that many of the consumers chose eco-friendly products due to social or professional status that these products offers such as owning a hybrid vehicle.

Many research papers have focused on the scientific benefits of hybrid cars and much less, as those mentioned earlier, have explored their related marketing aspects. Apart from the perceived high costs of hybrid vehicles in Mauritius, another main problem is that there is no constant flow of these vehicles in the market as compared to other vehicle type. How are customers reacting to such happenings and what should car dealers do? This paper would set the baseline for such barely explored area and would aid vehicle corporations to better plan their offerings to potential customers in Mauritius so as to ensure successful marketing of hybrid vehicles.

3. Research Methodology

A quantitative survey was done from August till September 2014 with 150 Mauritians by using non-probability quota sampling. It is important to point out that not all Mauritians possess a hybrid vehicle but, as people has a constant changing need and want, it is essential to consider their point of views so that proactive marketing strategies can be created. The island of Mauritius has 9 districts. To ensure of having a representative sample, the researcher had set a quota of 30 respondents per area-North, South, East, West and Centre of the island. Questionnaires were personally administered to the Mauritians and according to McLeod (2014), questionnaires can be an effective means of measuring the behaviour, attitudes, preferences, opinions and intentions of relatively large numbers of subjects more cheaply and quickly than other methods. A pilot study conducted with 15 respondents permitted the researcher to improve the questionnaire. Cronbach's alpha determines the internal consistency or average correlation of items in a survey instrument to gauge its reliability (Santos, 1999). This study's Cronbach Alpha test was reliable at 0.735 for 70 items.

According to Smyth (2004), a conceptual framework is structured from a set of hypotheses that help a researcher to properly identify the problem and find suitable solutions or opportunities to it. As such, a conceptual framework was developed for the present study; whereby the relationship between various characteristics of hybrid vehicles and age, as one of the demographic profiles of respondents, were examined. The generation of hypotheses also permitted to confirm and strengthen certain points.

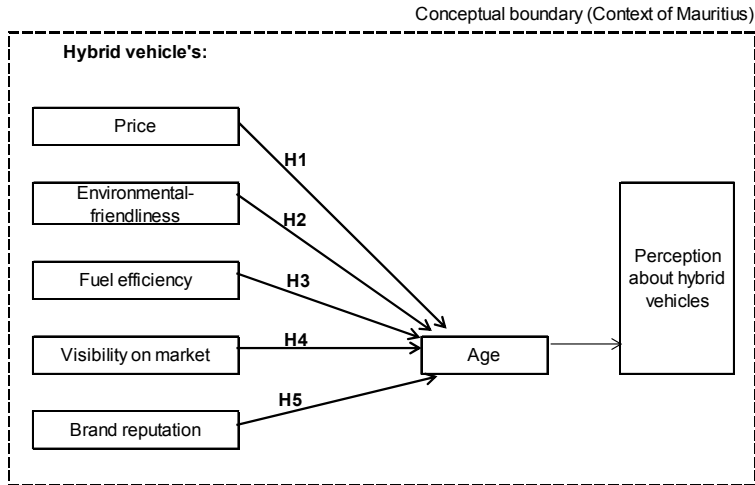


Figure 1: The conceptual framework of the study (authors' creation)

4. Data Analysis and Discussion

The survey's response rate was 100%. Findings have been graphically represented through usage of diagrams such as pie chart, bar chart and histograms for the simplicity of interpretation as well as quantifiable results of factor analysis, crosstabs & chi square test have been presented along with discussions.

Table 1: Socio-Demographic Profile of Respondents

	Socio Demographics	No. of Respondents	% of Respondents
Gender	Male	90	60
	Female	60	40
	Total	150	100
Age Range	20-30 years old	132	88
	31-40 years old	8	5.3
	41-50 years old	0	0
	51-60 years old	8	5.3
	Over 60 years old	2	1.4
	Total	150	100
Occupation	Student	64	42.7
	Student & Part Time Employed	21	14
	Employed	53	35.3
	Unemployed	10	6.7
	Retired	2	1.3
	Total	150	100
Income	Less than Rs 10,000	73	48.7
	Between Rs 10,001 - Rs20,000	37	24.7
	Between Rs 20,001 - Rs30,000	20	13.3
	Between Rs 30,001 - Rs40,000	6	4
	Between Rs 40,001 - Rs 50,000	8	5.3
	Above Rs 50,000	6	4
	Total	150	100

As it can be observed from table 1, the majority of the respondents were aged between 20-30 years old which showed that most of the respondents were able to respond due to the younger generation's enthusiasm to participate in such surveys. It can also be noted that above 45% of the respondents obtained less than Rs 10,000 which can signify that it had a relation with the youth who are now entering the job market and were obtaining a convenience salary to satisfy their basic needs rather than their wants.

4.1 Factors influencing the purchasing behaviour

Table 2: KMO and Bartlett's Test 1

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.763
Bartlett's Test of Sphericity	Approx. Chi-Square	659.421
	df	55
	Sig.	.000

A review of the KMO measure of sampling adequacy shown above, prove that the research has an acceptability level of 0.763 which is relatively high.

Table 3: Rotated Components Loadings for 11 survey items

Item	Components			Eigen Values	% of total Variance	Cronbach Alpha
	1	2	3			
Driving Force of Purchase Behaviour				5.954	40.220	0.846
Insurance	0.837					
Tax Deduction offers	0.766					
Current condition of the car	0.748					
Price	0.677					
Customer Care	0.62					
High resale value	0.528					
Customer Preferences				5.503	12.866	0.667
Style		0.782				
Brand		0.722				
High resale value		0.585				
Other Influences for Buyer Behaviour				2.094	10.426	0.489
Environmental Friendly			0.828			
Fuel Efficiency			0.719			
	6	3	2			
Total percentage variance					97.1	

The 1st factor consisted of 6 items, with Eigen value of 5.954 and a percentage of total variance of 40.220%, which were in relation with the buying behaviour toward hybrid vehicles such as insurance offer, tax deduction offers, and current condition of the car, price, customer care and high resale value. This factor constituted of the main driving force of purchasing behaviour as it obtained a cronbach alpha of 0.846; showing its reliability.

The 2nd factor involved 3 items related to customers' preferences to the type of hybrid vehicles they desired such as brand, style and resale value of the vehicle. It had an Eigen value of 5.503 and a percentage of total variance of 12.866%. The cronbach alpha was 0.667, which is below acceptability level of the factor.

The 3rd factor, categorized as other influences for buyer behaviour, comprised of only 2 items which were in relation with the other benefits obtained from purchasing a hybrid vehicle such as its environmental friendly and fuel efficiency features. It had an Eigen value of 2.094 and a percentage of total variance of 10.426%. The cronbach alpha was 0.489 which signified the poor reliability of this factor.

It could be observed that the main concern of the Mauritian population focused on the insurance policy offered to a vehicle which was be at the 1st place; which may be true with an increasing number of car accidents and high maintenance costs of vehicles especially for costly hybrid vehicles. The style of the vehicle was the first factor from component 2 which showed that people have different taste in the way the vehicle is designed as some may prefer classic design while others want a vehicle which has sportive attire. Finally, one of the main features of a hybrid is it environment-friendliness. It is an important as most of the population seems to be concerned with global warming and want to do as much as possible to acquire and use a product which contributes positively to the environment.

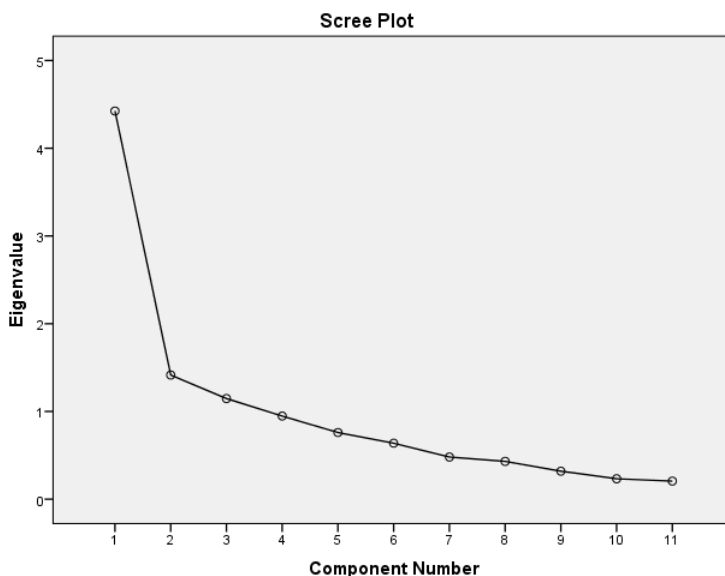


Figure 2: Scree plot diagram 1

According to Rahn (2012), a scree plot is another option to know how to settle too many factors in a factor analysis. It displays the Eigen value on the y-axis and the component number or factors on the x-axis. For the study, in relation to the total percentage variance as shown in table 3, only the first 3 factors were taken into consideration since their percentage of variation is 63.512% which is appropriate. However, as from the 4th towards the 11th factor, the scree plot started to flatten indicating that each following factor had lower and lesser amount of total variance. Thus, it is considered that both the scree plot and the table of rotated component support the conclusion that the 11 survey items can be decreased to a 3 factor model.

4.2 Perception of customers about the benefits of hybrid vehicles

Table 4: KMO and Bartlett's Test 2

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.886
Bartlett's Test of Sphericity	Approx. Chi-Square	917.529
	df	36
	Sig.	.000

A conclusion of the KMO measure of sampling adequacy shown above, proved that the research had 0.886 acceptability level.

Table 5: Rotated Component Loadings for 9 survey items

Item	Components		Eigen Values	% of total Variance	Cronbach Alpha
	1	2			
Strong Point of View of Customers			5.429	60.318	0.892
Performs Well	0.805				
Distance Coverage	0.785				
Reliability and Durability	0.782				
Safety	0.773				
Easy to Drive	0.702				
Publicity	0.632				
Other Opinions			1.054	11.716	0.909
Produce Less Carbon Emissions		0.898			
Reduce Dependency on fossil fuels		0.888			
Fuel Economy		0.793			
Number of test measured	6	3			
Total percentage variance				72.034	

Factor 1 comprised of 6 items, with an Eigen value of 5.429 and a percentage of total variance of 60.318%, which demonstrated the point of view of customers

towards the benefits of a hybrid vehicles such as its performance, distance coverage, reliability and durability, safety, ease of driving and its publicity. The factor showed the strong point of view of customers with a cronbach alpha of 0.892 showing its high reliability.

Factor 2 involved 3 items related to other customers' opinions about hybrid vehicles. It accentuated on such views as hybrid vehicles also had various benefits such as less carbon emissions, reduce dependency on fossil fuels and fuel economy. These items had an Eigen value of 1.104 and a percentage of total variance of 11.716. The cronbach alpha obtained was 0.909 which had a high reliability.

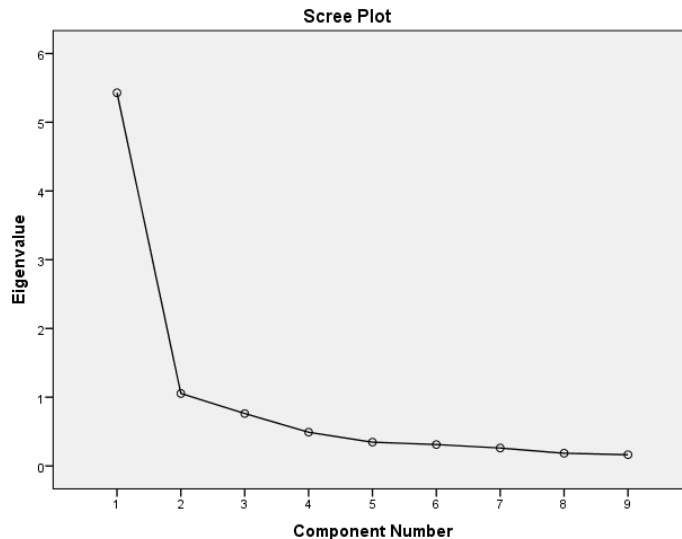


Figure 3: Scree plot diagram 2

Considering the table and scree plot illustrated above, only the first 2 factors were considered as the total percentage variation was 72.034% which was adequate. As from the 3rd factor onwards, the scree plot began drastically to roll out showing that the sequential factors had lesser amount in their total variances.

So, the scree plot and the table of rotated components demonstrate that 9 survey items can be reduced to a 2 factor model.

4.3 Introduction and penetration of hybrid vehicles in Mauritius

Most of the respondents with 78.7% approved that hybrid vehicles should be intensively introduced in Mauritius due to the variety of such vehicles in other international markets. Nevertheless, 21.3% disagreed or do not know whether to introduce such vehicles in Mauritius.

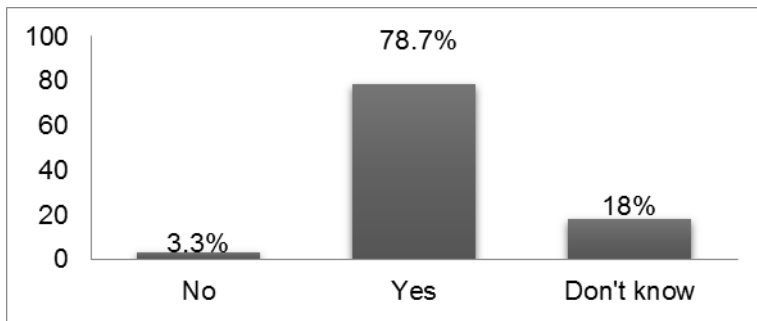


Figure 4: Do you think that more hybrid vehicles should be introduced in Mauritius?

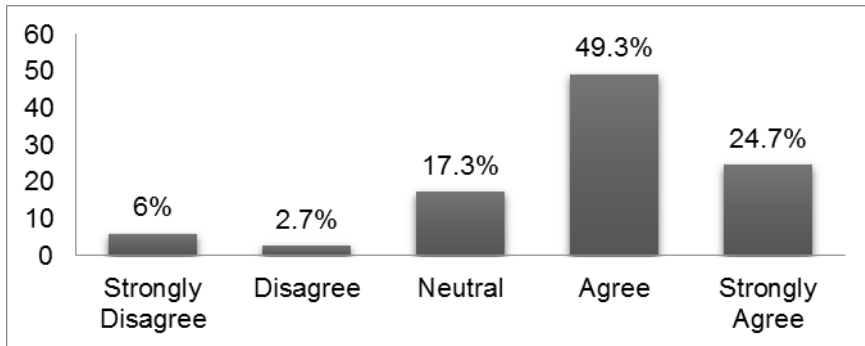


Figure 5: To what extent do you agree that hybrid vehicles are not enough being promoted on the Mauritian market?

The aim of this question was to determine whether respondents wanted to see greener vehicle on the roads so as to be more caring towards the environment. With a majority of 49.3% on overall responses, individuals agreed that hybrid vehicles should be promoted by various Medias around the island to encourage Mauritians to go greener.

4.4 Motives to purchase hybrid vehicles

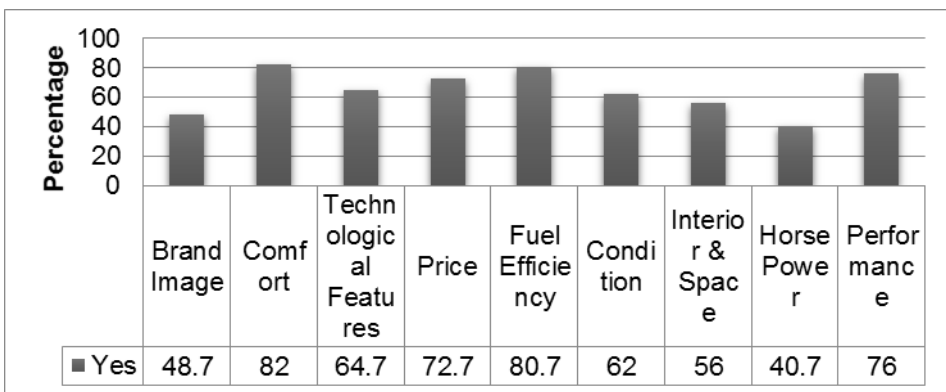


Figure 6: Motives for purchasing a vehicle

Most of the respondents looked for comfort and fuel efficiency in a vehicle as both got the highest percentage 82% and 80.7%, respectively. This demonstrated that most customers prefer to be at ease in the vehicle and also want to save on their fuel consumption. Performance of the vehicle was not far behind with 76% as well as price with 72.7%. Almost all aspects and features of a vehicle were important considerations in the purchase behaviour of customers as almost all elements were above 50% apart from brand image (48.7%) and horse power (40.7%).

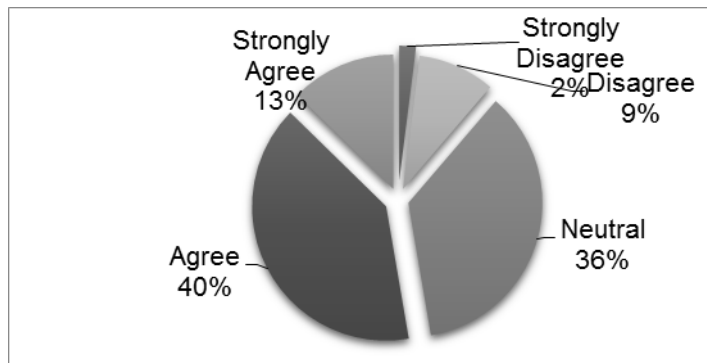


Figure 7: Do you find concepts of sustainability proposed by authorities important?

53% agreed that sustainability concepts are beneficial for Mauritius but, 36% were in the neutral zone as they might not exactly know about such concepts in place due to lack of regular advertising about such concepts by the government or due to unawareness about the meaning and implications of such concepts. However, there is a minority of 11% who were disagreeing about sustainability concepts.

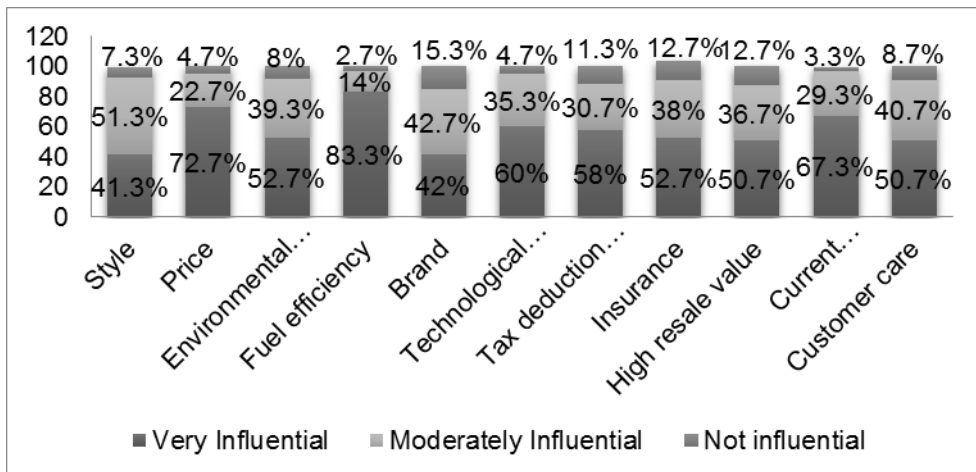


Figure 8: Factors influencing purchase of a hybrid vehicle

Customers are influenced by various factors before they decide to make their final decision for purchasing a product. For the study, several factors which may

influence an individual while deciding to purchase a hybrid vehicle were presented to the respondents. The factors were rated by 3 choices: "Very influential", "Moderately Influential" and "Not Influential".

In terms of most influential factor was fuel efficiency which dominated 83.3% of responses, seconded by price with 72.7% and current condition of the car (67.3%). This signified that the respondents focused more on these 3 factors before purchasing a hybrid vehicle. Then as the average influential factor, the style was most favourable with 51.3% of responses, seconded by the brand of the vehicle (42.7%). These 2 elements indicated that individuals were moderately receptive to what are the design and popularity of the automobile. Finally as the elements that do not influence customers' behaviour was brand (15.3%), insurance and high resale value which both scored 12.7%. Even though brand was a moderate influencer for some individuals, others thought that it would not impact on their decision making process for purchasing a hybrid vehicle.

4.5 Benefits of owning and using a hybrid vehicle

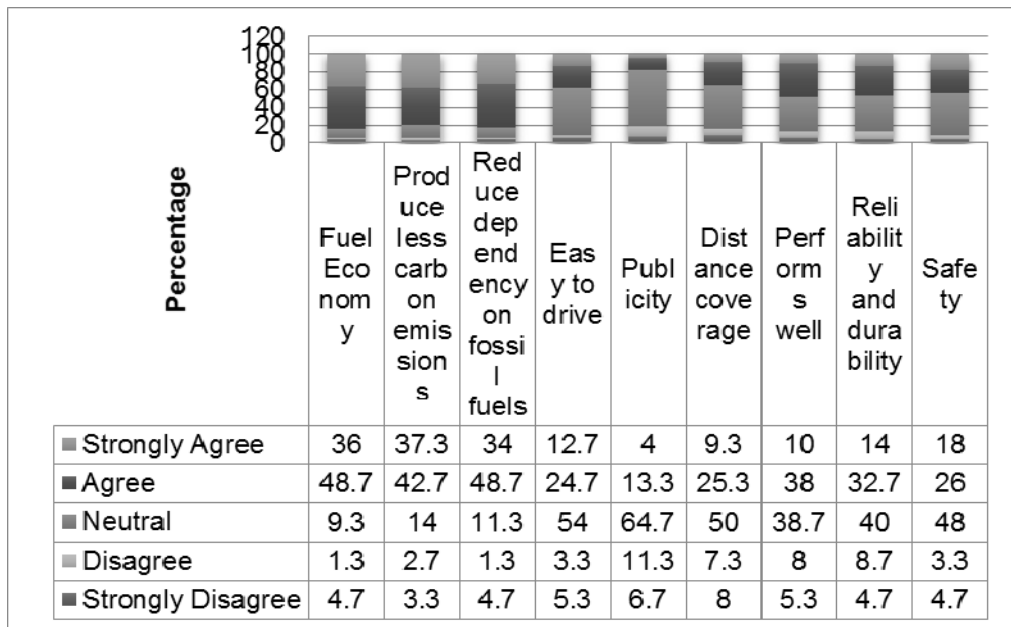


Figure 9: Benefits of owning and using a hybrid vehicle

Almost 48.7% of respondents agreed that hybrid vehicles are fuel efficient and reduce the dependency of fossil fuels. While 37.3% strongly approved that hybrid vehicles are beneficial to environment by releasing lower rate of carbon monoxide in the atmosphere. However, it could be observed that nearly 64% of the respondents were neutral about the public image that a greener car could have in the society while distance coverage did not lag behind with 50%. Furthermore, there were still some

respondents with 11.3% who disagreed about the publicity of the hybrid vehicle and 8.7% who disagreed on the reliability and durability.

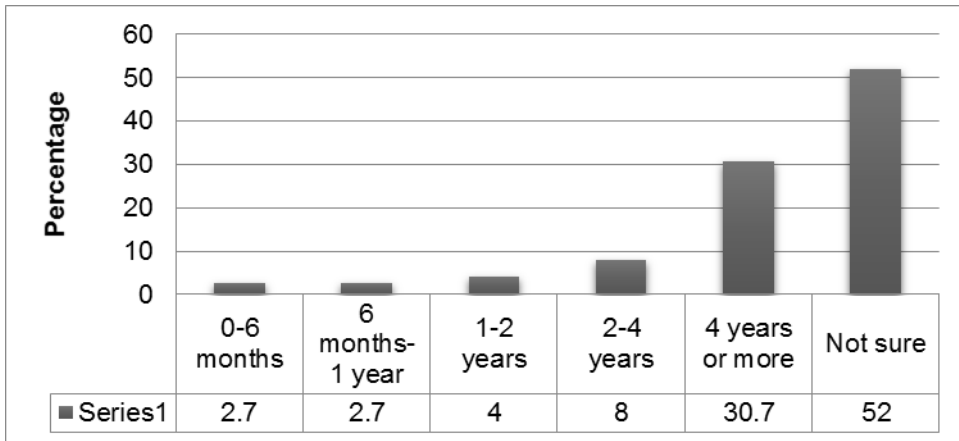


Figure 10: How much time can you take to decide about purchasing a hybrid vehicle

The results demonstrated that most respondents were not sure about the time they could take to decide the purchase of a hybrid vehicle. Also, 30.7% stated that they could take 4 or more years to do so. This meant that Mauritians did not have an immediate plan to shift from their conventional cars to a hybrid or were even uncertain in the need to purchase a vehicle. Thus, different stakeholders have to collaborate so as to educate people and aid people in purchasing a hybrid vehicle for the benefit of the planet.

4.6 Relationship between age of respondents and hybrid vehicles

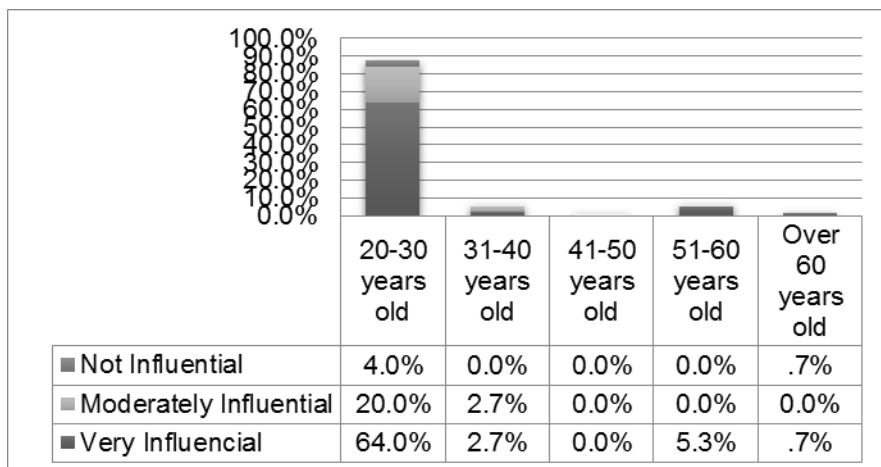


Figure 11: The influence of hybrid vehicle's price on age

From the above histogram, it can be observed that price plays a major influencer in the decision of purchasing a hybrid vehicle for respondents aged between 20-30 years. Moreover, those aged 31 up to 51-60 years also agreed to the fact that price is a determinant factor in their decision making process even though there are some who do not see price as an important issue.

The hypotheses generated were:

H_0 : There is no relationship between price of hybrid vehicles and age.

H_1 : There is a relationship between price of hybrid vehicles and age.

Table 6: Chi-Square Tests 1

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.992 ^a	6	.014
Likelihood Ratio	12.447	6	.053
Linear-by-Linear Association	.020	1	.887
N of Valid Cases	150		
a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is .09.			

It could be concluded from the above table that the Asymp. Sig is less than 5% as it is 0.014 which showed that H_0 should be rejected and H_1 accepted as there is a relationship between price of hybrid vehicle and age.

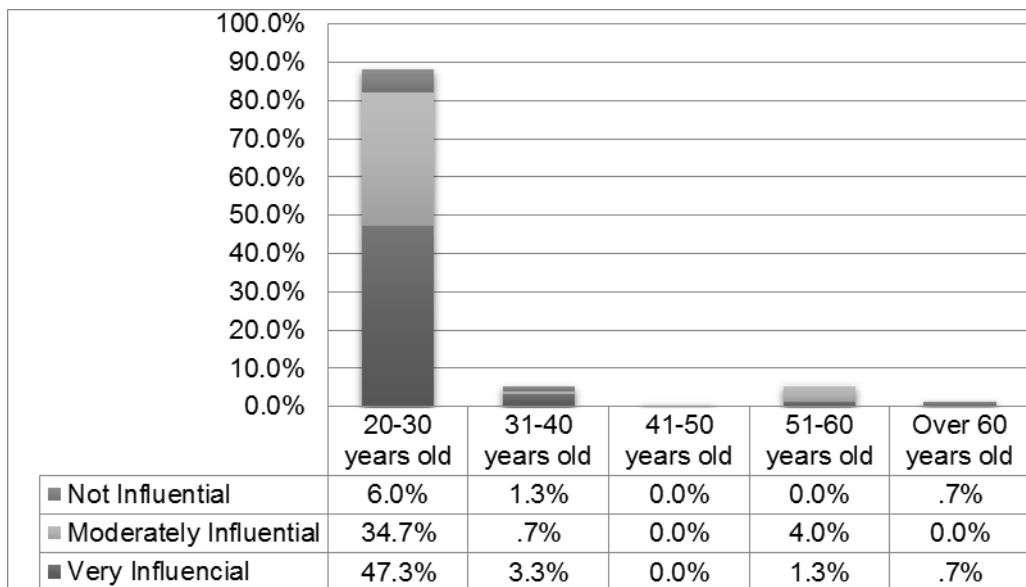


Figure 12: Influence of environmental-friendliness of hybrid vehicles on age

The hypotheses generated were:

H_0 : There is no relationship between environmental friendliness of hybrid vehicle and age.

H_1 : There is a relationship between environmental friendliness of hybrid vehicle and age.

Table 7: Chi-Square Tests 2

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.353 ^a	6	.026
Likelihood Ratio	12.577	6	.050
Linear-by-Linear Association	1.893	1	.169
N of Valid Cases	150		

a. 9 cells (75.0%) have expected count less than 5. The minimum expected count is .16.

What could be concluded was that H_1 should be accepted and H_0 rejected as the sig. value from this chi-square test was less than 0.05 ($p < 5\%$) and thus there was a relationship between the environmental friendliness of hybrid vehicle and age.

When asked the following question: *With fuel prices rising up, do you consider of shifting from conventional car to hybrid vehicle so as to save on fuel expenses?*, almost 115 of the respondents thought of shifting their conventional vehicle to a hybrid one in the future. Yet, few wished to still maintain their traditional vehicles.

To support this theory, the hypotheses formulated were:

H_0 : There is no relationship between increase in fuel prices and age.

H_1 : There is a relationship between increase in fuel prices and age.

Table 8: Chi-Square Tests 3

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.608 ^a	3	.014
Likelihood Ratio	9.440	3	.024
Linear-by-Linear Association	7.459	1	.006
N of Valid Cases	150		

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is .47.

The conclusion from the table displayed above, was that there was a relationship between the increase in fuel prices and age as the sig. value was less than 5% thus normally accepting H_1 and rejecting H_0 .

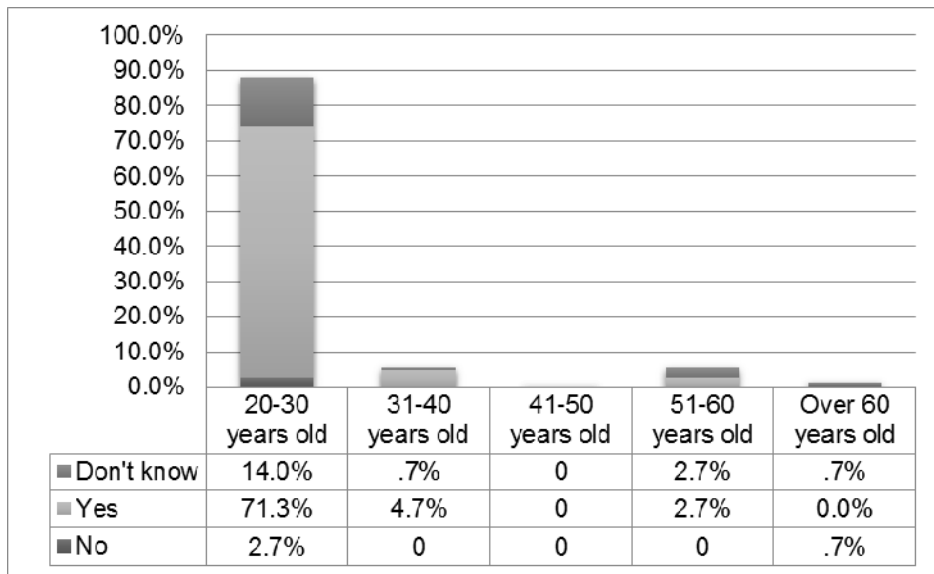


Figure 13: Visibility of hybrid vehicles on market and age of respondents

Mostly the younger respondents agreed that hybrid vehicles should be made more visible on the market; with a majority of 71.3% “YES”. It could be concluded that the younger generation were more in favour to greener vehicles on the roads and insisted on introduction and advertisement of these vehicles in the near future.

From the histogram displayed above, the below hypotheses were created:

H_0 : There is no relationship between visibility of hybrid vehicles on the market and age.

H_1 : There is a relationship between visibility of hybrid vehicles on the market and age.

Table 9: Chi-Square Tests 4

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.365 ^a	6	.001
Likelihood Ratio	13.234	6	.039
Linear-by-Linear Association	2.600	1	.107
N of Valid Cases	150		
a. 8 cells (66.7%) have expected count less than 5. The minimum expected count is .07.			

From the above table, it was founded that the Sig value was less than 5% which signified accepting H_1 and rejecting H_0 as there was a relationship between visibility of hybrid vehicles on the market in Mauritius and age group.

Table 10: Cross-tabulation hybrid vehicle brand reputation and age of respondents

		Are you aware of hybrid?		Total
		No	Yes	
Age	20-30 years old	8.0%	80.0%	88.0%
	31-40 years old	.7%	4.7%	5.3%
	41-50 years old	0.0%	0.0%	0.0%
	51-60 years old	0.0%	5.3%	5.3%
	Over 60 years old	1.3%	0	1.3%
% Total		10.0%	90.0%	100.0%

It was noted that mostly 80% of 20-30 years old had knowledge of these vehicles along with 4.7% of people aged from 31 to 40 years old and 5.3% of 51-60 years old people. It could be deducted that the majority of the respondents were perfectly aware of hybrid vehicles.

From the cross-tab, the hypotheses developed were:

H_0 : There is no relationship between the brand reputation of hybrid vehicles and age.

H_1 : There is a relationship between the brand reputation of hybrid vehicles and age.

Table 11: Chi-Square Tests 5

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.066 ^a	3	.000
Likelihood Ratio	11.073	3	.011
Linear-by-Linear Association	2.723	1	.099
N of Valid Cases	150		
a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is .20.			

It was concluded from the table that the sig (2-sided) was less than 5% ($p < 0.05$) thus, there was a relationship between the brand reputation of hybrid vehicles and age, H_1 was therefore accepted and H_0 was rejected.

5. Conclusion

The study could conclude that there was a relationship between age of the respondents and: a) price of hybrid vehicle, b) environmental friendliness of hybrid vehicle, c) the increase in fuel prices, d) visibility of hybrid vehicles on the market in Mauritius, and e) the brand reputation of hybrid vehicles. One limitation of this study was the use of the non-probability convenience sampling. Such sampling method may cause bias to a study because the researcher would not be having any control factor

determining the exact respondents of a study. However, the current paper could benefit from this sampling method because it was mostly the younger generation who constituted most of the respondents. Younger generation also implies future rulers of the planet and as such, knowing their behaviours towards eco-cars would greatly help marketers to better anticipate the needs of potential near buyers of such products.

This study could highlight that the younger generations believed that hybrid vehicles are not only good in terms of performance but, had various benefits such as less carbon emissions, reduce dependency on fossil fuels and fuel economy. Consequently, this tallied with their desire to see more such vehicles in the island through better promotion. However, what motivated them to buy a hybrid vehicles were mainly comfort of the vehicle, its fuel efficiency and performance. Almost 48.7% of the respondents agreed that hybrid vehicles are fuel efficient and reduce the dependency of fossil fuels. While 37.3% strongly approved that hybrid vehicles are beneficial to environment by releasing lower rate of carbon monoxide in the atmosphere. Strangely, however, many seemed to have neutral perceptions about sustainability concepts proposed by the Government. This meant that either they were not aware about those concepts or that the younger generation people have better and different methods of promoting sustainability in the island. As such, it has become imperative to educate everyone about sustainability concepts but, what is most important is to devise the right concepts only after understanding the perception of each stakeholder; one being customers of the younger generations. This might increase acceptance of such concepts and at the same time, help companies such as those promoting hybrid vehicles, to increase in a smooth manner the flow of such products on the Mauritian market.

Thus, eco-cars should be introduced in Mauritius along with advertising campaigns promoting their benefits and features to the right target market. Throughout, the analysis of the findings proved that hybrid vehicles have potentials in the Mauritian market just like these vehicles have had great impacts on the international level. In its quest of becoming a greener economy however, more ground work has to be done by key stakeholders of hybrid vehicles so as to achieve this goal. This paper can be considered as a starting point and further studies can be entailed for discovering detailed needs and desires of current and potential customers of hybrid vehicles.

6. References

- Bhunnoo, Mohummud, K., Oogarah-Hanuman, V., Ramsaran-Fowdar, R. (2011), *Analysing the potential market for hybrid cars: a survey of car dealers in Mauritius*, available online at <http://www.thefreelibrary.com/Analyzing+the+potential+market+for+hybrid+cars%3A+a+survey+of+car...-a0262583222>
- Business Magazine. (2012), *So far, the retail price of the electric car is an obstacle to its commercialization*, available online at <http://www.businessmag.mu/article/jusqua-maintenant-le-prix-public-de-la-voiture-electrique-constitue-un-frein-sa>
- Gerbis, N. (2010), *What is the economic impact of hybrid cars?*, available online at <http://auto.howstuffworks.com/economic-impact-of-hybrid-cars.htm>

- Friedman, D. (2003), *A New Road. The Technology and Potential of Hybrid Vehicles*, available online at http://www.ucsusa.org/sites/default/files/legacy/assets/documents/clean_vehicles/hybrid_2003_final.pdf
- Santos, J. R. A. (1999), *Cronbach's Alpha: A Tool for Assessing the Reliability of Scales*, available online at <http://www.joe.org/joe/1999april/tt3.php>
- Soogund, M., 2013. *Maurice Ile Durable – A vision that captures the nation*, available online at <http://www.defimedia.info/news-sunday/magazine/item/28092-maurice-ile-durable-a-vision-that-captures-the-nation.html?tmpl=component&print=1>
- Silverman, G. (2001): *The Secrets of Word-of-Mouth Marketing: How to Trigger Exponential Sales Through Runaway Word-of-Mouth*, New York: American Marketing Association.
- Anonymous. (2014), *5 Facts about Hybrid Cars*, available online at <http://www.mauritiuscarsales.com> [Accessed on 13 July 2015].
- Edmunds, D. (2013), *What Are Hybrid Cars and How Do They Work?*, available online at <http://www.edmunds.com/fuel-economy/what-is-a-hybrid-car-how-do-hybrids-work.html>
- Sadeque, S., Chua, W. Y., Lee, A. (2010), *Why do people buy hybrid cars?*, available online at https://www.academia.edu/2543019/Why_do_people_buy_hybrid_cars
- Griskevicius, V., Tybur, J.M., Van Den Bergh, B. (2010), *Going green to be seen: status, reputation, and conspicuous conservation*, *Journal of Personality and Social Psychology*, 98 (3), pp. 392-404.
- McLeod, S. A. (2014), *Questionnaires*, available online at www.simplypsychology.org/questionnaires.html
- Smyth, R. (2004), *Exploring the usefulness of a conceptual framework as a research tool: A researcher's reflections*, *Issues in Educational Research*, 14 (2); pp. 167- 180, available online at <http://www.iier.org.au/iier14/smyth.html>