Intention to Purchase Hybrid Cars in India : A Study

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Abstract

This study aimed to measure consumer purchase intention of hybrid cars in India and discussed various factors and previous studies associated with purchase intention of hybrid cars in different nations. The results serve as a reference for automobile companies planning to launch hybrid cars in the near future in India. Five different constructs were extracted from literature for measuring intention to purchase hybrid cars in India, including seeking green products information, self image effects, social value of hybrid car purchase, emissions importance, and social value of green product purchases that is associated with owning a hybrid car in India. Partial least square structural equation modeling was incorporated to establish the relationship model. The results indicate that Indian consumers showed relatively high purchase intention towards hybrid cars. Our analysis found that seeking green product information, social value of hybrid car purchase, and social value of green product purchase is positively associated with hybrid car purchase intention among Indian consumers. However, self image effects and emission importance emerge to be negatively associated with hybrid car purchase intention. Indian consumers are yet to warm up to the idea of purchasing eco friendly cars known as hybrid cars, and it takes a long time to create awareness among Indian consumers towards the advantages of accepting hybrid cars. This study would be helpful for the automobile sector to better understand the various dimensions needed for developing a positive intention towards hybrid cars.

Keywords: **purchase intention, hybrid car, green marketing, decision making**

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Various international organizations and governments have showed a serious concern towards climate change, increasing population, depletion of renewable sources of energy, and its effect on environment and other environmental issues. With increasing awareness towards the environment, there is a shift in the consumption pattern of people towards environmental friendly products. Ottman (1993) explained this shift of consumer behaviour towards eco friendly products with the growth of green market. This shifting of consumer behaviour has evolved a new business philosophy known as green business. This philosophy has lead to a change in various products, their designs, and business practices ; companies have modified their image from conventional business to green business. The 1980s witnessed a radical shift in consumer behaviour towards eco-friendly products with the emergence of green consumer market mechanisms for environmentally genial organizations (Ottman, 1993).

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The responsibility of protecting the planet now lies in the hands of every individual and business (Tara, Singh, & Kumar, 2015). This is generating a new form of environment friendly product demand and thus is permitting green marketing to emerge into a multidimensional strategic and tactical process. Green marketing comprises of a broad range of activities like product modification, fair - trade practices, adopting eco -friendly production processes and packaging (Mishra & Sharma, 2012). However, the flip side of the coin is that green products are generally expensive and require more maintenance.

This research focuses on the study of green consumer behaviour towards high involvement products (that is, hybrid cars) in India. According to Corfman (1991), the automobile industry is a high involvement industry because preference of automobiles is significant to consumer values and the consumer in a social setting. In order to get sustainable success, marketers have to adopt green marketing techniques. The companies who are using these green practices in their functioning will achieve sustainable success as people these days have a positive attitude towards green products. This research is an attempt to fill this gap by measuring intention to purchase hybrid cars in India. The major benefit of hybrid cars is reducing emission and less fuel consumption. However, India is yet to take to electric/ hybrid cars, probably because they are considered to be not only expensive to buy, but also maintain, and Indians rely more on LPG and CNG instead of electric energy (Naik,2015).

There are so many companies who are actually planning to launch hybrid cars in India in the near future. The Indian government has also developed a number of legislations to reduce the production and marketing of harmful products and promote eco-friendly products (Ramakrishna, 2012). However, the intention to purchase a hybrid car in India is yet to be measured. People have started recognizing the benefits of hybrid cars, which will be useful for the drivers in reducing their carbon footprint and can also reduce the harmful emissions. In recent years, the number of hybrid cars purchasing consumers has seen a growing trend worldwide. However, in India, the consumers are yet to warm up to the idea of purchasing eco friendly cars (hybrid cars).

Literature Review

Green purchase intention represents an individual's intention to purchase eco friendly products. Previous research into purchase intention towards green products came up with varying results over time. From the last couple of decades, consumers have become more aware towards the environment and have started showing an inclination towards eco-friendly products (Khandelwal & Bajpai , 2011; Krause, 1993 ; Lee, 2009 ; Mclntosh, 1991 ; Rahbar & Wahid, 2011). The governments of various nations have also showed their seriousness towards environmental friendly actions and are promoting products with similar orientations. In 2009, the U.S. government lay emphasis on electric vehicles as compared to petroleum and set up a goal of putting one million plug-in vehicles on the road by 2015 (Kriz, 2009). Similar steps were take by many European countries, China, Japan, and South Korea, and because of these initiatives, growth in the development of pro-plug-in vehicles has shown an increase in these regions. In addition, these nations are advancing towards their environmental goals of reducing air pollution and emission of greenhouse gases (School of Public and Environmental Affairs, Indiana University, 2011).

This shifting trend has put a pressure on the companies to modify and innovate the green products in order to sustain themselves in the market and also to meet their comprehensive ethical and moral responsibilities (Saxena & Khandelwal, 2010). Due to the attention of the society, more and more companies are willing to accept environmental responsibility (Chen, Lai, & Wen, 2006). The pressure on companies due to environmental concerns is difficult to ignore and ,therefore, companies should shift their business models that can conform to the popular green trends prevalent nowadays (Chen, 2010).

Marketers can exploit the green marketing initiative in order to generate and facilitate any trade aim to satisfy customers' environmental needs or wants (Polonsky, 1994). The industry may adapt an eco-marketing orientation as a planned response to the dynamic environments of the 1990s (Clarke, 2004).The automobile sector is also not untouched with this changing trend, because this sector is assumed to be majorly responsible for adverse

environmental effects. Hybrid or electric vehicles is a revolutionary innovation to adhere to this shifting trend. In many nations, hybrid cars have been launched and are doing well. Hybrid cars have not yet been launched in India, however, there are many companies who are actually planning to launch the same in the near future. Mahindra, Toyota, and Maruti Suzuki are planning to introduce vehicles which are clean and green (Naik, 2015). Success of these cars is based upon the positive purchase intention of potential car buyers.

Previous literature shows the different findings in measuring purchase intention of hybrid cars in different nations. The positive relationship between environmental attitudes and purchase intention has been established in numerous studies in different cultures such as Asian, European, and American and also in various product categories such as organic products, timber-based products, and eco-friendly vehicles (Ahmad & Juhdi, 2010 ; Chan & Lau, 2001 ; Mostafa, 2007 ; Sinnappan & Abd Rahman, 2011 ; Tarkianen & Sundqvist, 2005).

However, there are some studies, which have showed a negative intention towards green products or hybrid cars. Malaysian young consumers were found to be not willing to change their attitudes towards hybrid cars to help to reduce the environmental pollution (Tan, 2010 ; Wahid & Abustan, 2009). There are some other studies also which explained less awareness and understanding about alternate fuels, and hence showed an adverse effect on purchase intention of the same (School of Public and Environmental Affairs, Indiana University, 2011).There are very limited research studies that have focused on measuring intention to purchase hybrid cars in different parts of the globe. A summary of these research studies is shown in the Table 1.

Previous research into purchase intention of hybrid cars has revealed different results for different nations, societies, cultures, and time. In a very recent study, Dumortier, Siddiki, Carley, Cisney, Krause, Lane, Rupp, and Graham (2015) observed that information on 5 year cost saving and cost of ownership affects the preference of consumers over conventional cars. The results of this study found that consumers may have difficulties in comparing the value of the 5-year fuel expenditure savings to the vehicle price in a meaningful way. They also mentioned that this finding is not consistent with the European study conducted by Nixon and Saphores (2011) who found that 5-year savings information did influence stated preferences.

Jayaraman, Ng, Stocker, and Kiumarsi (2016) measured environment concerns that motivated intention to utilize free bus service in Malaysia and found that people have started taking note of environmental problems and the ultimate benefits of using public transport for primary travel to resolve traffic congestion issues. Karunanayake and Wanninayake (2015) measured purchase intention of hybrid cars in Sri Lanka by taking product knowledge, social influence, price perception, environment attitudes, and perceived risk as independent variables. This study revealed that perceived risk, price perception, environmental attitudes, and social influence variables had a positive relationship with hybrid car purchase intention. Hong, Khan, and Abdullah (2013) adopted theory of planned behavior for measuring purchase intention of hybrid cars in the Malaysian context and found that the adoption of hybrid vehicles was strongly influenced by relative advantage, compatibility, pro-environmental, and perceived behavioral control.

Li, Clark, Jensen, Yen, and English (2013) measured intention to purchase flexible fuel and hybrid - electric vehicles in America and found energy security, the environment, and availability of alternate fuel generated positive expectations to purchase hybrid vehicles. Schuitema, Anable, Skippon, and Kinnear (2013) suggested that instrumental attributes are important for the intention to adopt electric vehicles because they influence emotional responses to electric vehicles (hedonic function) and are used to form and express an identity (symbolic function). Maritz Automotive Research (2011) conducted a telephone survey of 1,207 licensed American drivers and found hybrid vehicles as their second choice for their next purchase. This survey also revealed that consumers had relatively low product knowledge of electric-only and electric-hybrid vehicles and saw electric technology vehicles as useful for those who did limited driving.

A consistent result observed from the survey conducted by Nixon and Saphores (2011) was that most of the consumers were unaware about the impact of motor vehicles on the environment, and therefore, did not understand the related government regulations. However, another survey of 2,302 adult drivers in 21 large U.S. cities revealed

Table 1. Summary of Previous Research on Hybrid Car Purchase Intentions

Author (year)	Context	Independent Variables	Findings
Dumortier, Siddiki, Carley, Cisney, Krause, Lane, Rupp, & Graham (2015)	U.S.A	Demographics, previous vehicle ownership, average rank (experimental research design)	The findings suggested that consumers felt difficulty in assessing the savings of the 5- year fuel expenditure to the vehicle price in a consequential way.
Karunanayake & Wanninayake (2015)	Sri Lanka	Product knowledge, social influence, price perception, environment attitudes, perceived risk	Price perception, social influence, and perceived risk had a significant impact on purchase intention of hybrid cars in Sri Lanka.
Hong, Khan, & Abdullah (2013)	Malaysia	Attitude, subjective norms, perceived behavioural control (theory of planned behaviour)	There was a positive association between relative advantage, compatibility, pro environmental and perceived behavioural control and hybrid car purchase intention in Malaysia ; whereas, no relationship was found between subjective norms and hybrid car adoption.
Li, Clark, Jensen, Yen, & English, (2013)	U.S.A	Demographics, vehicle and driving characteristics, beliefs, environmental information	There was a significant impact of energy security, the environment, and the availability of alternative fuels, along with demographic factors on consumer expectations of purchasing alternative-fuel vehicles.
Schuitema, Anable, Skippon, & Kinnear, (2013)	United Kingdom	Instrumental, hedonic, symbolic, pro-environmental identity, car-authority identity	Instrumental attributes were found to be very important as they were associated with other attributes associated with owning and using electric vehicles including pleasure of driving (hedonic attributes) and identity derived from owning and using EVs (symbolic attributes).
Maritz Automotive Research (2011)	U.S.A	Survey	The findings of this research indicated that people preferred alternate fuel vehicles as their second choice not first. In addition, purchase intention may be affected by low consumer familiarity and understanding about alternative fuel for vehicles.
Carley, Krauseb, Laneb, & Grahama, (2013)	U.S.A	Survey	The survey discovered that highly educated, concerned regarding dependence on foreign oil, previous owners of hybrid vehicles and environmentally responsive consumers showed an early interest in adopting hybrid vehicles. Superior fuel economy, the most important tangible advantage of plug-in technology, was recognized as favorable by respondents, but failed to exert a strong influence on purchasing intentions.
Soon et al. (2013)	Malaysia	Financial condition, consumer awareness, quality of vehicle, demographic background.	Conceptual paper
Nixon and Saphores (2011)	U.S.A	Survey	Respondents of the survey were unsure about the impact of motor vehicles on the environment and ,therefore, did not understand related government regulations and some of the motivations for promoting AFVs.
Ozaki & Sevastyanova (2011)	U.K	Financial benefits, environmental benefits and compatibility with green values, social norms and pressure, practical compatibility, expression of self, attitude towards technology	Financial benefits emerged as a significant factor in hybrid vehicle purchase motivation. Consumer willingness and social norms conformed to their group influence purchase decisions.
Oliver & Lee (2010)	U.S. and Korea (cross cultural analysis)	Seeking green product information, self-image congruence, social value	A strong relationship was found between green information seeking and intention to purchase hybrid cars in U.S. consumers. However, a strong relationship was found between social value association and intention to purchase hybrid cars among Korean consumers.

Coad, Haan, & Woersdorfer (2009)	Switzerland	Environmental policy, financial incentives, intrinsic motivation, technology adoption, technology diffusion	Research contrasted voluntary pro-environmental behavior brought on by 'intrinsic motivation' to enforced compliance due to financial and legal incentives.
Khan & Kar (2009)	Canada	Financial limitations, consumers' lack of information, technology challenges	This paper summarized the key initiatives and policies adapted by the Canadian government to encourage the purchase of fuel-efficient vehicles, particularly hybrid electric vehicles.
Heffner, Kurani, & Turrentine (2007)	California (U.S.A)	Denotations and connotations (Conceptual)	This study discovered that social meaning (denotations) was associated with personal meaning (connotations) and affected both vehicle purchase and use.

a different finding - consumers who expressed an early interest in adopting electric vehicles were typically highly educated, were previous owners of conventional hybrids, were environmentally sensitive, and were concerned about dependence on foreign oil (Carley, Krause, Lane, & Graham, 2013).

Soon, Seng, Luen, and Siang (2013) developed a conceptual model to understand the consumption choice of hybrid/electric vehicles which comprised of four factors: financial condition, consumer awareness, quality of vehicle, and demographic background of consumers. Financial benefits were an important factor in purchasing and adoption of hybrid vehicles followed by environmental benefits, social norms, practical compatibility, and attitude towards technology (Ozaki & Sevastyanova, 2011). A cross-cultural study in the U.S. and Korea, taking U.S. as an individualist country and Korea as a collectivist country was conducted by Oliver and Lee (2010). The study found that self-image congruence and propensity to seek information about green products had a strong positive relationship with intention to purchase a hybrid car among consumers from both countries. This study has adopted a similar methodology in India to measure the intention to purchase hybrid cars in India.

Research Methodology

The main objective of this study is to examine the relationship between consumer factors and consumer intentions to purchase a hybrid car in India. To do this, we analyzed the relationship between propensity to seek information about green products, congruence of green product consumption with self-image, and social value associated with hybrid car purchase intentions among various metropolitan cities of India. The target population of this study was residents of metropolitan cities in India. Metro people have higher awareness level, higher per capita income, availability of infrastructure, and higher socioeconomic development (Datt & Sundharam, 1990 ; Joshi & Mishra, 2011).

There is an abundance of empirical evidence that consumers are willing to pay more for environmental friendly products and consideration of environmental issues is an important determinant of purchase decision (Chen, 2008 ; Laroche, Bergeron, & Barbaro-Forleo, 2001 ; Oliver & Lee, 2010). Oliver and Lee (2010) considered seeking green product information as an important driver to hybrid car purchase intention and thus, a similar measure was considered for this study in the Indian context.

H1 : Seeking green product information is positively related with intentions to purchase a hybrid car.

Self image comes out as an important independent variable in various hybrid car purchase intention studies (Karunanayake & Wanninayake, 2015 ; Ozaki & Sevastyanova, 2011; Oliver & Lee, 2010). Self image reflects how the consumer wants to look different in his/her appearance, thinking, abilities, and so on. Timmor and Katz-Navon (2008) explained this kind of adoption behaviour as the basis of need for absorption and differentiation, depending upon the need of reflecting similar or dissimilar in the group. Lash and Urry (1994) also claimed the

same phenomenon as people's identities are reflected in their consumption, which forms their self image. Self image congruence captures how the consumer feels the product relates to his/her view of who he/she is and who he/she would like to be (Sirgy, 1982).

H2 : Self-image effect is positively related to one's intentions to purchase a hybrid car.

Social influence refers to the change in the individual thinking, feelings, attitudes, or behaviors resulting from the influence from another individual or group (Rashotte, 2007). Numerous studies have considered social influence in measuring purchase intention of green products or hybrid cars (Heffner, Kurani, & Turrentine, 2007 ; Hong et al., 2013 ; Karunanayake & Wanninayake, 2015 ; Ling, 2013 ; Oliver & Lee, 2010). Characteristics like risk, social approval, uncertainty may influence the rate of adoption (Kotler & Armstrong, 2012; Roehrich, 2004). Tan and Teoh (2000) conducted a study to identify and understand the factors (attitudinal, social, and behavioral control) in order to explain the intention to adopt Internet banking services in Singapore.

H3 : Perceptions of the social value of a hybrid car is associated with purchasing a hybrid car.

Marketers can use the fuel economy and environmental friendly cars as one of their promotional tools in marketing to encourage consumers to adopt a hybrid vehicle (Hong et al., 2013). Heffner et al. (2007) mentioned that hybrid-electric vehicles should be symbolized as environmental preservation due to the usage of less petrol or diesel, hence generating fewer harmful emissions. Oliver and Lee (2010) considered emission self efficacy as a construct in measuring hybrid car purchase intentions.

H4 : Perception towards emission importance is positively related to intentions to purchase a hybrid car.

In extension to these constructs, Oliver and Lee (2010) considered social value as another construct for measuring hybrid car purchase intention. Different cultures reflect different social values ; consumers in the USA may respond differently to social values because of their individualistic culture (Oliver & Lee, 2010).

H5 : Perceptions of the social value of a green product is associated with purchasing a hybrid car.

Different views of consumers have been found in various research studies in different geographical locations. Consumers think that they cannot make any difference by driving a hybrid vehicle. Researchers also found social value to be associated with owning a hybrid car because owning of a hybrid car can have different social values from other eco-friendly products as purchasing of hybrid car is a costly affair.

There is lack of a scale to measure the purchase intention of hybrid cars in India. Therefore, we adopted a similar scale used by Oliver and Lee (2010) for measuring U.S. and Korean consumers' intentions to purchase a high involvement, environmentally friendly product: the hybrid car. Adopted scale comprised of 5 demographic questions - gender, age, occupation, qualification, and city (see Table 2) of the respondents. In addition, 21 statements covered six different constructs, that is, seeking green product information, self-image effects, social value of a hybrid car purchase, emissions importance, social value of green product purchases, and hybrid purchase intentions. Respondents reported their responses to the questions by noting their level of agreement with each statement on a 7-point rating scale anchored by (1) *strongly disagree,* (2) *disagree,* (3) *somewhat disagree,* (4) *neither agree nor disagree,* (5) *somewhat agree,* (6) *agree,* and (7) *strongly disagree.* Selected items, marked with (R), were reverse coded. Reliability and validity of the scale are shown in the Table 3.

The residents of metropolitan cities of India and potential consumer of cars acted as the respondents for the present study. These metropolitan cities cover the NCR region, Mumbai, and Bangalore. Online method and offline method of data collection was used in order to capture more number of people during the time period from February - May 2015. The sample covers businessmen, academicians, and government officials. Convenience

Table 2. Demographic Profile of the Respondents

Demographic Characteristics		Frequency	%
Gender	Male	265	69.74
	Female	115	30.26
Age	Less than 30 yrs	95	25.00
	30-45 yrs	178	46.84
	Above 45 yrs	107	28.16
Occupation	Self employed	119	31.32
	Private employed	179	47.11
	Govt. employed	82	21.58
Education	Intermediate	37	9.74
	UG	120	31.58
	PG & above	223	58.68
City	NCR	180	47.37
	Mumbai	110	28.95
	Bangaluru	90	23.68

Table 3. Reliability and Validity of the Constructs

S.No.	Construct	α	AVE	Mean	Std Dev.	No. of items
1	Seeking green product information	0.745	0.571	5.272	0.937	4
2	Self-image effects	0.722	0.669	5.157	1.087648	3
3	Social value of a hybrid car purchase	0.742	0.569	5.372	0.602269	4
4	Emissions importance	0.725	0.647	5.074	1.165048	3
5	Social value of green product purchases	0.734	0.559	5.523	0.63561	4
6	Hybrid car purchase intentions	0.826	0.742	3.374	1.369468	3

(non - probability) and referral sampling technique were used for sample selection. An individual respondent is the sampling element. Since the total population of the concerned regions is more than 10 lakh, therefore, 380 respondents were taken as respondents for this study (Krejcie & Morgan, 1970).

Partial least squares (PLS) structural model was taken as an analysis tool for this study. PLS structural modeling approach is different from covariance based structural modeling equation approach. This approach is inclined to maximizing the quantity of variance explained. PLS structural equation model is composed of three components: the structural model, the measurement model, and the weighting scheme. Structural and measurement model are components in all kinds of SEMs with latent constructs; the weighting scheme is specific to the PLS approach (Monecke & Leisch, 2012). An iterative algorithm solves the structural equation model by estimating the latent variables by using the measurement and structural model in alternating steps, hence, the procedure's name, partial. The structural model estimates the latent variables by means of simple or multiple linear regressions between the latent variables estimated by the measurement model.

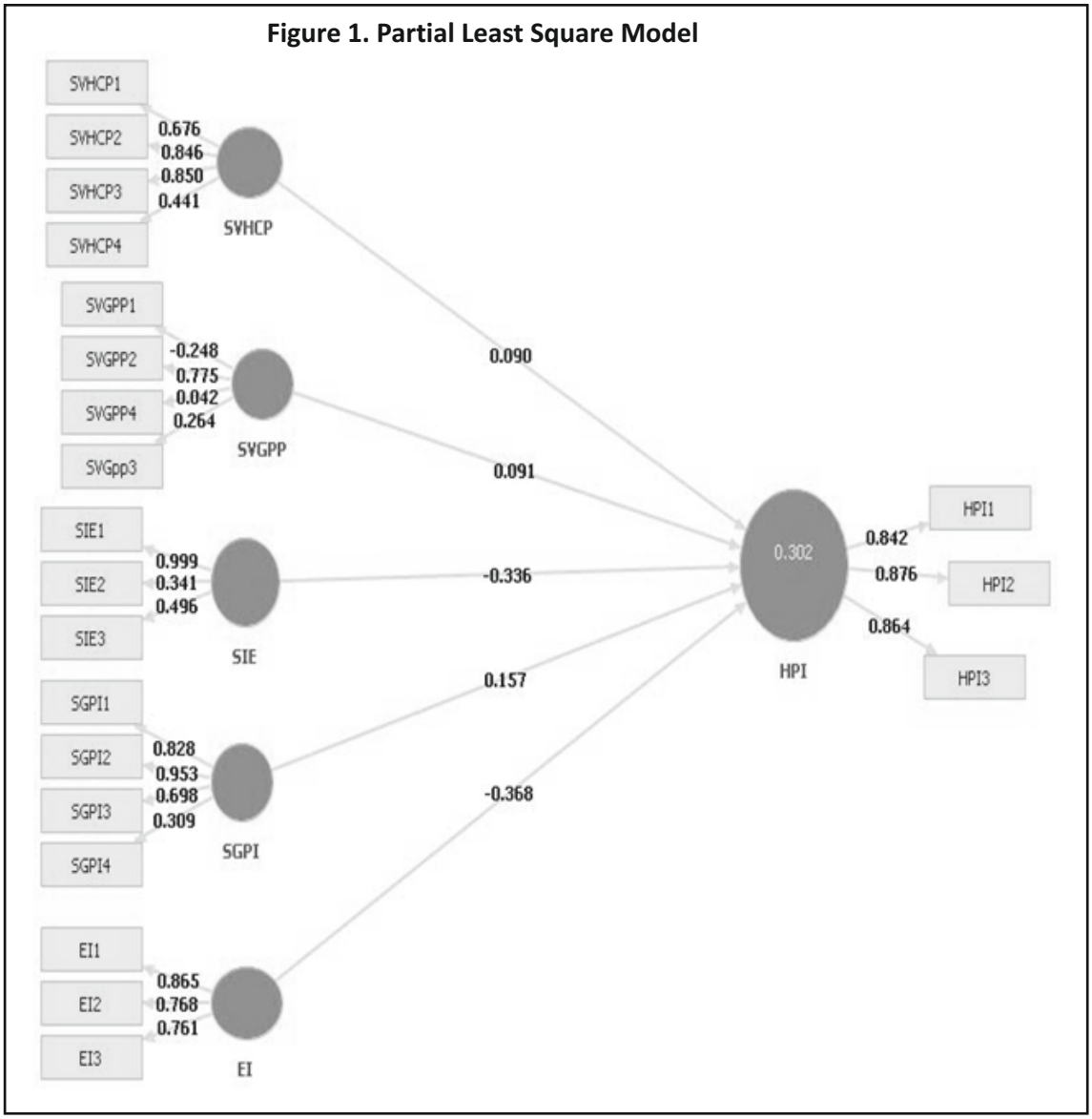
Data Analysis and Interpretation

For conducting any research, it is very important to conceptualize the thought. In measuring purchase intention of hybrid cars in India, we have adopted methodology that is similar to the one adopted by Oliver and Lee (2010) used

to measure the same in U.S. and Korea as discussed earlier. The discussed hypotheses were tested using PLS-structural model, which allowed to avoid multicollinearity assumptions that are usually associated with structural equation modeling based on covariance and least square regression. However, we were still able to analyze the structure using latent variables instead of reducing the constructs to average scores.

The analysis is divided into two stages; in the first stage, reliability and validity of the measurement model have been analyzed. Cronbach's alpha has been incorporated in order to measure the convergent validity of the reflective measure, which provides a measure of the internal consistency of the items based on the assumption that they are equally weighted. Cronbach's alpha of each construct is more than its minimum standard of 0.7 as shown in the Table 2. The value of Cronbach's alpha for the construct - seeking green product information *(SGPI)*, self-image effects *(SIE)*, social value of a hybrid car purchase *(SVHCP)*, emissions importance , social value of green product purchases *(SVGPP)*, hybrid car purchase intentions *(HPI)* are 0.745, 0.722, 0.742, 0.725, 0.734, and 0.826. Discriminant validity was assessed as average variance extracted (AVE). Mean of each construct is greater than 4 except for hybrid car purchase intention, which shows a positive inclination towards the construct.

Figure 1. Partial Least Square Model



In the next stage of analysis, all the hypotheses were tested through partial least square structural equation modeling. The details of the analysis are shown in the Figure 1. The results of PLS structural model is shown in the Figure 1. H1 suggests that there is a positive association between seeking green product information and intention to purchase hybrid cars ($\beta = 0.157$; $p < 0:001$). Hence, this path has a significant relation, and it has maximum positive contribution in purchase intention. This study supports H1. H2 predicts a positive relationship between self image effect and hybrid car purchase intention *(HCPI)*. The result rejects the hypothesis and has a negative relationship with the self image effect ($\beta = -0.336$; $p < 0.05$). This path does not have a significant relation. The relationship between perceived social value and *HCPI* has been tested in the third hypothesis (H3). This hypothesis is accepted and has a positive relationship between social value and the intentions to purchase a hybrid car ($\beta = 0.090$; $p < 0.001$). This path has a significant relation, and it has a positive contribution in purchase intention. H4 establishes a positive relationship between perceived emission importance and *HCPI.* The result of PLS structure model indicates that there is a negative relationship between emissions importance and consumer intention to purchase a hybrid car in the fourth hypothesis ($\beta = -0.368$; $p < 0.05$). Thus, this hypothesis is rejected, and this path is not significant. Likewise, in the fifth hypothesis (H5), that is, social value of green product purchase has a positive value (0.091) ; so, this hypothesis is accepted at the 5% level of significance and has a positive relation with intentions to purchase a hybrid car. This path is significant ; hence, it suggests a psychological reactance against the social value associated with going green that has a positive impact on consumer intentions to purchase a hybrid car.

Hence, H1, H3, and H5 are accepted and show a positive relationship between seeking green product information, social value of a hybrid car purchase, and social value of green product purchases and *HCPI*. However, H2 and H4, that is, self image effects and perceived emission importance do not show any positive relationship with *HCPI.* Finally, the coefficient of determination R^2 is 0.316 between all independent variables and purchase intention. This means that 31.6 % of the variance is explained by the latent variable for purchase intention in the model. Standard value of R^2 is at least 0.25 (Wong, 2013) ; so, in this case, the independent variable moderately explains the dependent variable. This result is consistent with the results obtained by Oliver and Lee (2010) of comparison of hybrid car purchase intention between U.S. consumers and Korean consumers. In the study of Oliver and Lee (2010), the R^2 value was 0.41 and 0.49 in the U.S. model and Korean model, respectively. The result justifies a good relationship between social value association and purchase intention of hybrid cars in India also.

Discussion and Conclusion

Decreasing conventional fuel reserves and increasing concerns towards the environment have led to the growth of the hybrid car market. This growth is mainly concentrated in developed economies and is gradually widening to other developing economies. India is also a very good market because the automobile sector is increasing at a good pace, and environmental awareness is also increasing among people. Various car manufacturers are planning to launch hybrid cars in the near future in India, and thus, it become worthwhile to measure the intention of Indian car consumers to purchase hybrid cars.

The main aim of the study is to measure the purchase intention of hybrid cars in India. This study would be useful for various automobile producers planning to launch hybrid cars in India. Through the literature survey, we hypothesized the five constructs that are related to purchase intention of hybrid cars: seeking green products information, self image effects, social value of hybrid car purchases, emissions importance, and social value of green product purchases that are associated with owning a hybrid car in the Indian market. We expected a positive relationship of these constructs with *HCPI*. In India, the expectation in purchasing a hybrid car is the effect of social value of hybrid car on hybrid purchase intention which has had a specific effect in India. However, our analysis found that seeking green product information, social value of hybrid car purchases, and social value of

green product purchases is positively associated with hybrid car purchase intention among Indian consumers. This result suggests that social phenomenon play a vital role in developing intention to purchase hybrid cars as social value towards green products and hybrid cars has emerged as a vital construct in developing *HCPI.* Social influence occurs when one's emotions, opinions, or behaviors are affected by others. This result is consistent with Ozaki and Sevastyanova (2011), who, in the same context, believed that social norm and consumer willingness to comply with group norms can influence their *HCPI*. In *HCPI*, social meaning is connected to personal meaning (Heffner et al., 2007). Social identity plays a prominent role in possession of new technologies (Roehrich, 2004 ; Schuitema et al., 2013). Kotler and Armstrong (2012) mentioned that characteristics such as risk, social approval, and uncertainty may also influence the rate of adoption. However, Oliver and Lee (2010) were somewhat dissimilar and found that the impact of social value of hybrid car purchases on *HCPI* was positive in Korea but not in U.S., and impact social value of green product on *HCPI* was positive in U.S. but not in Korea.

Further, in this study, self image effects and emission importance emerged as negatively associated with hybrid car purchase intention. This result differs from the findings of Kressmann, Sirgy, Herrmann, Huber, Huber, and Lee (2006) ; Jamal and Al-Mari (2007) ; and Ericksen (1996). They established that self-image congruency could explain consumer's preference and intention to purchase a car. With the help of the given findings from our study, we have concluded that individual decision making heavily influences the perceptions related to social conformity and other social issues in purchasing a hybrid car.

Managerial Implications

Buyers are becoming more aware of the environmental issues and are seriously trying to lessen their negative effects on the earth by buying eco-friendly products and are being inspired to adopt a greener living behaviour. Companies have to understand this shifting phenomenon and need to willingly accept their responsibility towards the environment. Companies may benefit by using the initiative of green branding to breed and to support any proposed exchange to meet the customers' needs (Chen et al., 2006). There is a huge cut throat competition in the car market in India. Adopting eco-friendly cars may emerge as a competitive advantage and long term sustainability model (Khandelwal & Bajpai, 2011). Marketers have to understand the constructs that are related to the intention to purchase hybrid cars.

One of the most important implications is that social value emerged as an important element in forming intention to purchase hybrid cars in India. Social value also plays a prominent role in purchase intention of hybrid cars because owning a hybrid car creates a smart and proactive image of an individual in the society. Marketers can utilize this social value of possessing this type of product in order to generate conforming behavior towards hybrid cars. Marketers should encourage positive word-of-mouth and opinion leadership among Indian consumers. They should utilize various platforms where consumers are searching and seeking information towards hybrid cars and are trying to communicate the social benefits associated with hybrid car ownership.

Marketers have identified some of the consumers who seek information about green products. Marketers may not be able to identify some specific environmental values and thoughts in consumers because of poor response and lack of information available with the consumers, but awareness among consumers can be increased with the help of websites and information in the form of reports. Sometimes, consumers report and participate in web chats and demonstrate their involvement with environmentally friendly products and support social initiatives of such products. However, sometimes, it is not clear whether good intentions translate into purchase intentions, especially for more expensive products like hybrid cars, which are environment friendly. The results of the current study have demonstrated that interest and involvement in green product information is related to the purchase intention of hybrid cars. In short, we conclude that marketers should focus upon the 'social value' of hybrid cars' ownership in their marketing communications. Also, emission importance should be secondary when it comes to hybrid car purchase intentions.

Limitations of the Study and Scope for Further Research

Measuring intention to purchase a hybrid car is a complex phenomenon as it is undergoing constant and rapid development, and hence, it represents a challenging task for research. Though we have taken all possible steps to provide the findings in a holistic way, but the present study is also not free from some limitations. This entails that a number of limitations can be presented, of which the most substantial are elaborated. However, some of these limitations can and should also be regarded as fruitful avenues for future research under a similar scope.

The research framework of this study is based on five constructs - seeking green product information, self-image effects, social value of a hybrid car purchase, emissions importance, and social value of green product purchases. This means that we could prioritize only a few factors. Future researchers can focus on other theoretical models for measuring intention. The purpose of this research was to measure hybrid car purchase intention. Due to constraints, we could not cover a large number of Indian cities. Therefore, the results of this study cannot be generalized for pan- India, but rather, they give an idea to formulate the marketing policies. Future researchers can include more cities in the study in order to get better results that can help in the formation of more accurate marketing policies. Future researchers can also replicate the same in other developing countries for measuring opportunities of hybrid car businesses. Furthermore, future studies should also focus towards the negative intention towards hybrid cars to identify reasons as to why some consumers are against the purchase of environment - friendly cars.

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