

**MEDIA MIX COMPONENTS INFLUENCING BRAND EQUITY: A COMPARISON OF THE INDIAN PASSENGER CAR MARKET****<sup>1\*</sup>Pinaki Mandal and Avinash Kahar<sup>2</sup>**<sup>1</sup>pinaki.mandal@live.com and <sup>2</sup>PGDMSY at DMTIMS Navi Mumbai**ABSTRACT**

*This study creates and tests a model to understand how the frequency of advertisements in different media affects brand equity in the passenger car market for first-time and repeat buyers. The study looks at how different media mix elements influence various aspects of brand equity. It is expected that first-time buyers have less knowledge about the product category compared to repeat buyers, leading them to behave differently. Since these groups have different levels of knowledge, they process information about the product or brand differently. The study's results support this prediction.*

*Keywords: Brand equity, advertising frequency, media mix, first-time buyers, repeat buyers, passenger car market, consumer behavior*

**INTRODUCTION**

Brand equity refers to the extra value a brand name adds to a product. This concept is important because it helps brands stand out from competitors without focusing on price. Research shows that brand equity is built through long-term marketing efforts. People with different levels of knowledge about a product category behave differently. For example, someone buying a product for the first time will act differently than someone who has bought it before. These groups have different knowledge, so they process information about the product or brand differently. They may also respond differently to the frequency of advertisements they see. Some consumers may believe that a brand advertising frequently has higher equity because they think the company can quickly recover its costs, while others may not think this way.

Since media plays a key role in brand communication, it is crucial for brands to understand how different media elements affect these two groups. This will help them engage in effective brand-building activities. This paper aims to understand how different media mix elements influence brand equity for these groups of consumers.

Many studies on media mix elements and brand equity do not distinguish between first-time and repeat buyers. However, these groups are influenced differently by brand equity factors. As consumers are in the market for a short time, it is important for marketers to identify and communicate with the right consumers efficiently. This is why it is important for managers to know which media mix elements work best for first-time buyers versus repeat buyers.

**The Objectives of this Study are to Understand:**

1. How advertising frequency across different media mix elements influences brand equity.
2. Whether first-time and repeat consumers perceive advertising frequency across different media vehicles differently.

**BRAND EQUITY AND ITS DIMENSIONS**

Brand equity, as explained by Aaker (1991), is a concept with multiple aspects. It includes brand loyalty, brand awareness, perceived quality, brand associations, and other unique brand assets. These elements collectively provide benefits and add value to the company. Keller (2002) described customer-based brand equity as the different response customers have to a brand's marketing activities, influenced by their knowledge of the brand. This knowledge isn't just factual; it includes all the thoughts, feelings, perceptions,

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## *International Journal of Applied Engineering & Technology*

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and experiences linked to the brand in the customer's mind, whether they are individuals or organizations (Leone et al., 2006).

Perceived quality refers to a consumer's personal judgment about a product's overall excellence. Brand loyalty means a strong commitment to repurchase a preferred product or service consistently. Loyal customers tend to respond more positively to a brand compared to non-loyal customers. Brand association is anything consumers remember about a brand, while brand awareness is how easily the brand can be recalled from memory. A strong brand image is created by high brand awareness and strong brand associations, which are positively related to brand equity because they signal quality and help consumers consider the brand at the time of purchase.

In summary, high brand equity means consumers have strong associations with the brand, view it as high quality, and are more loyal to it. Increasing these dimensions leads to higher brand equity because each is positively related to it (Yoo, Donthu & Lee, 2000). In this study, 'brand equity' is defined as the difference in consumer choice between a branded product and an unbranded product with the same features. This is measured by the consumer's intention to buy or preference for the branded product compared to the unbranded one. We focus on perceived quality and brand awareness as the key dimensions of brand equity.

### **ADVERTISING FREQUENCY AS A BUILDER OF BRAND EQUITY**

Advertising is a major factor in building brand equity (Aaker & Biel, 1993). Lindsay (1990) argues that the greatest added value comes from consumer perceptions shaped by advertising, which builds a brand image. Maxwell (1989) suggests that consistent advertising is crucial for steady sales, rather than relying on temporary boosts from price promotions.

Advertising impacts brand equity in several ways. Research by Cobb-Walgren, Beal, and Donthu (1995) shows that brands with higher advertising budgets achieve significantly higher levels of brand awareness and equity. This means that advertising increases brand awareness and the likelihood of the brand being considered by consumers. Effective advertising improves brand awareness, attitude towards the brand, and strengthens its image (Rice & Bennett, 1998).

Advertising can enhance brand equity by creating positive associations, perceived quality, and user experience (Keller, 1993). It can also signal product quality (Milgrom & Roberts, 1986). Simon and Sullivan (1993) found a positive relationship between advertising and brand equity using financial data, while Jedidi, Mela, and Gupta (1999) reported similar findings using household purchase data.

Milgrom and Roberts (1986) suggest that advertising spending indicates advertising frequency and signals product quality. Kihlstrom and Riordan (1984) proposed a model where advertising frequency signals product quality by indicating a firm's ability to cover sunk costs, implying higher product quality. Moorthy and Zhao (2000) found a positive correlation between advertising frequency and perceived quality across both durable and non-durable goods. Kirmani and Wright (1989) also found a positive relationship between advertising frequency and perceived quality across media.

Higher advertising frequency can improve perceived quality, as shown in studies where heavy advertising increases perceived product quality (Nelson, 1970, 1974) and signals higher brand quality (Roberts & Urban, 1988). Kirmani and Wright (1989) noted that the perceived cost of a brand's advertising campaign influences consumers' quality expectations. Klein and Leffler (1981) found that firms producing high-quality products often invest in specific capital, like logos and ad campaigns, to assure consumers of their commitment to quality. According to Philip P. Abey (2007), there is a strong relationship between advertising and consumption patterns.

In this study, we assume that brands with higher advertising spending have higher advertising frequency. Whether spending heavily in one medium or across multiple media, if the advertisements reach the right

audience, consumers will perceive the brand as having a higher advertising frequency, which can lead to increased brand equity.

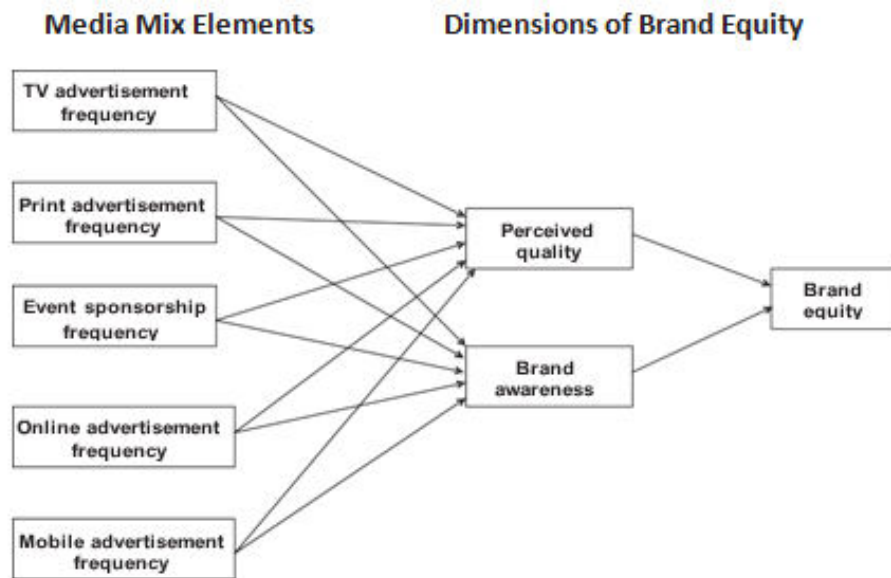
### **First-Time Buyers vs. Repeat Buyers**

This study aims to identify which media mix elements affect brand equity for two distinct groups of consumers: first-time buyers and repeat buyers. Repeat buyers, having used the product for a long time, are likely to have decision criteria easily available from memory due to their familiarity with the product category (Bettman and Suajan, 1987). This familiarity gives them more knowledge about the product category compared to first-time buyers, similar to the difference between experts and novices.

To understand why first-time buyers behave differently from repeat buyers, we look at perception theory. Two key consumer traits influence their perceptions: the tendency to generalize from one stimulus to another and the ability to distinguish between different stimuli (Assael, 1998). According to organizational learning theory (Vera & Crossan, 2004), consumers learn over time by gaining experience and adjusting their perceptions based on past experiences. First-time buyers, not being as familiar with a product category as repeat buyers, are likely to distinguish between different stimuli more. Thus, the effectiveness of different media mix elements is expected to vary between these two groups.

Research on cognitive processes shows that expert information analysts, who have more experience, differ in their approach from novices. Experts use model-based reasoning, mental simulation, critical testing of hypotheses, and reuse analogical knowledge (Maiden & Sutcliffe, 1992; Vitalari & Dickson, 1983). Experts can organize large amounts of knowledge using higher-level abstract concepts, making it easier for them to recognize and use analogies. They also remember details from past experiences, while novices struggle with these tasks and often start from scratch due to a lack of reusable specifications in their memory.

In decision-making situations, experts (like repeat buyers) may apply known decision criteria directly and are less influenced by the salience or visibility of these criteria when comparing similar options. However, for less knowledgeable consumers (first-time buyers), constructing decision criteria at the time of choice is necessary, even for comparable alternatives. In such cases, making certain decision criteria more noticeable can significantly influence how they perceive and evaluate their choices. Therefore, attempts to highlight certain decision criteria are likely to have a more substantial effect on novice consumers, impacting their judgment of both comparable and non-comparable alternatives. For expert consumers, such effects are likely to be limited to non-comparable alternatives.



**Figure 1:** Proposed model of media mix elements influencing brand equity.

Based on the foregoing discussion, we postulate that the response pattern of first time car buyers (novices) would be different from repeat car buyers (experts) towards different media.

### Theoretical Framework

Yoo et al. (2000) developed the Brand Equity Creation model to explore how marketing activities impact brand equity. They found that marketing efforts influence brand equity dimensions, which in turn increase overall brand equity. This relationship suggests that brand equity is built through these dimensions. They also noted that advertising frequency is an important factor in determining brand equity.

In our study, we focused on the impact of advertising frequency, as suggested by Yoo et al. (2000), and examined which media channels are most effective in building brand equity. We adapted Yoo et al.'s model, using media mix elements instead of general marketing mix elements to understand their impact on brand equity (Fig. 1).

### Approach to Study

Our study focuses on the automobile industry, a key sector in any economy (Pauwels et al., 2004). We conducted our research in five major Indian cities. According to the J.D. Power Asia Pacific report (2006), 37% of car buyers in India are first-time buyers. This is a shift from ten years ago when 50% were first-time buyers (Economic Times, 2006). Our study aims to identify which media mix elements influence brand equity for first-time versus repeat buyers.

We classified cars into three categories: premium, volume, and economy, based on price, following the approach of Desarbo and Manrai (1992) and Kirmani et al. (1999). Premium cars cost more than Rs. 9 lakhs, volume cars between Rs. 5-9 lakhs, and economy cars less than Rs. 5 lakhs, based on ex-showroom prices in New Delhi, as per Auto Car magazine, March 2009. Premium brands are often seen as status symbols, while volume and economy brands are more accessible to the general market.

### Research Hypothesis

Our study looks at the perceived media mix elements rather than actual ones because perceived efforts are believed to have a more direct impact on consumer psychology. Consumers' perception of media efforts plays a crucial role in shaping their behavior.

**Media Mix Elements and Brand Equity**

We propose that media activities influence brand equity through various dimensions. We specifically examined the relationship between media activities and two brand equity dimensions: perceived quality and brand awareness. We did not include brand loyalty in our study, as car buyers often move from economy to premium brands over time.

**Advertising and Media Mix Elements Impacting Brand Equity**

Advertising significantly contributes to brand equity, but different media have varying strengths and weaknesses. For example, magazine ads can target specific audiences, while TV ads are good for showcasing product attributes. However, TV audiences are fragmented across channels. Mobile ads are targeted, and internet ads have global reach but are harder to measure. Our study explored the effect of advertising frequency on brand equity across five media channels: TV, print, mobile, event sponsorship, and online.

**Television Advertising**

Television is a powerful medium due to its combination of sight, sound, and motion. It's effective for demonstrating product features and creating strong brand associations (Keller, 2002). About 49% of Indian households own a TV (IRS, 2009), making it a common medium for advertising. However, TV ads are costly and can sometimes overwhelm viewers.

**Print Advertising**

Print ads, especially in newspapers and magazines, are effective for providing detailed product information. About 38% of Indian adults see press ads, with newspapers being popular among car buyers (IRS, 2009). Print media can influence affluent consumers.

**Event Sponsorship**

Sponsorship of events, like sports or film awards, helps increase brand awareness and strengthen brand image (Cornwell & Maignan, 1998). In India, events like the IPL and IIFA Awards are popular sponsorship platforms. Event sponsorship is becoming a common strategy in India, although there is limited research on its impact on brand equity in the country.

**Online Advertisement**

Online ads are increasingly important, especially as internet usage grows. In India, online advertising expenditure has been rising, with a significant growth rate (Media Analyser Package, 2009). Web ads can enhance brand recognition and change consumer attitudes, as shown in studies from other markets like China.

**Mobile Advertisement**

Mobile ads reach users wherever they are, using devices like smartphones. SMS campaigns, a common form of mobile advertising, have high response rates (Jelassi & Enders, 2004). This medium allows for personalized and targeted advertising.

**Sampling and Procedure**

We classified cars into economy, volume, and premium segments and planned our sample accordingly, based on market data (Global Insight, 2007). Our sample included a mix of first-time and repeat car buyers, reflecting the actual market distribution. The study was conducted in five Indian states with the highest car populations, which account for 48% of the total vehicle population in the country.

Type of car	Price band	2004	2005	2006	2007	2011
Economy brand	< 5 lakh	683	716	791	867	1653

## International Journal of Applied Engineering & Technology

Volume brand	5e9 lakh	87	106	155	182	294
Prestige brand	> 9 lakh	34	33	42	57	116
<b>Source:</b> Based on the data in 'India: Forecast and Analysis', 7th September, 2007, published by Global Insight.						

**Table 2:** Stratification of Respondents State- and Brand wise.

Total no. of respondents targeted		No. of new car buyers			No. of repeat car buyers		
		Economy	Volume	Premium	Economy	Volume	Premium
Andhra Pradesh	23	7	1	1	12	2	1
Delhi	40	12	2	1	20	4	2
Maharashtra	59	17	3	1	30	5	2
Tamil Nadu	47	14	2	1	23	4	2
West Bengal	31	9	1	1	16	3	1
Total	200	59	9	5	101	18	8

### Summary of Research on Brand Equity and Media Mix Elements

According to data from Global Insight ('India: Forecast and Analysis', 2007), the sales mix for passenger cars in India from 2004 to 2011 is shown in Table 1. In 2011, it was expected that 2,063,000 new passenger cars would be sold in India, with 80% being economy cars, 14% volume range, and 6% prestige range. Our sample was designed accordingly, with 80% of respondents owning an economy car, 14% a volume car, and 6% a prestige car. Data from the Ministry of Road Transport, Government of India, indicated that Andhra Pradesh, Delhi, Maharashtra, Tamil Nadu, and West Bengal represented 48% of India's total vehicle population, making our sample from these states representative.

We conducted exploratory research with 22 consumers across India to identify parameters affecting brand equity. The respondents included two industrialists, three senior managers, four mid-level managers, two junior managers, two academicians, five business owners, and four consultants. We pretested the survey questionnaire in June 2008, with 30 responses collected from Indian automobile owners across five state capitals: Mumbai, Delhi, Chennai, Hyderabad, and Kolkata. The pretest aimed to ensure clarity and reliability of the questions.

Based on pretest feedback, adjustments were made to the questionnaire, and Cronbach's alpha was used to drop unreliable items. We conducted the final survey using shopping center intercept surveys in five cities. Each shopping center had to have over 1,000 daily visitors and parking for at least 250 cars. We contacted every third person in the parking area between 3 to 9 PM on Friday, Saturday, and Sunday. A total of 1,032 consumers were contacted, with 494 agreeing to participate. Respondents received a small gift for completing the survey.

To participate, consumers needed to have bought more than one car, with the last purchase within the last six months and not a second-hand car. We stratified respondents based on vehicle type (economy, volume, or prestige) and state-wise distribution, resulting in a sample size of 200.

The questionnaire aimed to identify factors influencing brand equity and consumer choice. We used Structural Equation Modeling (SEM) and SPSS 13.0 for analysis. SEM helps test multiple regression equations simultaneously. Good model fit was indicated by values above 0.90 for GFI, NFI, CFI, and RMR, and above 0.80 for AGFI, with an RMSEA below 0.10. Due to the large sample size, Chi-square values were considered alongside the Chi-square to degrees of freedom ratio, where a ratio of 3:1 or less indicated a good fit.

### Measurement Model Testing

Confirmatory Factor Analysis (CFA) is particularly useful for testing the measurement model as it allows correlated errors of measurement (Hair, Anderson, Tatham, & Black, 1998). A measurement model was set having 22 items with seven constructs (latent variables) in this study. AMOS 5.0 maximum likelihood method was used to examine each construct and its standardised loading.

<b>Table 3: Cronbach alpha of construct.</b>			<b>Table 4: Convergent validity of constructs.</b>	
Construct	Number of items	Cronbach's alpha	Convergent validity of construct	Composite reliability
TV advertisement	3	0.74	TV advertisement	0.60
Press advertisement	3	0.82	Press advertisement	0.69
Online advertisement	3	0.96	Online advertisement	0.66
Event sponsorship	4	0.79	Event sponsorship	0.51
Mobile advertisement	3	0.72	Mobile advertisement	0.65
Perceived Quality	4	0.81	Perceived quality	0.82
Brand Awareness	4	0.73	Brand awareness	0.55

### Standard Loading and Squared Multiple Correlation

The results from the analysis showed that all items had high loadings on their respective constructs ( $p > 0.05$  in all cases), and the t-values for these items were above 2.0 (Segars & Grover, 1993). The squared multiple correlation analysis indicated that, except for a few items, most items met the recommended criterion of 0.40 (Taylor & Todd, 1995). This suggests that the items shared a significant amount of variance with their expected constructs (see Table 5).

Regarding model fit, the measurement model demonstrated a good fit to the data. According to Table 6, all criteria met the recommended values suggested by Hu and Bentler (1999), except for the Chi-square and Norm Fit Index (NFI).

The Chi-square value for the measurement model was 873.35 with 455 degrees of freedom, and the p-value was 0.00, which does not meet the criterion for a good fit ( $p > 0.05$ ). However, it is known that the Chi-square test is not ideal for large sample sizes (Marsh, 1994) and becomes more sensitive with more indicators (Hair et al., 1998). This study had a large sample size (200 valid respondents) and many indicators, making the Chi-square test less suitable for assessing model fit.

The NFI was above the recommended value of 0.90, specifically 0.95, indicating that the measurement model had acceptable fitness levels. Other fitness indices also met the recommended minimum values (see Tables 7 and 8).

### Structural Model Testing

After testing the measurement model's suitability, the structural model was estimated. This model was used to examine the relationships between latent variables in the proposed model (Byrne, 1998).

The structural model was run using AMOS 5.0 Graphics, employing maximum likelihood estimation and a correlation matrix to test the hypothesized relationships between constructs. The model included all variables from the measurement model, as they all had significant factor loadings. The exogenous variable was actual brand choice, while the endogenous variables were perceived media efforts.

The constructs and their hypothesized relationships were tested simultaneously. The same model fit criteria used in the measurement model testing were applied here. The fit statistics indicated that the structural model had a satisfactory fit. The Chi-square value was 36.94 with 11 degrees of freedom, and the p-value was 0.00, again not meeting the fit criteria ( $p > 0.05$ ), likely due to the large sample size and many indicators.

## International Journal of Applied Engineering & Technology

All other fitness indices met the recommended values: Chi-square (X<sup>2</sup>)/df of 2.36, GFI of 0.99, AGFI of 0.92, NFI of 0.99, CFI of 0.99, RMR of 0.02, and RMSEA of 0.06 (see Table 8). Therefore, the structural model study showed an acceptable level of model fitness.

**Table 6** Results of hypothesis testing from Structural Equation model.

Hypothesis	From	To	Standardised coefficient	T-value	Results
Relationship from media activities to brand equity dimensions:					
H 1A	TV advertisement 1st time buyers	Perceived Quality	0.11	2.24	Supported
H 1B	TV advertisement 1st time buyers	Brand Awareness	0.11	2.02	Supported
H 1C	TV advertisement repeat buyers	Perceived Quality	0.2	1.22	Unsupported
H 1D	TV advertisement repeat buyers	Brand Awareness	0.17	1.82	Supported
H 2A	Press advertisement 1st time buyers	Perceived Quality	-0.08	-0.68	Unsupported
H 2B	Press advertisement 1st time buyers	Brand Awareness	0.19	5.86	Supported
H 2C	Press advertisement repeat buyers	Perceived Quality	0.21	1.81	Supported
H 2D	Press advertisement repeat buyers	Brand Awareness	-0.06	-0.56	Unsupported
H 3A	Event sponsorship 1st time buyers	Brand Awareness	0.06	1.45	Unsupported
H 3B	Event sponsorship 1st time buyers	Perceived Quality	0.06	1.46	Unsupported
H 3C	Event sponsorship repeat buyers	Brand Awareness	0.08	0.62	Unsupported
H 3D	Event sponsorship repeat buyers	Perceived Quality	0.19	3.41 **	Supported
H 4A	Online advt 1st time buyers	Brand Awareness	0.06	1.65	Supported
H 4B	Online advt 1st time buyers	Perceived Quality	0.06	1.46	Unsupported
H 4C	Online advt repeat buyers	Brand Awareness	0.16	3.84	Supported
H 4D	Online advt repeat buyers	Perceived Quality	0.19	5.52 **	Supported
H 5A	Mobile advt 1st time buyers	Brand Awareness	0.06	1.65	Supported
H 5B	Mobile advt 1st time buyers	Perceived Quality	0.06	1.46	Unsupported
H 5C	Mobile advt repeat buyers	Brand Awareness	0.08	3.62	Supported
H 5D	Mobile advt repeat buyers	Perceived Quality	0.19	5.52 **	Supported

### Summary of Findings

Hypotheses H1A to H1D suggested that television advertisements positively influence perceived quality and brand awareness for both first-time and repeat car buyers. However, the connection between TV ads and perceived quality was not significant, while the link to brand awareness was only significant for repeat buyers. For new car buyers, both paths were significant. This difference might be because new car buyers actively seek information from all sources, and TV, with its visual and sound effects, is an effective medium for creating awareness. Repeat buyers, having prior experience with the product category, are less influenced by TV ads.

Hypotheses H2A to H2D proposed that perceived quality and brand awareness are positively correlated with the frequency of press advertisements for both new and repeat car buyers. For new buyers, there was no significant link between the frequency of press ads and perceived quality, but a strong correlation was observed for repeat buyers. In terms of brand awareness, press ads were more effective for first-time buyers than repeat buyers. This might be because first-time buyers, not being familiar with the product category, absorb information more superficially. In contrast, repeat buyers, with their deeper understanding, respond better to the detailed information provided in press advertisements.

**Table 7:** Reported Values of Model Fit for the Measurement Model.

Fit measure	Recommended values	Values from model	Conclusion
Chi Square (X <sup>2</sup> )	p > Z 0.05	0.00	Not fit
Chi Square (X <sup>2</sup> )/df	< Z 3.00	1.90	Fit
Goodness of Fit (GFI)	> Z 0.9	0.93	Fit
Adjusted Goodness of fit (AGFI)	> Z 0.8	0.90	Fit
Norm Fit Index (NFI)	> Z 0.9	0.95	Fit
Comparative Fit Index (CFI)	> Z 0.9	0.94	Fit



Root Mean Square Residual (RMR)	<Z0.9	0.05	Fit
Root Mean Square Error of Approximation (RMSEA)	<Z0.1	0.04	Fit

H 3A to H 3D hypothesised that event sponsorship is positively related to perceived quality and brand awareness for both categories of buyers. The path to perceived quality was found to be positive for repeat buyers, but no path was seen for first time car buyers. However, path to brand awareness from event sponsorship was found to be weak and insignificant for both categories of buyers. That is, event sponsorships not effective in promoting a sponsor's brand and communicating brand personality to the audience.

**Table 8** Reported Values of Model Fit for the Structural Model.

Chi square (X2)	P>Z0.05	0	Not fit
Chi square (X2)/dF	<Z3.0	2.36	Fit
Goodness of Fit (GFI)	>Z0.9	0.99	Fit
Adjusted Goodness of Fit (AGFI)	>Z0.8	0.92	Fit
Norm Fit Index (NFI)	>Z0.9	0.99	Fit
Comparative Fit Index (CFI)	>Z0.9	0.99	Fit
Root Mean Square Residual (RMR)	<Z0.09	0.02	Fit
Root Mean Square Error of Approximation (RMSEA)	<Z0.1	0.06	Fit

H 4A to H 4D and H 5A to H 5D hypothesised that online and mobile advertisements were positively related to perceived quality and brand awareness for both categories of buyers. The path to brand awareness from online and mobile advertisement was found to be positive for both the categories of buyers, but the path from perceived quality showed mixed results. While the path to perceived quality for repeat buyers was strong, the path for first time buyers was weak for both the media.

### Managerial Implications

In 2011, it is projected that two million passenger cars will be sold in India, representing a market worth approximately 27 billion USD. Of this, around 9.9 billion USD is expected to come from first-time car buyers, with the remainder from repeat buyers.

This study aimed to identify the determinants and effects of brand equity on these two distinct groups of consumers. Since the knowledge levels of first-time and repeat buyers differ, they are likely to respond differently to various advertising strategies (Keller, 1993). Consequently, these groups may prioritize different aspects of the advertisements they encounter.

Previous research has shown that the likelihood of choosing a brand increases with stronger brand equity dimensions (Yoo et al., 2000), and that advertisement frequency helps build brand equity (Yoo et al., 2000). Building on these findings, this study analyzed the relative importance of different media mix elements for first-time and repeat car buyers.

It was discovered that not all media mix elements significantly impact brand equity. For instance, television advertising was found to be more effective for first-time buyers, while press advertising worked better for repeat buyers. Additionally, event management appeared to influence one dimension of brand equity for repeat buyers.

The study concludes that consumers at different stages of knowledge acquisition behave differently. This insight can guide brand managers in the automobile and consumer goods industries on which media mix

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## *International Journal of Applied Engineering & Technology*

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elements to focus on to strengthen brand equity dimensions and effectively position the brand for specific consumer groups. Ultimately, enhancing brand equity can lead to a higher likelihood of brand choice and increased sales.

### **Limitations and Directions for Future Research**

This study has several limitations that future research could address. Firstly, the sample was geographically limited, so the hypothesis should be tested in other countries for more generalizable data.

Data collection occurred post-purchase, which could introduce bias as respondents may rationalize their decisions. Ideally, data should have been collected on consumers' perceptions before purchase to avoid this bias. However, as interviews were conducted within six months of repurchase, this bias is expected to be minimal (Punj & Brookes, 2002).

The study focused solely on advertising frequency when assessing media effectiveness. Other factors, such as advertisement quality, celebrity endorsements, respondent involvement with the product category, and ad recency, can also influence outcomes. Future research should consider these additional factors to provide a more comprehensive understanding of the media's impact on brand equity.

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