

Key Factors Influencing Automobile Purchase Behavior Among Consumers in Malaysia

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Abstract

This study investigates the key factors influencing automobile purchase behavior among Malaysian consumers in the context of the ASEAN Free Trade Area (AFTA) and the ASEAN Trade in Goods Agreement (ATIGA). Using Pearson's correlation and multiple regression analyses on data collected from Malaysia's most populous regions, the research highlights the dominant role of psychological and personal factors in shaping consumer decisions, with social and cultural factors also exerting significant influence. Notably, the preference for national cars, driven by affordability and lower ownership costs, underscores the critical impact of economic conditions on consumer behavior. These findings provide valuable insights for automakers, suggesting that marketing strategies should prioritize consumer needs and economic realities. The study also acknowledges its limitations, such as geographic and demographic constraints, and suggests that future research expand the scope to include additional regions and consumer segments. Overall, this research enhances the understanding of environmental factors in the Malaysian automobile market, offering actionable strategies for industry stakeholders.

Keywords: *Automobile Purchase Behavior, Consumer Behavior, Cultural Factors, Psychological Factors, Malaysian Automobile Market*

1.0 Introduction

Since Malaysia's entry into the ASEAN Free Trade Area (AFTA) on 17th May 2010, alongside Brunei Darussalam, Indonesia, the Philippines, Singapore, and Thailand, the dynamics of the regional automobile market have undergone significant changes (AFTA Council, 2016). The ASEAN Trade in Goods Agreement (ATIGA) has been a critical driver of this transformation, promoting trade liberalization within ASEAN member states, which has in turn strengthened intra-regional industrial links, enhanced production efficiency, and bolstered the global competitiveness of local industries (MATRADE, 2016).

One of the most notable outcomes of this agreement has been the reduction and elimination of import duties and non-tariff barriers, enabling Malaysian manufacturers to source higher-quality raw materials at lower costs from within ASEAN. This has not only reduced production costs but also paved the way for more competitive retail car prices, intensifying competition in Malaysia's automobile market. In this increasingly competitive landscape, it is imperative for automobile manufacturers to go beyond mere cost considerations and gain a profound understanding of consumer preferences and the myriad factors influencing their purchasing decisions.

Research has shown that consumer behavior in the automobile market is shaped by a complex interplay of factors. For instance, differences in race, age, and income have been found to significantly influence automobile purchasing decisions in Malaysia (Wong, 2013). Brand perception also plays a crucial role, as it represents a certain value in consumers' minds, influencing their decision-making process (Chovanovaa et al., 2015). Moreover, tangible aspects such as price, safety, fuel consumption, maintenance costs, and resale value are key considerations for consumers when selecting a car (Koppel et al., 2008). Promotion strategies, too, are essential, with well-executed promotional activities directly contributing to increased sales and sustained business growth (Mohd Alia et al., 2013).

While much of the existing research has focused on these market stimuli factors, there is a notable gap in understanding the impact of environmental stimuli factors—such as cultural, social, personal, and psychological influences—on consumer behavior in the automobile market. This research aims to fill that gap by exploring these environmental factors and their role in shaping automobile purchasing behavior among Malaysian consumers.

By identifying and analyzing these key environmental influences, this study seeks to provide valuable insights that automobile manufacturers can leverage to refine their marketing strategies, better target specific consumer segments, and ultimately enhance their competitive advantage in the market. The objectives of this study are to determine the relationship between cultural, social, personal, and psychological factors and consumer buying behavior in Malaysia's automobile market, providing a comprehensive understanding that will help manufacturers sustain long-term business growth.

2.0 Literature Review

2.1 Consumer Buying Behaviour

Consumer buying behavior is an intricate and multifaceted process influenced by a variety of factors that drive individuals to make purchasing decisions. As defined by Peter and Olson (2008), consumer buying behavior involves a dynamic and ongoing process where consumers assess and evaluate different options before finalizing a purchase. This process is far from static; rather, it involves constant evaluation and re-evaluation as new alternatives emerge, new information becomes available, and consumer preferences shift over time.

A significant component of this decision-making process is the interaction between market stimuli and environmental stimuli. Market stimuli, often referred to as the marketing mix, encompass the controllable variables that companies use to influence consumer decisions. These include product attributes, pricing strategies, distribution channels, and promotional tactics (Vliet, 2013). These elements are carefully crafted by marketers to elicit a desired response from the target market, guiding consumers toward a particular product or brand.

On the other hand, environmental stimuli are factors that are largely beyond the control of marketers but nonetheless play a crucial role in shaping consumer behavior. These include cultural norms, social influences, personal characteristics, and psychological triggers (Furaiji et al., 2012). Understanding the interplay between these stimuli is essential for marketers seeking to effectively influence consumer decisions, particularly in complex and competitive markets such as the automotive industry.

2.2 Cultural Factors

Culture is one of the most profound influences on consumer behavior, as it encompasses the shared values, beliefs, and behaviors that are passed down within a society. According to Durmaz (2014), culture shapes the way individuals perceive the world and make decisions, including purchasing decisions. From a marketing perspective, understanding cultural differences is essential, as what may resonate with consumers in one cultural context may not have the same effect in another.

Hofstede's cultural dimensions theory, one of the most influential frameworks in cross-cultural research, provides valuable insights into how culture influences consumer behavior. Hofstede's research highlights a key distinction between individualistic and collectivist cultures. In individualistic cultures, such as those in the United States, the United Kingdom, and Australia, consumers prioritize personal goals, self-expression, and individual achievements. These consumers are more likely to make purchasing decisions based on personal preferences and self-interest (Hofstede, 2001).

In contrast, collectivist cultures, which are prevalent in many Asian countries, including Malaysia, emphasize group harmony, social cohesion, and collective well-being. Consumers in collectivist cultures are more likely to consider the impact of their purchasing decisions on their social groups and may prioritize products that enhance group welfare or social status (Nayeem, 2012). This cultural orientation has significant implications for marketers, as it suggests that strategies successful in individualistic cultures may need to be adapted to resonate with collectivist consumers.

Subcultures, which are smaller groups within a broader culture that share specific characteristics, also play a crucial role in shaping consumer behavior. In Malaysia, a multicultural society composed of various ethnic groups—including Malays, Chinese, Indians, and indigenous peoples—subcultural influences are particularly pronounced. Each ethnic group may have distinct values, preferences, and behaviors that influence their purchasing decisions. For example, research by Ahmad et al. (2009) found that ethnocentrism, or the preference for local products, is strong among Malaysian consumers, particularly within certain ethnic groups. This finding highlights the importance of cultural sensitivity and localization in marketing strategies.

H1: There is a significant relationship between culture factors and consumer buying behaviour.

2.3 Social Factors

Social factors, such as reference groups, family roles, and social status, exert a powerful influence on consumer behavior. Reference groups are groups of people who influence an individual's attitudes, beliefs, and behaviors, either directly or indirectly. These groups can be

further categorized into membership groups (those with which an individual has regular interaction, such as family and friends) and secondary groups (those with less frequent interaction, such as professional associations or religious organizations) (Kotler & Keller, 2012).

Reference groups play a crucial role in shaping consumer choices by exposing individuals to new behaviors and lifestyles, influencing their attitudes toward products and brands, and creating pressure to conform to group norms. For example, a person may choose to purchase a particular brand of car because it is favored by their peer group or because it is seen as a symbol of success within their social circle (Abdu & Purwanto, 2013).

Family is another critical social factor influencing consumer behavior, particularly in collectivist cultures like Malaysia, where family ties and respect for authority are highly valued. As the primary reference group, the family significantly impacts consumer decisions, especially for major purchases such as automobiles. The opinions and preferences of family members can strongly influence the final purchasing decision, with the needs and desires of the collective often taking precedence over individual preferences (Kotler & Armstrong, 2008).

Social status, which is often reflected through the ownership of luxury goods, is a key determinant of consumer behavior. Products like automobiles serve as status symbols, communicating an individual's social standing, wealth, and success. Danziger (2004) notes that consumers are often motivated to purchase luxury goods not only for their functional benefits but also for the social recognition and personal satisfaction they provide. Understanding the role of social status in consumer behavior is essential for marketers aiming to position their products as aspirational or prestigious.

H2: There is a significant relationship between social factors and consumer buying behaviour.

2.4 Personal Factors

Personal factors, including age, occupation, education, financial status, lifestyle, and personality, play a significant role in shaping consumer behavior. These factors are unique to each individual and can have a profound impact on their purchasing decisions.

Age and life-cycle stages are particularly influential, as consumer needs and preferences change throughout different stages of life. For instance, young singles may prioritize style and performance when choosing a car, while married couples with children may focus more on safety, space, and reliability (Brosekhan & Velayutham, 2014). Marketers must consider these life-cycle stages when developing products and targeting their marketing efforts.

Occupation is another critical factor, as it determines the type of products and services an individual is likely to need or desire. For example, a construction worker may prefer a rugged truck that can handle tough job sites, while a corporate executive may opt for a luxury sedan that reflects their professional status (Durmaz, 2014). By understanding the occupational needs of their target market, marketers can tailor their offerings to meet specific consumer demands.

Education also influences consumer behavior by affecting how individuals process information and make decisions. Higher levels of education often correlate with greater awareness of environmental and social issues, leading some consumers to prefer products that align with their values, such as eco-friendly or ethically sourced goods (Teoh & Noor, 2015).

Financial status is a critical determinant of purchasing power and consumer behavior, particularly for high-cost items like automobiles. Consumers must consider not only the initial purchase price but also the ongoing costs of ownership, such as maintenance, fuel, and financing (Leow & Husin, 2015). Marketers need to be aware of these considerations and position their products accordingly, whether by highlighting affordability, offering financing options, or emphasizing long-term value.

Lifestyle, which encompasses an individual's interests, activities, and opinions, is another key factor influencing consumer behavior. Even within the same cultural group, different lifestyles can lead to varying consumer preferences and behaviors. For example, an environmentally conscious consumer may prioritize fuel efficiency and low emissions when purchasing a car, while a performance enthusiast may focus on horsepower and acceleration (Khaniwale, 2015). Marketers who understand the lifestyle preferences of their target audience can better align their products and messaging to resonate with those consumers.

H3: There is a significant relationship between personal factors and consumer buying behaviour.

2.5 Psychological Factors

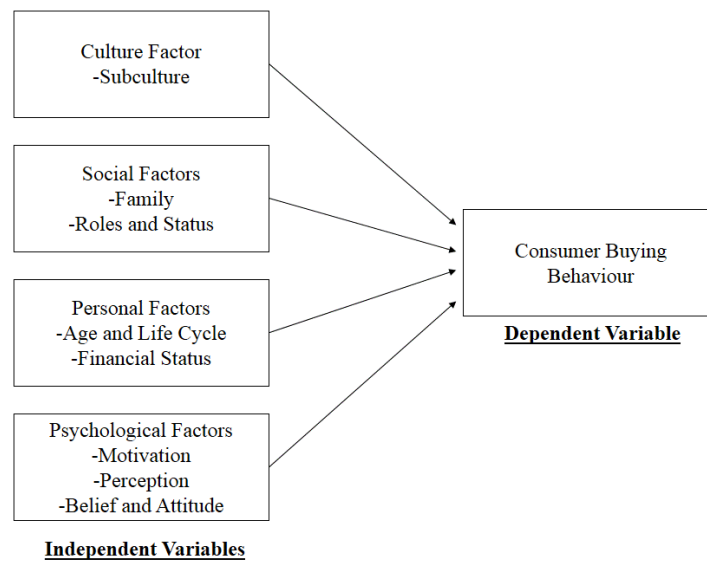
Psychological factors, including motivation, perception, beliefs, and attitudes, are deeply embedded in consumer behavior and play a crucial role in decision-making processes. Motivation is the driving force behind consumer actions, as it pushes individuals to fulfill their needs and desires. According to Maslow's hierarchy of needs, consumers' motivations evolve from basic physiological needs to higher-order needs such as esteem and self-actualization (Maslow, 1970). In the context of the automotive industry, consumers are often motivated by esteem needs, seeking vehicles that reflect their social status and provide a sense of achievement and recognition (Wong, 2013).

Perception, the process by which consumers select, organize, and interpret information, significantly influences how they view products and brands. Perception can be shaped by direct experiences with a product, such as test-driving a car, or by indirect influences, such as online reviews or word-of-mouth recommendations (Saling et al., 2016). In the automotive industry, brand perception plays a critical role in influencing consumer choices. A strong, positive brand image can enhance consumer confidence and increase the likelihood of purchase, while negative perceptions can deter potential buyers (Chovanovaa et al., 2015).

Beliefs and attitudes, which are formed through experiences, knowledge, and societal influences, also play a significant role in shaping consumer behavior. Consumers develop a set of beliefs about a product's attributes, which contribute to their overall brand image and influence their purchasing decisions (Lee, 2007). Attitudes, whether positive or negative, are closely linked to these beliefs and can significantly impact consumer behavior. For example, a consumer with a favorable attitude toward environmentally friendly cars is more likely to choose a hybrid or electric vehicle (Chowdhury et al., 2006).

H4: There is a significant relationship between psychological factors and consumer buying behaviour.

Figure 1: Research Framework



3.0 Methodology

The research study employs snowball sampling methodology, a non-probability sampling technique, to conduct an online survey targeting the most populous regions in Malaysia: Selangor, Federal Territory of Kuala Lumpur, and Johor. These regions were chosen due to their high population density and significant number of vehicles on the road, making them ideal for studying consumer behavior in automobile selection. The survey aims to collect responses from a sample size of 390 respondents, calculated using a 95% confidence level and a 5% margin of error, ensuring the accuracy and reliability of the findings (Zulkaedah, 2015; RaosoftInc, 2004).

The data collection method relies on a questionnaire distributed electronically using the snowball sampling technique. This approach leverages social media platforms, allowing initial respondents to forward the survey to their acquaintances, thereby expanding the reach across the targeted regions. The questionnaire is designed using the "funnel" technique, progressing from general to specific questions to gather comprehensive data on consumer behavior. This method is cost-effective and time-efficient, enabling the collection of data from a geographically dispersed population (Patel & Joseph, 2016). For data analysis, correlation and multiple regression analyses were conducted. These statistical methods help determine the relationships between independent variables (such as cultural, social, and psychological factors) and the dependent variable (consumer buying behavior). The inclusion of demographic variables further allows for the analysis of buying patterns and purchase decisions among Malaysian consumers in the automobile market (Lund Research Ltd, 2013).

4.0 Results

4.1 Inferential Analysis and Findings

The inferential analysis of the study focuses on understanding the relationship between various factors—cultural, social, personal, and psychological—and consumer buying behavior in the automobile sector in Malaysia. The analysis was conducted using Pearson’s correlation and multiple regression techniques, with significant findings that support the hypotheses.

4.2 Correlation Analysis

The correlation analysis employed Pearson's correlation coefficient to examine the relationships between the independent variables (cultural, social, personal, and psychological factors) and the dependent variable (consumer buying behavior). Pearson's correlation coefficient (r) measures the strength and direction of the linear relationship between two variables. In this analysis, the correlation coefficients revealed significant positive relationships between all independent variables and consumer buying behavior. Specifically, psychological factors ($r = 0.762$) and personal factors ($r = 0.757$) exhibited strong correlations with buying behavior, indicating that these factors play a crucial role in influencing consumer decisions in the automobile market. Meanwhile, social factors ($r = 0.575$) and cultural factors ($r = 0.497$) showed moderate correlations, suggesting that while these factors are also important, their influence is slightly less pronounced compared to psychological and personal factors. The significance levels ($p = 0.000$ for all variables) confirm the robustness of these relationships, indicating that the results are statistically significant and that the observed correlations are unlikely to be due to chance.

Table 37: Pearson's Correlation Analysis

		Culture Factors	Social Factors	Personal Factors	Psychological Factors	Buying Behaviour
Culture Factors	Pearson Correlation	1	.041	.058	.091	.497**
	Sig.(2-tailed)		.417	.256	.073	.000
	N	390	390	390	390	390
Social Factors	Pearson Correlation	.041	1	.259**	.333**	.575**
	Sig.(2-tailed)	.417		.000	.000	.000
	N	390	390	390	390	390
Personal Factors	Pearson Correlation	.058+	.259**	1	.597**	.757**
	Sig.(2-tailed)	.256	.000		.000	.000
	N	390	390	390	390	390
Psychological Factors	Pearson Correlation	.091	.333**	.597**	1	.762**
	Sig.(2-tailed)	.073	.000	.000		.000
	N	390	390	390	390	390
Buying Behaviour	Pearson Correlation	.497**	.575**	.757**	.762**	1
	Sig.(2-tailed)	.000	.000	.000	.000	
	N	390	390	390	390	390

****Note:** ****. Correlation is significant at the 0.001 level (2-tailed).

4.3 Multiple Regression Analysis

The multiple regression analysis further explored the combined effect of the independent variables on consumer buying behavior, providing insights into the relative importance of each

factor when considered together. The analysis revealed that psychological factors alone accounted for 58.1% of the variance in consumer buying behavior, as indicated by an R square value of 0.581. When cultural factors were added to the model, the R square value increased to 0.765, suggesting that these two factors together influence 76.5% of consumer buying behavior. The inclusion of personal factors further increased the R square value to 0.952, indicating that psychological, cultural, and personal factors together explain 95.2% of the variance in buying behavior. Finally, when all four factors (psychological, cultural, personal, and social) were considered, the model achieved an R square value of 1.000, meaning that these factors collectively account for 100% of the variation in consumer buying behavior. This indicates that these environmental factors are critical determinants of consumer decisions in the automobile market. The significance levels for all factors were $p = 0.000$, confirming that each of the factors has a statistically significant impact on consumer buying behavior.

Table 38: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.762 ^a	.581	.581	.20660
2	.875 ^b	.765	.764	.15478
3	.952 ^c	.906	.905	.09833
4	1.000 ^d	1.000	1.000	.00000

4.4 Hypothesis Testing

The hypothesis testing results confirmed the significance of each factor in influencing consumer buying behavior:

- H1: Supported - Significant relationship between cultural factors and buying behavior.
- H2: Supported - Significant relationship between social factors and buying behavior.
- H3: Supported - Significant relationship between personal factors and buying behavior.
- H4: Supported - Significant relationship between psychological factors and buying behavior.

In conclusion, the study reveals that psychological and personal factors have the most substantial impact on consumer buying behavior, followed by social and cultural factors. Understanding these relationships provides valuable insights for marketers in the automotive industry, guiding them in developing strategies that resonate with consumer motivations and preferences.

5.0 Discussion, Implications, Limitations, and Recommendations

5.1 Discussion

Based on the findings and analysis, it was observed that the majority of respondents have a monthly salary ranging from RM2000 to RM4000, with a higher proportion of these individuals opting for national cars over imported ones. Although imported cars are perceived to offer better quality, performance, and reliability, many consumers in Malaysia still prefer national cars due to their lower price and affordability. The cost of owning a car, including operating, maintenance, and financing costs, plays a significant role in the decision-making process. In light of Malaysia's high living costs and uncertain economic conditions, consumers have become more rational in their purchasing behaviors, often prioritizing economic deals and essential products over premium items.

Before purchasing a car, most consumers consider not only their personal needs but also those of their families. They often categorize their choices based on brand perception and the resale value of the car. As Malaysia is an Asian country with a strong inclination towards a cohesive lifestyle, car-buying decisions tend to favor group interests over self-interest. Choy et al. (2010) found that perceived quality, value, and risk significantly influence consumers' decisions. However, this research revealed that environmental stimuli, rather than market stimuli, are more influential in the Malaysian automobile market.

Consumers typically purchase cars that meet their needs and requirements, with personal and psychological factors playing a more significant role than price in their decision-making process. For example, despite attractive promotions and displays of luxury cars at a car carnival, consumers are more likely to choose cars that fulfill their usage needs rather than simply being swayed by luxury features. Financial status is another crucial factor, as consumers must consider the costs associated with owning a car, such as operating, maintenance, and financing costs, to ensure they can afford it.

5.2 Research Contribution

This study addresses a gap in the literature by considering all environmental factors—cultural, social, psychological, and personal—that influence consumer buying behavior in the Malaysian automobile market. Previous research often focused on single factors, but this study breaks down each factor into related dimensions for a comprehensive analysis. The findings revealed significant relationships between these environmental factors and consumer buying behavior, with psychological and personal factors being the most influential.

The results provide valuable insights for automakers to develop strategic marketing plans and unique selling propositions that align with the most influential factors affecting consumer behavior. Understanding these factors enables automakers to better penetrate the local market, increase market share, and sustain business growth. By aligning their products with consumer needs and usage requirements, manufacturers can enhance their competitiveness in the Malaysian automotive market.

5.3 Research Limitations

The study was limited to three geographic areas—Federal Territory of Kuala Lumpur, Selangor, and Johor—due to time and cost constraints, which may not represent the entire Malaysian market. The focus was also limited to the passenger car segment, excluding other

types of vehicles within the automotive industry. Additionally, the research concentrated on specific dimensions within each factor, potentially overlooking other influential factors. The snowball sampling method primarily reached respondents aged 25 to 34, which may have biased the results towards this demographic.

5.4 Recommendations

Future research should consider expanding the analysis to include the entire automotive industry in Malaysia, covering all types of vehicles and broader geographic areas. Researchers are also encouraged to explore additional dimensions within environmental factors to obtain a more comprehensive understanding of consumer behavior. Expanding the sample to include a wider range of age groups and other demographics would provide a more representative picture of the Malaysian automobile market.

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