



Research Paper

Understanding Car Buying Preferences in Muscat: A Cross-Sectional Analysis

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ABSTRACT: In this paper, consumers' car buying preferences in Muscat have been analysed by adopting a cross-sectional approach. This research aims to unveil the relationship between the demographic profile of car buyers in Muscat with their buying preferences about the product features. The data was collected from 192 car owners using convenient sampling technique. The data was processed with the help of frequency and descriptive statistics. The relationship was studied by employing Spearman's rank order correlation and their corresponding p-values. It was observed that age, marital status, and income had significant correlations with the buying preferences of the car owners. The study also revealed that there is a growing preference among car owners in Muscat towards eco-friendly vehicles.

KEYWORDS: Buyer behaviour, Demographic influence on car buying, Muscat car owners, Cross-sectional approach, non-parametric analysis, Eco-friendly cars

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I. INTRODUCTION

1.1 Background

Oman is an oil-based economy. About three-fourths of Oman's revenues come from the oil trade. The economy has witnessed a speedy development in the human index, infrastructure, and economic lifestyle of people (IMF, 2022). It was traditionally dependent on agriculture and fishing while engaging in trade. Despite having such large-scale development in a short period, Oman's economy is not fully industrialized to date. Even today, it is largely dependent on imports for its consumption. Oman's share in the global manufacturing industry is just a mere 0.08% (World Bank Data, 2024). It depends largely on global imports for local consumption, especially automobiles. Most of the Omani population depends on vehicles for routine commutation which are imported from other countries. Social science researchers have often shown rigorous interest in unveiling buyer behaviour in the automotive market. Many researchers have tried to explore the interlinks between socioeconomic factors and the buying decision styles of consumers in various countries. This study helps in understanding the car-buying preferences of the residents of Muscat, the capital city of the Sultanate of Oman.

1.2 Purpose

This research aims to analyze the relationship between the demographic variables of the car owners in Muscat and their buying preferences. The specific objectives are to understand the correlation between the age, gender, marital status, and income of Muscat car owners with their car-buying behaviour.

1.3 Scope and Significance

This study focused only on the buying behaviour of individual car owners in Muscat taking into consideration certain demographic variables like age, gender, marital status, and income only. It enquired about the preferences of the car buyers towards nine elements of product preferences viz., brand prestige, car design, capacity, safety, maintenance, reselling value, fuel efficiency, credit available and eco-friendly features. The researcher used a quantitative method to analyse data from 192 responses collected through a structured questionnaire.

The research will be useful to policy makers, car dealerships in the Muscat car market, and other environment-friendly people to customize their sales tactics to cater to the demands of the changing car market

shifts in Oman and to improve the competitive advantage of the market. The research also contributes to the current literature on buyer behaviour and preferences by analysing the relationship between demographic variables and the buying preferences in case of personal cars.

1.4 Research Statement

Much research have been done on buyer behaviour but still the problem is under-explored in the Sultanate of Oman, which primarily relies on imported cars. The past literature do not give a clear understanding about the buying preferences of a car consumer in the Gulf Cooperation Council (GCC) region. This research intends to address the problem of unravelling the interplay between the demographic factors and car buying behaviour of Oman.

II. LITERATURE REVIEW

Social science researchers who have analysed the trends in car buying behaviour have often given suggestions to policymakers, car manufacturers and sales enablers that the attitudes of car consumers are highly influenced by demographic factors such as age, gender, income, region etc. Here, the author intends to summarise the research findings in this field to have a wholesome understanding of the relationship between the variables of this study.

One of the pioneers of the research on this topic De Janosi (1959) found through his study that the demand for automobiles is highly influenced by the income level and financial conditions of the people living in a region. The Theory of Buyer Behaviour enunciated by Haines et al. (1970) stated that psychological and economic factors significantly impact the consumers' decision-making process. Studies conducted by Choy et al. (2010) and Yee et al. (2011) observed that price elasticity, brand affinity and product quality influence the car purchase decisions of Malaysian consumers. This was confirmed by Chaudhary (2023) when he analysed the buying behaviour of automobile consumers in India. Income and cultural effects also played a role in shaping the car-buying attitude of Malaysia. Another study conducted in Malaysia by San (2011) found that they considered the car's perceived expected quality and perceived buying risks as major criteria for buying vehicles. Indian consumer behaviour towards car purchase was majorly defined by the cost efficiency, mileage and after-sales service of the cars (Shende, 2014; Chopra, 2018 and Dharmaraj, 2020).

According to Nerurkar et al. (2023), fuel efficacy and reselling value were also the major defining factors in the case of Indian consumers. Similar research done among Nigerian car consumers revealed that city expansion, income and age of the buyers were the major factors that determine the car-buying decisions of households. City dwellers prefer compact and fuel-efficient cars, but countryside buyers prefer cars with greater endurance to the rough terrain (Koce et al., 2021). When Guan (2023) investigated the factors of growing automobile demand in China, he identified economic growth and technological advancements in the sector as the main determinants of vehicle buying behaviour of Chinese consumers. It was also seen that there was a growing awareness among people to prefer eco-friendly cars.

Income is a major factor that influences buying decisions. Higher-income consumers favour cars with first-class features and environment-friendly vehicles and low-income consumers prefer budget-friendly vehicles (De Janosi, 1959; Chopra, 2018 and Koce et al., 2021). In fact, Koce et al., (2021) also mentioned in their research that along with income; education and the family size also had an influence on the car buying decisions. If we analyse from the perspective of age of the buyers, it was seen that older consumers showed greater affinity towards buying cars with free after sales services and brand trustworthiness whereas young consumers preferred cars with great advanced technological features and cost-efficiency (Dharmaraj, 2020 and Yee et al., 2011). Bishnoi and Jishu (2023) also confirmed the dynamic that younger consumers preferred vehicles that had modern technological features and appealing body design whereas older car buyers gave preference to car stability and its cost-efficiency. According to Kiran and Vasantha (2016) social media promotions improved the brand reputation and trustworthiness of cars among consumers which enhanced the car demand of the households.

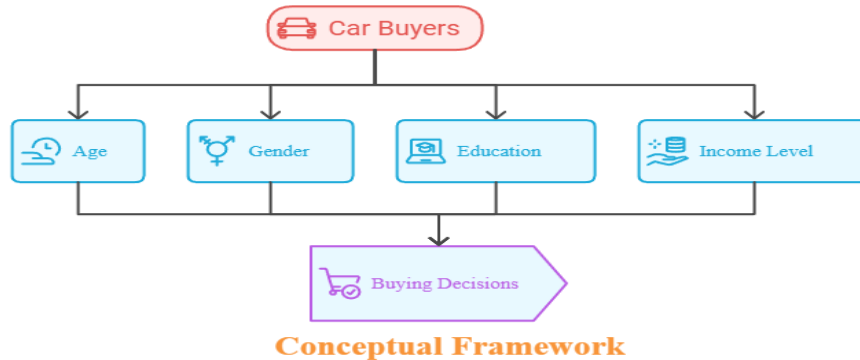
There was a variation in the buying decisions based on the gender too. Male consumers highly favour buying cars with great engine performance, but female buyers prefer buying cars that offer safety and functionality for travelling with family (Rezvani et al., 2014 and Nerurkar et al., 2021). Mehmood et al., (2024) proved in their research that vehicle buyers, nowadays, give importance to environmental regulations and favour buying electric vehicles. Nerurkar et al., (2023) and Rezvani et al., (2014) also noted this feature in their investigations. An interesting angle of investigation was provided by Jahan et al., (2024) when they proposed a model incorporating the effects of demographic and behavioural factors to provide a strong framework for estimating the vehicle buying decisions of the household consumers.

All these studies make it clear that demographic variations play a major role in determining the vehicle buying decisions of consumers. It was also noticed that socio-demographic variations resulted in differences in the car buying attitudes of people. The analysis of literature revealed that though many studies have been

conducted to analyse the relationship between income levels and car buying decisions, they fail to give a clear understanding of how the changing income levels of a demographic class impact their buying decisions in a specific period. Demographic factors such as the marital status of the consumers remain under-explored in studying the underlying forces of car buying decisions. These gaps have been examined critically in this paper to have a clear understanding of car buying decisions.

III. RESEARCH FRAMEWORK AND METHODOLOGY

In this research, the dependent variable is the car-buying decision behaviour of individuals, and the independent variables are age, gender, marital status and income levels of domestic car users.



Source: Conceptual Framework developed by the author

This study analyses how the age, gender, marital status, and income levels of domestic car users influence their vehicle buying decisions. This quantitative research employs descriptive research design to understand the relationship between the demographic variables and the car buying behaviour of household car users. In this research 192 individual participants were taken as samples by the convenience sampling technique who are owning and driving their personal cars in the city of Muscat, Sultanate of Oman. The primary data was collected by administering a structured google form questionnaire circulated to known acquaintances in various parts of Muscat city from March to May 2024.

IV. DATA ANALYSIS AND INTERPRETATION

The survey participants were asked about their buying preferences with respect some of the vehicle features of cars during the period. The collected data was analysed using SPSS version 26 software. Preliminary analysis of the responses collected from the participants showed that the internal consistency of the data was acceptable and closely related to each other as shown in the table below:

Cronbach's Alpha	N of Items
0.772	9

Source: Processed data

4.1 Percentage Analysis

To present relevant conclusions for this study, it is imperative that we go through the demographic profile of the survey participants and understand how they are distributed in the sample.

Demographic Profile	Categories	Frequency	Percent*	Cumulative Percent
Age	18-29 years	107	55.7	55.7
	30-44 years	62	32.3	88.0
	45-59 years	21	10.9	99.0
	Above 60 years	2	1.0	100.0
Gender	Male	115	59.9	59.9
	Female	77	40.1	100.0
Marital Status	Single	113	58.9	58.9

	Married	79	41.1	100.0
Income	Below 400 OMR	80	41.7	41.7
	401-700 OMR	26	13.5	55.2
	701-1000 OMR	18	9.4	64.6
	1001-2000 OMR	30	15.6	80.2
	Above 2000 OMR	38	19.8	100.0
Type of car owned	Saloon/SUV	107	55.7	55.7
	Sports/Luxury	47	24.5	80.2
	Pick-up Truck	4	2.1	82.3
	Electric/Hybrid	34	17.7	100.0
*No missing data		N = 192		

Source: Processed data

It is observed from Table 4.1 that most of the participants belong to the young age group. Majority of them are men and single having an income of less than OMR 400. Most of them have purchased saloon/SUV which are preferred for commutation to office and family outing purposes. However, we can see that a notable number of participants own electric/hybrid cars which means that there is a developing interest in Muscat residents for eco-friendly features in their cars.

4.2 Descriptive Analysis

Before analyzing the relationship between the research constructs, it is necessary to summarize the data by examining the measures of central tendency so that the behavior of the car consumers can be identified. The summary of the results is given here:

Buying Preferences	Minimum	Maximum	Skewness	Kurtosis
Brand name	2	5	-0.212	-0.722
External appearance	1	5	-0.517	0.484
Seating Capacity	1	5	-0.637	1.296
Safety Features	1	5	-0.705	0.651
Maintenance expenses	1	5	-0.749	0.035
Resale Value	1	5	-0.973	1.134
Fuel Efficiency	1	5	-1.100	0.798
Credit facilities available	1	5	-0.907	0.781
Eco-friendly car features	1	5	-0.982	0.488
Valid N (listwise)	192		SE = 0.175	SE = 0.349

Source: Processed data

Since the skewness and kurtosis values are strong in case of the above results, it indicates that show that most of the respondents have given a strong rating for fuel efficiency, eco-friendly features and resale value as their preferred buying preferences while purchasing a car. It is also observed that the car features like brand name and car preferences are low rated by most of the respondents since the skewness is not strong enough. As the skewness and kurtosis are not close to zero, the data is not strictly normally distributed, therefore a non-parametric analysis will be employed in this study.

4.3 Relationship between Age and Car Buying Behavior

The relationship between the age of the respondents and the buying behavior was analyzed using Spearman's Rank Correlation Coefficient. The results are given below:

Buying Preferences	Spearman's rho	Sig. (2-tailed)
Brand name	-0.225**	0.002
External appearance	-0.109	0.132

Seating Capacity	0.031	0.672
Safety Features	-0.057	0.435
Maintenance expenses	0.083	0.250
Resale Value	0.234**	0.001
Fuel Efficiency	0.152*	0.035
Credit facilities available	0.209**	0.004
Eco-friendly car features	0.260**	0.000

** . Correlation is significant at the 0.01 level (2-tailed). * . Correlation is significant at the 0.05 level (2-tailed).

Source: Processed data

It has been identified that there is a significant positive and weak correlation existing between the age of the participants and the car features such as expected resale value, fuel efficiency, credit facilities and eco-friendly features. There was a significant weak and negative correlation between the age and brand name of the car purchase decisions. There was no significant relationship between age and the consumers' buying preferences regarding the car, such as external appearance, seating capacity, safety features, or car maintenance expenses.

4.4 Relationship between Gender and Car Buying Behavior

The data analysis regarding the relationship between gender and car buying behavior is crucial because many past studies have identified a strong relationship between these two variables. The correlation coefficients and the corresponding p-values are given below.

Buying Preferences	Spearman's rho	Sig. (2-tailed)
Brand name	0.027	0.707
External appearance	0.026	0.716
Seating Capacity	-0.043	0.552
Safety Features	0.048	0.508
Maintenance expenses	0.104	0.150
Resale Value	-0.028	0.705
Fuel Efficiency	-0.019	0.792
Credit facilities available	0.035	0.631
Eco-friendly car features	0.075	0.302

** . Correlation is significant at the 0.01 level (2-tailed). * . Correlation is significant at the 0.05 level (2-tailed).

Source: Processed data

All the above correlation coefficients are insignificant in respect of all the car buying preferences. There is a weak and insignificant relationship existing between gender of the participants and their buying preferences.

4.5 Relationship between Marital Status and Car Buying Behavior

The data analysis regarding the relationship between marital status and car buying behavior is crucial because many past studies have identified a strong relationship between these two variables. The correlation coefficients and the corresponding p-values are given below.

Buying Preferences	Spearman's rho	Sig. (2-tailed)
Brand name	-0.215**	0.003
External appearance	-0.118	0.102
Seating Capacity	0.022	0.764
Safety Features	-0.064	0.381
Maintenance expenses	0.126	0.082

Resale Value	0.285**	0.000
Fuel Efficiency	0.130	0.072
Credit facilities available	0.208**	0.004
Eco-friendly car features	0.327**	0.000

** . Correlation is significant at the 0.01 level (2-tailed). * . Correlation is significant at the 0.05 level (2-tailed).

Source: Processed data

There is a significant and negative relationship between the brand name and marital status. However, the marital status of the respondents had a significant positive and moderate relationship with the car resale value, credit facilities available and eco-friendly features. Whereas in cases of external appearance, seating capacity, safety features, maintenance expenses and fuel efficiency, the marital status did not have any significant relationship with the buying preferences of the sample.

4.6 Relationship between Income and Car Buying Behavior

The data analysis regarding the relationship between income and car buying behavior is crucial because many past studies have identified a strong relationship between these two variables. The correlation coefficients and the corresponding p-values are given below.

Buying Preferences	Spearman's rho	Sig. (2-tailed)
Brand name	-0.198**	0.006
External appearance	-0.166*	0.022
Seating Capacity	0.042	0.563
Safety Features	-0.049	0.501
Maintenance expenses	0.103	0.154
Resale Value	0.297**	0.000
Fuel Efficiency	0.120	0.096
Credit facilities available	0.197**	0.006
Eco-friendly car features	0.313**	0.000

** . Correlation is significant at the 0.01 level (2-tailed). * . Correlation is significant at the 0.05 level (2-tailed).

Source: Processed data

It has been identified that there is a significant positive and weak correlation existing between the income of the participants and the car features such as resale value, credit available for buying car and eco-friendly features. There was a significant weak and negative correlation between the income and brand as well as external appearance. There was no significant relationship between income and the consumers' buying preferences regarding the car, in case of seating capacity, safety features, maintenance expenses or fuel efficiency.

V. FINDINGS AND DISCUSSION

5.1 Research Findings

In this section, the findings of the above results are summarized. It has been observed that age is positively correlated with preferences for resale value, fuel efficiency, credit facilities and eco-friendly features while it is negatively correlated with brand name of the car. There was no correlation between the gender of the respondents and their car buying behavior. There was a positive and moderate correlation between the marital status of the respondents with some car features like resale value of the car, credit facilities and eco-friendly features. Brand name preference had a negative correlation with the marital status. The income of the respondents showed a positive correlation with resale value, credit facilities and eco-friendly features whereas it exhibited a negative correlation with the brand name and external appearance of the car. So, these findings suggest that marital status and income have influence on the car buying preferences especially with respect to resale value, credit facilities and eco-friendly features.

5.2 Discussion on the Findings

The above findings prove that this study confirms the ideas enunciated by the previous researchers on this problem. The main buyer behaviour tendencies discovered in this study will help in contributing to the

existing literature. The significant weak and positive correlation of age with resale value, fuel efficiency, eco-friendly features and credit facilities confirm the findings of Bishnoi & Jishu (2023), Dharmaraj (2020), Yee et al., (2011). Koce et al., (2021) has observed in his research that marital status changes the preference of the car consumers and makes them buy cars with enduring sale values and eco-friendly options. The same pattern has been observed in this study too. It suggests that marital status of an individual may shift his preferences in car buying. The income of the respondents had a significant relationship with resale value, credit facilities and eco-friendly features which corroborates the findings of De Janosi (1959) and Chopra (2018). The striking discovery of this study is that gender was not associated with the car buying preferences of the consumers which is contrasting the previous researchers (Rezvani et al., (2014) and Nerurkar et al. (2021). The male as well as the female respondents did not exhibit any variation in their preferences for the car features in Muscat.

VI. LIMITATIONS AND DIRECTIONS

6.1 Limitations of the Study

This research focused on a sample of 192 Muscat residents approached through a convenient sampling method. So, the study findings cannot be generalized to the whole of Oman. Since the study follows a cross-sectional design, the car buying tendencies observed are applicable for a short period only and over an extended period, the preferences are subject to change. This study did not consider psychological factors such as beliefs, attitudes, lifestyle, social influence, personality, motivations etc.

6.2 Directions for Future Research

The following suggestions are given to the future researchers in order to have a wholesome understanding of car buying behavior among consumers.

- a) There can be longitudinal research on this topic to identify the changes in car buying preferences.
- b) There can be a comparison of rural and urban car consumers in Oman for understanding the impact of the varying socio-economic background of Omani population.
- c) Future researchers can add more demographic variables like education, occupation, family size, regions or wilayat for getting greater knowledge about the car buying behaviour.
- d) Since, there is a shift in the buying preferences towards environment friendly car options, future researchers should focus on the influence of technology on car buying decisions of consumers.
- e) The research problem can be analysed by comparing the car buying preferences across the GCC countries.

VII. CONCLUSION

7.1 Conclusion

This research was undertaken to understand the car buying preferences of Muscat residents by conducting a cross-sectional analysis of the demographic profile of the respondents such as age, gender, marital status and income. This study has disclosed that age, marital status and income had a significant influence on figuring the buyer's preferences while buying a car. This study provides insights into car buying preferences for car dealerships, marketers and policymakers based in Muscat. It contributes to the literature on consumer behavior and preferences. This study has also pointed that there is a growing preference among Muscat based car consumers for sustainable and environment-friendly car options. A recent report published in Times of Oman confirms that there has been a three-fold rise in the electric vehicles purchased in Oman in 2024 compared to the previous year (Times of Oman, Sept. 2024)

REFERENCES

- [1]. Aarti Nagraj, Oman Aims To Sell Only Zero Emission Vehicles By 2050. National News, 20324. Available at <https://www.thenationalnews.com/business/energy/2024/09/22/oman-aims-to-sell-only-zero-emission-vehicles-by-2050-in-sustainability-push/>
- [2]. Abualkeir NI. Factors Influencing Consumers Buying Intentions Towards Electric Cars: The Arab Customers' Perspective. Int J Mark Stud. 2020;12(2):127-37.
- [3]. Adnan A, Ahmad A, Khan MN. Consumer lifestyles and ecological behavior: A study of car buyers in India. Bus Strateg Environ. 2022;31(6):2293-307.
- [4]. Altaf S, Perumal S, Hussin Z. Consumption values and consumer attitude towards automobile purchase. Paradigms. 2017;11(1):10-6.
- [5]. Chen C, Zarazua de Rubens G, Sovacool BK. Assessing the socio-demographic, technical, economic and behavioral factors of Nordic electric vehicle adoption and the influence of vehicle-to-grid preferences. Renew Sustain Energy Rev. 2020;121:109692.
- [6]. Chopra G. Consumer Preference Towards Maruti Suzuki and Hyundai Motors: A Comparative Study of The Automobile Sector. Int J Manag Stud. 2018;5(3):91-100.
- [7]. Choy JY, Ng AC, Ch'ng HK. A study on Malaysia consumer perception towards buying an automobile. Am J Econ Bus Adm. 2010;3(1):47-57.
- [8]. De Janosi PE. Factors Influencing the Demand for New Automobiles. J Mark. 1959;23(4):391-8.

- [9]. Dharmaraj R. A Study on Consumer Behaviour Towards Maruti Cars in Vellore District, Tamilnadu. *Int J Manag Stud.* 2020;7(4):67-76.
- [10]. Doddamani C, Manoj M. Effects of the Built Environment and Socio-demographics on the Car and Two-Wheeler Ownership Levels: A Case Study of Dharwad City. *Transp Dev Econ.* 2021;7(1):1-13.
- [11]. Haines G, Howard J, Sheth J. The Theory of Buyer Behavior. *J Am Stat Assoc.* 1970;65(328):718-25.
- [12]. International Monetary Fund. Oman: 2022 Article IV Consultation. 2022. Available at https://www.elibrary.imf.org/view/journals/002/2022/344/article-A002-en.xml?utm_source=chatgpt.com
- [13]. Isherwood B, Pickering J. Factors Influencing Individual Purchases of Motor Cars in Great Britain. *Manag Decis Econ.* 2009;1(3):13-20.
- [14]. Jahan MI, Bhowmik T, Borjigin SG, et al. A maximum log-likelihood-based data fusion model for estimating household's vehicle purchase decision. *Transp Lett.* 2024;16(1):10-23.
- [15]. Kiran P, Vasantha S. Transformation of consumer attitude through social media towards purchase intention of cars. *Indian J Sci Technol.* 2016;9(21):1-10.
- [16]. Koce HD, Ndaba MZ, Gata EG. Economic and demographic determinants and its effect on consumer purchasing decision in the Nigerian automobile industry. *Int J Res Granthaalayah.* 2021;9(6):97-108.
- [17]. Moody's Analytics. Oman: Economic Indicators. West Chester: Moody's Analytics; 2024. Available at <https://www.economy.com/oman/indicators>
- [18]. Morwitz V, Steckel J, Gupta A. When Do Purchase Intentions Predict Sales? *SSRN Electron J.* 2006;10(1):67-81.
- [19]. Nerurkar V, Barge P, Bhatt V, Rastogi S, Agarwal B. Factors Influencing Consumer Decision to Purchase a Car. *Mark Manag Innov.* 2023;14(1):28-37.
- [20]. Oman Vision 2040: Building a Sustainable Future. 2020. Available at https://fm-oman.s3.eu-west-2.amazonaws.com/reports/Oman2040-en.pdf?utm_source=chatgpt.com
- [21]. Rezvani S, Dehkordi GJ, Rahman MS. Analysis of Research in Consumer Behavior of Automobile Passenger Car Customer. *Int J Sci Res Publ.* 2014;4(2):1-6.
- [22]. times of Oman news. 300% rise in number of electric vehicles in Oman. Available at <https://timesofoman.com/article/150074-300-rise-in-number-of-electric-vehicles-in-oman>
- [23]. World Bank. Value Added Manufacturing data. 2024. Available at <https://data.worldbank.org/indicator/NV.IND.MANF.CD>