

Factors Shaping Malaysian Women Drivers' Preferences for Local Cars: Affordability, Comfort and Family Needs

Nagwaeen Atef^{1*}, Julaila Abdul Rahman², Shamzani Affendy Bin Mohd³, Abdul Razak Sopian⁴

^{1,2,3}Department of Applied Arts and Design, Kulliyyah of Architecture and Environmental Design, International Islamic University, Kuala Lumpur, Malaysia

⁴Department of Architecture, Kulliyyah of Architecture and Environmental Design, International Islamic University Malaysia, Kuala Lumpur, Malaysia

*Corresponding Author

DOI: <https://doi.org/10.47772/IJRISS.2026.100701078>

Received: 08 August 2026; Accepted: 13 August 2026; Published: 21 August 2026

ABSTRACT

Women drivers constitute an increasingly important segment of automotive consumers, yet their vehicle preferences cannot be explained by a single economic or design characteristic. This exploratory study examined the factors shaping Malaysian women drivers' preferences for five selected local car models—Perodua Bezza, Myvi, Axia, Atila, and Proton Saga—with particular attention to affordability, comfort, mother-friendliness, child-friendliness, and size suitability. Data were collected through an online questionnaire administered using Google Forms. Of 113 responses received, 106 valid questionnaires were retained and analysed descriptively using frequencies and percentages. Affordability was the most influential general factor (59%), followed by comfort (46%), mother-friendliness (30%), size suitability (27%), and child-friendliness (19%). Model-level comparisons showed different strengths: Axia recorded the highest affordability result (64%), whereas Atila recorded the highest comfort result (54%). Bezza achieved the highest results for both mother-friendliness (42%) and child-friendliness (28%) and, together with Myvi, received the highest overall proportion of ratings at levels 4 and 5 (71%). Bezza also obtained the highest mother-friendly overall rating (73%). These findings show that Malaysian women drivers balance economic, comfort, practical, and family-related considerations rather than evaluating cars through a single dominant attribute. The study contributes an exploratory, user-centred perspective on women's local-car preferences and highlights the value of recognising women drivers as a diverse consumer group. For Malaysian manufacturers, the results suggest that market positioning and vehicle development should respond to different combinations of affordability, comfort, size, practicality, and family needs. Further research with larger and more diverse samples is recommended.

Keywords: women drivers, car preferences, affordability, comfort, family needs

INTRODUCTION

Women have become an increasingly important segment of automotive consumers, and their growing participation in employment and economic activities has strengthened their influence on car purchasing decisions. As a result, the automotive industry has begun to recognise women as an important consumer group whose expectations, preferences, and experiences should be considered during car development (Parkin, 2017; Tu et al., 2018). However, women drivers are not a homogeneous group, as their needs and preferences vary according to their characteristics and patterns of car use (Tu et al., 2018).

In Malaysia, Perodua and Proton continue to dominate the local automotive market by offering cars across different price ranges and consumer segments (Baharom et al., 2014, 2016; Islam et al., 2016). Although previous studies have examined factors influencing car purchasing decisions, limited attention has been given to comparing Malaysian women drivers' perceptions of different local car models based on affordability, comfort,

and family-related needs. A better understanding of these preferences can support more user-centred car development and marketing strategies.

Accordingly, this study examines the factors shaping Malaysian women drivers' preferences for five selected local car models: Perodua Bezza, Myvi, Axia, Ativa, and Proton Saga. It compares respondents' perceptions of the selected cars in terms of affordability, comfort, mother-friendliness, child-friendliness, and size suitability. Specifically, the study aims to (1) identify the key factors influencing Malaysian women drivers' preferences for local cars, (2) compare women drivers' perceptions of the five selected local car models based on the five evaluated characteristics, and (3) examine how economic, practical, comfort, and family-related considerations contribute to women drivers' overall car preferences.

LITERATURE REVIEW

Women Drivers' Car Preferences

Women have become an increasingly influential consumer group within the automotive industry, yet their car preferences differ according to age, occupation, lifestyle, personal characteristics, and daily patterns of car use (Parkin, 2017; Tu et al., 2018). Previous studies have shown that car purchasing decisions are influenced by users' routines, preferences, and product characteristics (Meng & Yun, 2016; Rosli et al., 2014). Driver characteristics may also affect the importance assigned to different car features (Vrkljan & Anaby, 2011). For women drivers, practical considerations such as comfort, storage, accessibility, convenience, ease of operation, safety, and functionality are frequently identified as important factors influencing car preference (Rosli et al., 2014; Tu et al., 2018). Family responsibilities may further influence these preferences, particularly regarding mother-friendliness, child-friendliness, and the ability to support everyday travel.

User-Centred Car Design and User Experience

User-centred design emphasises understanding users' expectations, experiences, and interactions throughout product development. User experience reflects users' perceptions and responses during product interaction, while usability contributes to products that are functional, comfortable, efficient, and easy to understand (Quiñones et al., 2018; Renaud et al., 2019; Resende et al., 2019). Kamp (2012) similarly argued that contemporary product development increasingly focuses on users' needs rather than product functionality alone. Collecting information directly from users therefore enables manufacturers to design cars that better respond to consumer expectations and improve overall satisfaction.

Malaysian Local Cars and Consumer Preferences

Within Malaysia, Perodua and Proton have maintained important positions by offering cars across different market segments and price ranges (Baharom et al., 2014, 2016; Islam et al., 2016). Previous studies have shown that affordability, product characteristics, marketing, and consumer preferences influence purchasing decisions in the Malaysian automotive market (Islam et al., 2016; Meng & Yun, 2016). Malaysian automotive research has also emphasised the importance of incorporating users' expectations, comfort, and daily experiences into product development to strengthen satisfaction and competitiveness (Baharom et al., 2016; Rosli et al., 2014). Although previous studies have examined factors influencing car purchasing decisions, limited attention has been given to comparing Malaysian women drivers' perceptions of different local car models. Therefore, this study provides an exploratory comparison of five selected Malaysian local cars based on affordability, comfort, mother-friendliness, child-friendliness, and size suitability.

METHODOLOGY

This study employed an exploratory survey approach to examine the factors shaping Malaysian women drivers' preferences for five selected local car models: Perodua Bezza, Myvi, Axia, Ativa, and Proton Saga, as presented in Figure 1. These models were selected based on considerations of popularity, sales performance, and price within the Malaysian automotive market. The exploratory approach enabled the study to identify patterns in women drivers' perceptions and compare how different car characteristics contributed to their preferences.



Figure 1. Five Selected Malaysian Local Car Models Included in the Study

Data were collected through an online questionnaire administered using Google Forms. A total of 113 responses were received. Following data screening, 106 valid questionnaires were retained for analysis. The questionnaire collected information concerning respondents' demographic and driving profiles, factors influencing their car preferences, and their perceptions of the five selected local car models.

Respondents evaluated the selected models using closed-ended questions based on a five-point Likert scale, ranging from strongly disagree to strongly agree. Five principal characteristics were examined: affordability, comfort, mother-friendliness, child-friendliness, and size suitability. These characteristics reflect economic, comfort, practical, and family-related dimensions relevant to women drivers' car preferences. Respondents were also asked to provide an overall evaluation of the selected models using a five-point rating scale ranging from 1 (lowest) to 5 (highest).

The collected data were analysed using descriptive statistics, primarily frequencies and percentages. As the study was exploratory and intended to identify initial patterns in women drivers' perceptions, descriptive statistics were considered appropriate for summarising the responses and comparing the selected car models. The analysis first identified the relative importance of the five factors influencing respondents' car preferences and then compared perceptions of these characteristics across the five selected models. Ratings of 4 and 5 were combined to identify the proportion of respondents providing relatively high evaluations of each model. This comparative analysis was used to identify patterns and differences across the models rather than to assess car preference according to a single characteristic.

As an exploratory study, the analysis provided an initial understanding of how Malaysian women drivers balance affordability, comfort, practical suitability, and family-related considerations when evaluating local cars. The findings were interpreted in relation to existing literature on women drivers' preferences, consumer car choice, and user-centred automotive design. They provided an important foundation for the subsequent PhD research. In particular, the findings helped identify women drivers' perceptions of popular and mother-friendly Malaysian local cars, which informed the selection of the car model for the subsequent in-depth PhD study. These insights also guided a more detailed investigation of women drivers' needs and preferences towards the development of a user perception framework for car interior design within the Malaysian automotive context. Accordingly, the study focused on descriptive exploration rather than hypothesis testing or predictive analysis, while more advanced statistical validation may be considered in future research.

RESULTS

Respondents' characteristics and car use

A total of 106 valid responses were included in the analysis. As illustrated in Table 1, most respondents were mothers (70%), while 39% were aged between 31 and 40 years. In terms of occupation, 46% were primarily workers. Regarding driving experience, 33% had been driving for 16–20 years, while 42% had used their cars

for more than ten years. These characteristics provide useful background for understanding their perceptions and preferences.

Table 1: Respondents' Demographic and Driving Profile

Characteristic	Category	Percentage (%)
Family status	Mothers	70
Age	31–40 years	39
Primary occupation	Workers	46
Driving experience	16–20 years	33
Duration of car use	More than 10 years	42

Factors shaping women drivers' car preferences

The findings showed that respondents considered several factors when choosing a car. According to Table 2, affordability was the most influential factor (59%), followed by comfort (46%), mother-friendliness (30%), size suitability (27%), and child-friendliness (19%). This shows that women's car preferences were not based on one factor alone. Economic considerations were particularly important, but comfort and family-related needs also contributed to their preferences.

Table 2: Factors Influencing Car Preferences

Factor	Percentage (%)
Affordability	59
Comfort	46
Mother-friendliness	30
Size suitability	27
Child-friendliness	19

Comparison of the five local car models

Table 3 shows clear differences in how respondents perceived the five cars. The Axia received the highest percentage for affordability (64%), followed by Bezza (55%), Saga (54%), Myvi (50%), and Atila (31%). In contrast, Atila received the highest percentage for comfort (54%), followed by Bezza (48%), Myvi (47%), Saga (39%), and Axia (24%).

For mother-friendliness, Bezza recorded the highest percentage (42%), closely followed by Atila (41%), Myvi (39%), Saga (38%), and Axia (37%). Bezza also recorded the highest percentage for child-friendliness (28%), followed by Myvi (25%), while Axia, Saga, and Atila each recorded 23%. For size suitability, Bezza and Myvi received the highest percentage (28%), followed by Atila (27%), Axia (23%), and Saga (22%).

Table 3: Women Drivers' Perceptions of the Five Local Car Models

Car Model	Affordability	Comfort	Mother-friendliness	Child-friendliness	Size Suitability
Bezza	55%	48%	42%	28%	28%
Myvi	50%	47%	39%	25%	28%

Car Model	Affordability	Comfort	Mother-friendliness	Child-friendliness	Size Suitability
Ativa	31%	54%	41%	23%	27%
Saga	54%	39%	38%	23%	22%
Axia	64%	24%	37%	23%	23%

Figure 2 provides a visual comparison of respondents' perceptions of the five selected local car models across affordability, comfort, mother-friendliness, child-friendliness, and size suitability. These results show that different cars were associated with different strengths. Axia was most strongly associated with affordability, while Ativa received the highest percentage for comfort. Bezza showed a more balanced pattern across the five factors.

Car / Factor	%	10	20	30	40	50	60	70	80	90	100
Bezza – Affordability	55%										
Comfort	48%										
Mother-friendliness	42%										
Child-friendliness	28%										
Size suitability	28%										
Myvi – Affordability	50%										
Comfort	47%										
Mother-friendliness	39%										
Child-friendliness	25%										
Size suitability	28%										
Ativa – Affordability	31%										
Comfort	54%										
Mother-friendliness	41%										
Child-friendliness	23%										
Size suitability	27%										
Saga – Affordability	54%										
Comfort	39%										
Mother-friendliness	38%										
Child-friendliness	23%										
Size suitability	22%										
Axia – Affordability	64%										
Comfort	24%										
Mother-friendliness	37%										
Child-friendliness	23%										
Size suitability	23%										

Figure 2: Women Drivers' Perceptions of Five Selected Local Car Models

Overall evaluation of the five cars

When respondents rated the five cars from 1 (lowest) to 5 (highest), Table 4 indicates that both Myvi and Bezza received the highest combined proportion of ratings at levels 4 and 5, with 71% each. Ativa followed closely at 70%, while Saga received 60% and Axia 57%. When the cars were rated specifically for mother-friendliness, Bezza received the highest combined rating of 4 and 5 at 73%, followed by Myvi (69%), Ativa and Saga (68% each), and Axia (64%).

Table 4: Overall and Mother-Friendly Ratings of the Five Cars

Car Model	Overall Rating (4–5)	Mother-Friendly Rating (4–5)
Bezza	71%	73%
Myvi	71%	69%
Ativa	70%	68%
Saga	60%	68%
Axia	57%	64%

Overall, the findings show that Malaysian women drivers considered a combination of factors when evaluating local cars. Affordability was the strongest general consideration, but the comparison across the five cars shows different patterns: Axia stood out for affordability, Ativa for comfort, while Bezza showed a more balanced performance across economic, comfort, practical, and family-related factors. This suggests that women’s car preferences involve different priorities and trade-offs rather than being determined by one characteristic alone.

DISCUSSION

Factors shaping women drivers’ car preferences

The findings show that Malaysian women drivers’ preferences for local cars are shaped by several factors rather than one single characteristic. Affordability was the most important factor (59%), followed by comfort (46%), mother-friendliness (30%), size suitability (27%), and child-friendliness (19%). This supports previous research showing that car purchasing decisions are influenced by a combination of users’ needs, preferences, routines, and product characteristics (Meng & Yun, 2016; Rosli et al., 2014). It also supports Vrkljan and Anaby’s (2011) finding that the importance given to different car features may vary according to driver characteristics.

The pattern indicates that economic considerations remain particularly important, but they operate together with comfort, practical suitability, and family needs. Women’s car preferences should therefore be understood as a combination of priorities rather than as a response to one dominant feature.

Affordability and comfort: different priorities

Affordability was the strongest consideration among respondents. This is particularly relevant in Malaysia, where price has been identified as one factor contributing to the strong market position of local cars (Baharom et al., 2014). Previous Malaysian studies have also identified product, cost, marketing, and consumer preferences as factors influencing car purchasing decisions (Islam et al., 2016).

However, affordability alone did not determine how positively a car was evaluated. As shown in Table 5, Axia received the highest affordability result (64%) but the lowest comfort result (24%) and the lowest overall rating (57%). In contrast, Ativa received the lowest affordability result (31%) but the highest comfort result (54%) and a high overall rating (70%).

Table 5: Comparison of Affordability, Comfort and Overall Ratings

Car	Affordability	Comfort	Overall Rating (4–5)
Axia	64%	24%	57%
Bezza	55%	48%	71%
Saga	54%	39%	60%
Myvi	50%	47%	71%
Ativa	31%	54%	70%

This comparison reveals an important trade-off between affordability and comfort. A car perceived as highly affordable was not necessarily rated highly overall, while a car perceived as less affordable could still receive a strong overall rating because of other qualities. Comfort therefore appears to play an important role alongside price. Previous research similarly identifies comfort, accessibility, convenience, storage, safety, and ease of operation as important aspects of car use (Rosli et al., 2014; Tu et al., 2018).

Family needs and everyday car use

Family-related considerations were also visible in the findings. Most respondents were mothers (70%), while mother-friendliness (30%) and child-friendliness (19%) were among the factors considered when choosing a car. Previous literature suggests that women may value practical features that make it easier and more comfortable to transport children and their belongings, as well as storage, safety, connectivity, and smooth operation (Tu et al., 2018).

Bezza recorded the highest results for both mother-friendliness (42%) and child-friendliness (28%), while Ativa followed closely for mother-friendliness (41%). These findings suggest that family-related needs form part of women's broader car preferences alongside affordability, comfort, and practical considerations.

Different cars respond to different priorities

An important finding is that no single car performed best across all five characteristics. Axia was strongest for affordability, Ativa for comfort, while Bezza showed relatively strong performance across several characteristics. Myvi also showed a comparatively balanced pattern, particularly for affordability, comfort, and size suitability.

This finding supports the argument that women drivers should not be treated as a homogeneous consumer group. Their preferences may differ according to personal characteristics, lifestyle, responsibilities, and patterns of car use (Tu et al., 2018). The overall ratings strengthen this interpretation. As presented in Table 6, both the Bezza and Myvi each received 71% of ratings at levels 4 and 5, followed closely by Ativa at 70%. The small difference between these three cars indicates that respondents may positively evaluate different models for different reasons.

Table 6: Comparative Characteristics of the Five Selected Malaysian Local Cars

Model	Segment	2023 Sales	Price Range	Key Practical Characteristics
Bezza	A-Sedan	56,735	RM34,580–49,980	Large boot, practical cabin, fuel efficiency
Myvi	B-Hatchback	45,014	RM46,500–59,900	Compact, manoeuvrable, modern features
Axia	A-Hatchback	44,722	RM24,090–43,190	Lower price, compact size, urban use
Saga	A-Sedan	44,696	RM34,800–44,800	Sedan practicality, ride and handling
Ativa	B-Compact SUV	35,542	RM62,500–73,400	Elevated position, safety technology, practicality

Note: Comparative information was compiled from Malaysian automotive reviews, platforms, and market reports (Alexlovesmac, 2024; Carlist.my, 2023; Hafiz Car Dealer, 2023; Halid, 2023; Lye, 2023; Paultan.org, 2023; PCauto, 2023; SinarDaily, 2024; Tan, 2023a, 2023b).

The characteristics presented in Table 6 provide additional context for interpreting differences in respondents' perceptions. Differences in price ranges, car segments, practical features, and interior characteristics may help explain why the five models were perceived differently in terms of affordability, comfort, size suitability, and family-related needs.

Implications for user-centred car design

From a user-centred perspective, these differences are important for Malaysian car manufacturers. Understanding users' actual expectations, routines, preferences, and experiences can help manufacturers develop cars that better respond to different consumer groups (Baharom et al., 2016; Rosli et al., 2014). Rather than assuming that all women require the same car characteristics, manufacturers could recognise different combinations of priorities. Some women may place greater importance on affordability, while others may prioritise comfort, family use, size, or a balance between these characteristics. The findings therefore suggest that women drivers' car preferences involve trade-offs between economic, comfort, practical, and family-related considerations.

CONCLUSION

This study examined the factors shaping Malaysian women drivers' preferences for five selected local car models: Perodua Bezza, Myvi, Axia, Atila, and Proton Saga. The findings show that women's car preferences are influenced by a combination of economic, comfort, practical, and family-related considerations. Affordability and comfort were particularly important, while mother-friendliness, child-friendliness, and size suitability also contributed to how respondents evaluated the selected cars.

The comparison showed that different cars respond to different priorities. Axia was strongly associated with affordability, while Atila was more strongly associated with comfort. Bezza showed a more balanced performance across the evaluated factors, while Bezza and Myvi received strong overall evaluations. These differences suggest that women drivers may consider several characteristics together when choosing or evaluating a car rather than focusing on one factor alone.

The findings also support the importance of recognising women drivers as a diverse group with different needs, lifestyles, and family responsibilities. Understanding these differences can help Malaysian car manufacturers develop and position cars that respond more effectively to women's everyday needs. A user-centred approach that considers affordability, comfort, practicality, size, and family needs may therefore contribute to better car design and greater user satisfaction.

Limitations and future research

This exploratory study was limited to 106 Malaysian women drivers and five selected local car models, and the use of an online convenience sampling approach limits the generalisability of the findings to the wider population of Malaysian women drivers. In addition, the analysis relied primarily on descriptive statistics and therefore did not test the statistical significance of differences between the selected car models. Future research could address these limitations through larger and more diverse probability-based samples, inferential statistical analysis, and validated measures of specific constructs. Qualitative approaches, such as focus groups and real-world ergonomic assessments, could also provide deeper insight into women drivers' experiences and preferences. Additional factors, such as safety, fuel efficiency, technology, interior space, and maintenance costs, could also be examined to provide a broader understanding of women drivers' car preferences in Malaysia.

REFERENCES

1. Alexlovesmac. (2024, January 4). 2023 Perodua Bezza 1.3 AV start-up and full vehicle tour [Video]. YouTube.
2. Baharom, S. N., Zolkifly, N. H., & Tan, W. H. (2016). Emotional design for national car: The role of emotion and perception in car design and its effect on purchase. In *Regional Conference on Science, Technology and Social Sciences (RCSTSS 2014): Business and Social Sciences* (pp. 71–79). Springer. https://doi.org/10.1007/978-981-10-1458-1_7.
3. Baharom, S. N., Zolkifly, N. H., & Tan, W. H. (2014, November). Emotional design for national car: The role of emotion and perception in consumer purchasing behavior. Paper presented at the *Regional Conference on Science, Technology and Social Sciences (RCSTSS 2014)*, Universiti Teknologi MARA Pahang, Malaysia.

4. Carlist.my. (2023, February 8). First look + first drive: All-new 2023 Perodua Axia – Did it just blow some minds? [Video]. YouTube.
5. Hafiz Car Dealer. (2023). Full review Perodua Myvi 1.5 Advance Facelift 2023 [Video]. YouTube.
6. Halid, S. I. (2023, June 16). First drive: 2023 Perodua Axia – “Better, MUCH better”. Carlist.my.
7. Islam, R., Ghani, A. B. A., Kusuma, B., & Hong, E. T. Y. (2016). An analysis of factors that affecting the number of car sales in Malaysia. *International Review of Management and Marketing*, 6(4), 872–882.
8. Kamp, I. (2012). Comfortable car interiors: Experiments as a basis for car interior design contributing to the pleasure of the driver and passengers [Doctoral dissertation, Delft University of Technology].
9. Lye, G. (2023, June 2). 2023 Proton Saga gets new Aisin 4AT gearbox – No change in pricing and equipment; same 1.3L engine. Paultan.org.
10. Meng, L. J., & Yun, C. T. (2016). Consumer preference toward super-mini cars in Malaysia: An importance-performance analysis approach. In *Regional Conference on Science, Technology and Social Sciences (RCSTSS 2014): Business and Social Sciences* (pp. 259–268). Springer.
11. Parkin, K. J. (2017). *Women at the wheel: A century of buying, driving, and fixing cars*. University of Pennsylvania Press.
12. Paultan.org. (2023, December 1). Perodua Ativa 2021–2023 – Apa yang anda perlu tahu, panduan untuk pembeli Ativa baru dan terpakai.
13. PCauto. (2023). 2023 Perodua Ativa review & user feedback in Malaysia. PCauto Malaysia.
14. Quiñones, D., Rusu, C., & Rusu, V. (2018). A methodology to develop usability/user experience heuristics. *Computer Standards and Interfaces*, 59, 109–129. <https://doi.org/10.1016/j.csi.2018.03.002>
15. Renaud, J., Houssin, R., Gardoni, M., & Armaghan, N. (2019). Product manual elaboration in product design phases: Behavioural and functional analysis based on user experience. *International Journal of Industrial Ergonomics*, 71, 75–83. <https://doi.org/10.1016/j.ergon.2019.02.003>
16. Resende, A. E., Mautner, Y. M. M., & Ornstein, S. W. (2019). Design as a reflection of user experience. *Advances in Intelligent Systems and Computing*, 824, 1767–1772. https://doi.org/10.1007/978-3-319-96071-5_182
17. Rosli, M. U., Ariffin, M. K. A., Sapuan, S. M., & Sulaiman, S. (2014). Survey of Malaysian car owner needs of a car interior. *International Journal of Mechanical & Mechatronics Engineering*, 14(1), 62–69.
18. SinarDaily. (2024, April 22). ‘King of the road’ loses crown to Bezza.
19. Tan, D. (2023a, March 6). 2023 Perodua Axia 1.0L D-CVT full review – Hugely improved but not perfect; we detail the good, the bad. Paultan.org.
20. Tan, D. (2023b, October 27). Perodua Bezza is Malaysia’s best selling car so far in 2023; set to take over from Myvi, No.1 for the first time. Paultan.org.
21. Tu, J. C., Yang, C., & Hung, Y. T. (2018). A study on needs for automotive interiors based on lifestyle characteristics of Taiwanese female office workers. *Sustainability*, 10(7), 2168. <https://doi.org/10.3390/su10072168>
22. Vrkljan, B. H., & Anaby, D. (2011). What vehicle features are considered important when buying an automobile? An examination of driver preferences by age and gender. *Journal of Safety Research*, 42(1), 61–65. <https://doi.org/10.1016/j.jsr.2010.11.006>