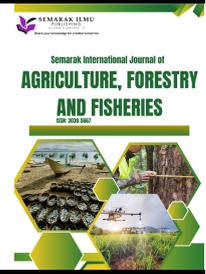




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# The Preference for Purchasing Rattan Furniture among Residents in Taman Bukit Chandan, Kuala Kangsar, Perak, Malaysia

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### ABSTRACT

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A study was carried out to evaluate consumer knowledge of rattan furniture and determine the factors that consumers prioritize when purchasing rattan furniture. Recognizing that various factors can affect consumer choices, thus rattan furniture manufacturers will need to align with current customer preferences. These preferences encompasses aspects e.g. sustainable consumption, social status, environmental safety and modern design. Data was gathered *via* random sampling using a questionnaire, and descriptive statistics were applied to analyze the frequency and percentage of responses. The questionnaires were distributed *via* online to 315 respondents in Taman Bukit Chandan, Kuala Kangsar, Perak. The findings of the survey indicated that rattan furniture usage was perceived as safe, with 62.86 % of respondents answering affirmatively and 37.14 % negatively. Similarly, a majority (56.83 %) considered the environmental impact of rattan furniture production to be minimal. Additionally, most respondents (89.94 %) deemed rattan's characteristics—flexibility, strength and lightness—suitable for furniture production. The survey also revealed that modernity was the primary purchasing factor for respondents, followed by social status, environmental safety and sustainable consumption. These insights into consumer preferences can guide rattan furniture manufacturers and retailers in making informed decisions regarding production and marketing strategies.

## 1. Introduction

The demand for environmental-friendly and sustainable home goods has markedly risen in recent years. People are increasingly aware of the environmental impact of their purchasing decisions, prompting them to seek alternatives that align more closely with their values [1]. This shift in consumer behaviour has sparked heightened interest in exploring materials that not only promote environmental sustainability but also offer various additional benefits.

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Rattan is one such material that has garnered attention. Derived from climbing palm trees, rattan possesses several characteristics that make it an attractive option for household items. Firstly, it is renewable, meaning it can be harvested without depleting the plant or causing harm to the environment. This makes it an excellent choice for individuals who prioritize sustainability and aim to minimize their environmental footprint.

Despite the potential advantages of rattan, it is crucial to assess consumer attitudes toward this material as a preferred option for home goods [2]. Consumer perspectives, preferences and perceptions significantly influence market trends and product development. By understanding what consumers think about rattan, we can better meet their needs and expectations. It's essential to explore consumer views on rattan and understand their motivations for selecting or not selecting rattan-based home products. Factors such as sustainable consumption, social status, environmental safety and modernity may impact consumer decision-making [3]. Therefore, this study aims to identify and address any concerns or barriers in promoting rattan as a preferred choice for eco-friendly and sustainable home products, thereby boosting its demand and market acceptance.

Rattan, a non-wood forest product extracted from the rattan palm, is a natural material commonly found in tropical regions. Its versatility, strength and aesthetic appeal make it a popular choice for furniture, crafts and decorations [4]. Its flexibility allows for intricate weaving and shaping, resulting in elegant furniture pieces such as chairs, tables, sofas and beds. Rattan's durability and comfort make it suitable for both indoor and outdoor spaces. Additionally, its natural beauty is showcased in a variety of colour variations, ranging from light blondes to deep browns, allowing for customization to suit various design styles and preferences. Its timeless appeal has contributed to its enduring popularity throughout history.

As consumers increasingly seek sustainable and eco-friendly options, rattan furniture has experienced a resurgence in popularity, prompting scholars and industry experts to delve into its various aspects [5]. Knowledge levels encompass the depth of understanding consumers have about rattan furniture, including its production process, maintenance requirements and long-term benefits. This knowledge is crucial in evaluating the effectiveness of educational initiatives and identifying the need for further information dissemination among consumers [6].

In recent decades, there has been a growing focus on sustainable consumption, particularly concerning building materials [7] and household furniture. This renewed interest in sustainable consumption is partly driven by the recognition that human activities significantly contribute to environmental degradation. Practising mindful consumption is viewed as a way for consumers to contribute to the well-being of themselves, their communities and the environment [8]. Social status is another motivating factor for many individuals, as high status can bring respect, admiration and influence within society [9]. Environmental quality encompasses a range of concerns, from sustainable management to health-related issues [10]. Beyond environmental conservation, health and safety considerations also significantly influence consumer behaviour. Modernity plays a significant role in shaping purchasing decisions by reflecting changing needs and values [11].

Consumers can make better decisions regarding rattan furniture based on their needs and preferences, while manufacturers can identify sustainable consumption, social status, environmental safety and modernity as factors influencing consumer choices. Consumer buying factors vary depending on location and generation. It is crucial to meet current customer wants and needs in rattan furniture manufacturing, as various factors can influence purchasing decisions. Thus, the objective of this study was to evaluate consumer knowledge of rattan furniture and determine the factors that consumers prioritize when purchasing rattan furniture.

## 2. Methodology

### 2.1 Study Area

The research was conducted in Taman Bukit Chandan, Kuala Kangsar, Perak. Taman Bukit Chandan, is situated on the scenic hill of Bukit Chandan within the town of Kuala Kangsar, is renowned for its historical significance and natural beauty. It forms part of the Kuala Kangsar district, encompassing a total area of 43.68 km<sup>2</sup>. As reported by the Malaysian Department of Statistics in 2020, Kuala Kangsar boasts a substantial population, constituting 23 % of Perak's total population. However, as per the village head in 2023, an estimated 550 individuals resided in Bukit Chandan. Figure 1 shows the residential area of Taman Bukit Chandan in Kuala Kangsar, Perak.

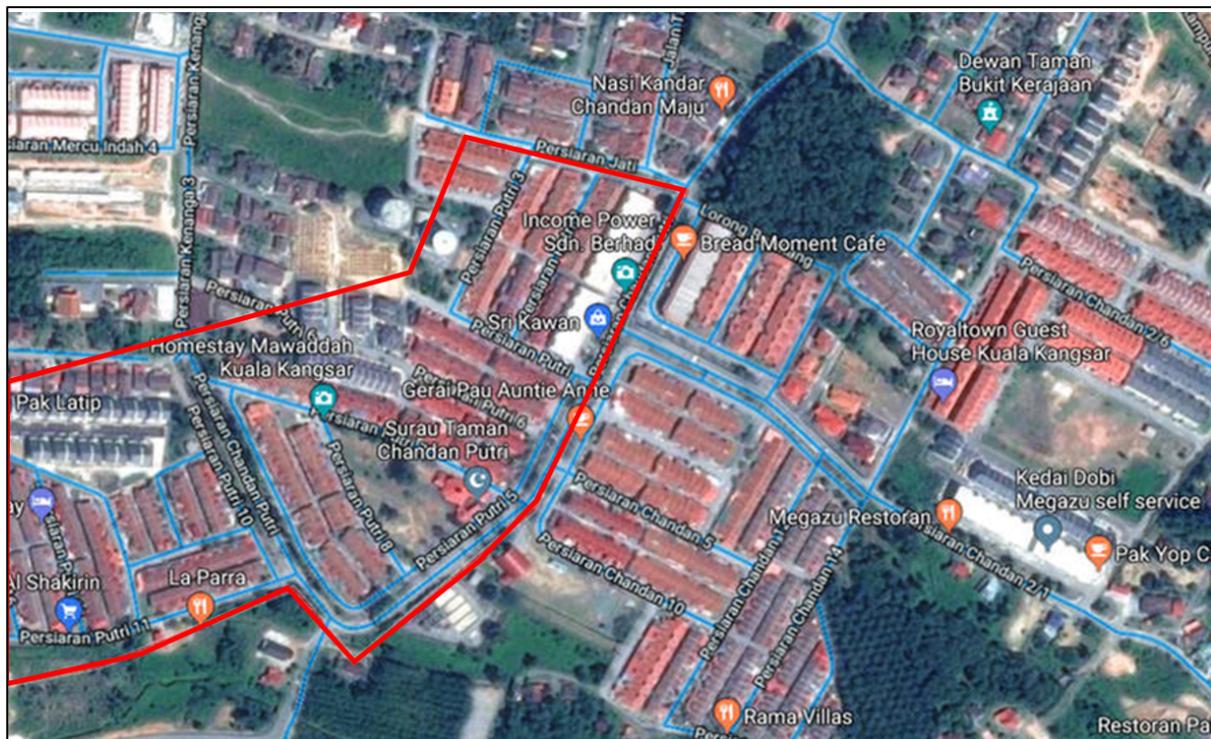


Fig. 1. Study area (red border) -Taman Bukit Chandan in Town Kuala Kangsar, Perak

This study employed a snowball sampling technique. Snowball sampling, typically utilized in social science research, is a non-probability sampling method aimed at identifying or accessing specific populations. It involves randomly selecting initial seeds and subsequently referring more individuals. The samples were considered a representative since the characteristics of a properly drawn sample accurately reflect those of the population in all aspects. A sampling formula by [12] was used in determining the sample size. The population in the research study was estimated at 550 people. By using the formula as in Eq. (1),

$$s = x^2 np(1-p) \div d^2(n-1) + x^2 p(1-p), \quad (1)$$

the sample size for this study was 256 samples.

## 2.2. Research Design

In this study, Google forms were utilized as a tool to develop a questionnaire for data collection from respondents. The questionnaire was disseminated online *via* platforms such as WhatsApp and Telegram applications to residents across Taman Bukit Chandan. A quantitative approach was adopted for conducting the research. The questionnaire items were designed to assess consumer knowledge regarding their perceptions of rattan as a furniture material. The questionnaire was developed by drawing multiple-choice questions structured into three parts: Parts A, B and C. Part A addressed the demographic background of the respondents and Part B comprised questions aimed at gauging consumer knowledge regarding their perceptions of rattan as a furniture material. Part C identified internal factors influencing consumers' purchasing decisions regarding rattan furniture. Frequency and percentage statistics were employed for measurement, and the collected data was analyzed using Microsoft Excel.

## 3. Results and Discussion

### 3.1 Demographic Background of Respondents

The distribution of respondent demographic background is presented in Table 1. A total of 315 respondents participated in the research, comprising 121 males (38.41 %) and 194 females (61.63 %). The largest demographic group in the survey was the Malay ethnic group, with 234 respondents, constituting the majority at 74.32 % of the total respondents. Following the Malay participants was the Chinese ethnic group with 54 individuals participating, accounting for 17.14 % of the total respondents. While the Chinese respondents form a significant segment, their numbers were noticeably smaller compared to the Malay majority. The Indian ethnic group however, ranks third in representation with 27 respondents, making up 8.63 % of the overall respondents.

Regarding education levels, a notable concentration was observed among diploma holders, comprising 108 respondents (34.32 %). This was followed by degree holders with 88 respondents (27.93 %), secondary school (SPM) graduates with 73 respondents (23.21 %) and STPM/Matrikulasi/A-Level qualifications with 29 respondents (9.2 %). Secondary school (PMR) graduates and those with a master's degree represent smaller proportions, with 11 respondents (3.51 %) and 5 respondents (1.62 %) respectively. There was also one respondent (0.30 %) with no formal education.

In terms of marital status, 217 respondents (68.91 %) were married, while 95 respondents (30.23 %) were single. Additionally, three respondents (1.0 %) were widows or widowers.

Income distribution among respondents falls into four categories: 157 respondents (49.83 %) have an income ranged from RM 0 to RM 2,000; 83 respondents (26.32 %) have an income ranged from RM 2,001 to RM 4,000; 46 respondents (14.64 %) have an income ranged from RM 4,001 to RM 6,000 and the least number; 29 respondents (9.22 %) have an income above RM 6,000.

Regarding age distribution, the largest segment of the surveyed population fell within the 41 – 50 year-old age group, comprising 51.75 % of the total samples. The 31 – 40 year-old group represented the second-largest age category, accounting for 28.89 % of the population. The 21 – 30 year-old group was the third-largest, comprising 14.60 % of the population followed by the smallest age groups: 51 years old and above (3.81 %) and 20 years and below (0.95 %).

The largest occupational group among respondents were individuals working in the private sector (35.56 %), followed by self-employed individuals (29.84 %), students (16.51 %), government employees (12.38 %) and the unemployed (5.71 %).

**Table 1**  
 Demographic background of respondents

Variable	Frequency	Percentage (%)
Gender:		
Male	121	38.41%
Female	194	61.63%
Ethnic:		
Malay	234	74.32%
Chinese	54	17.14%
Indian	27	8.63%
Others	0	0%
Education Level:		
Primary school	0	0%
Secondary school	11	3.51%
STPM	110	34.92%
Diploma	188	59.68%
Degree	5	1.62%
Masters	1	0.30%
None		
Status:		
Single	95	30.23%
Married	217	68.91%
Widow/Widower	3	1.0%
Income (RM):		
0 – 2000	157	49.83%
2001 – 4000	83	26.32%
4001 – 6000	46	14.64%
Above 6000	29	9.22%
Age:		
20 years and below	3	0.95%
21 – 30 years old	46	14.60%
31 – 40 years old	91	28.89%
41 – 50 years old	163	51.75%
51 years old and above	12	3.81%
Occupation:		
Unemployed	18	5.71%
Self-employed	94	29.84%
Government employees	39	12.38%
Private sector	112	35.56%
Student	52	16.51%

### 3.2 Knowledge: Uses of Rattan Furniture Poses No Health Problems to Users

In order to assess knowledge levels regarding rattan furniture, respondents were given three questions. The first question aimed to assess respondents' perceptions of potential health issues associated with the use of rattan furniture. By asking whether the utilization of rattan furniture leads to any health problems, the researcher aimed to gauge the extent of awareness or misconceptions among respondents regarding the health implications of using furniture made from rattan. This question was formulated to gain insights into whether users view rattan furniture as a safe and health-conscious choice for their households. As shown in Table 2, the majority of respondents—

198 of them (62.86 %)—responded "Yes," indicating that they believe rattan furniture does not pose health issues. In contrast, 117 respondents (37.14 %) selected "No," expressing concerns or uncertainties and suggesting that they believe rattan furniture might pose health risks.

**Table 2**  
 Knowledge of rattan furniture poses no health problems to users

The uses of rattan furniture poses no health problems to users	Yes	No	Total
Frequency	198	117	315
Percent	62.86 %	37.14 %	100 %

Unfavourable responses may indicate the presence of misunderstandings or concerns that warrant attention through marketing or educational initiatives. Essentially, the question aids in assessing and addressing users' perceptions of the health effects associated with choosing rattan furniture. Drawing from prior research, their findings revealed that a significant majority of respondents, constituting 62.86 % of the total, correctly perceived rattan furniture as not posing any health problems. However, in contrast to the findings of the previous study by [13], which observed a notable proportion of respondents comprising 37.14 % of the sample, who expressed concerns or misconceptions about the health implications of using rattan furniture.

### 3.3 Knowledge: The Production of Rattan Furniture has a Minimal Impact on the Environment

The second question aimed to investigate respondents' perceptions regarding the environmental impact of rattan furniture production. The objective was to ascertain whether respondents perceive the manufacturing process of rattan furniture as having a minimal impact on the environment. This inquiry seek to assess the level of environmental awareness among respondents, examining whether they view rattan furniture as a sustainable option and perceive its production as aligned with eco-friendly practices. Table 3 shows only 179 respondents (56.83 %) answered "Yes," indicating their belief that rattan furniture production has a minimal environmental impact. Conversely, the remaining 136 respondents (43.17 %) chose "No," suggesting that they perceive a significant environmental impact associated with rattan furniture production.

In a prior research, [13] found that a majority of respondents constituting 56.83 % of the sample believed that the production of rattan furniture has a low impact on the environment. However, their findings also revealed a considerable proportion of respondents, accounting for 43.17 % of the total, who held opposing views. This disparity highlighted differing perceptions regarding the environmental sustainability of rattan furniture production among consumers. It underlined the necessity for further research and educational initiatives aimed at addressing misconceptions and fostering a better understanding of the environmental implications associated with rattan furniture manufacturing processes.

**Table 3**  
 Knowledge of rattan furniture has a minimal impact on the environment

Does the production of rattan furniture have a minimal impact on the environment?	Yes	No	Total
Frequency	179	136	315
Percent	56.83 %	43.17 %	100 %

### 3.4 Knowledge: The Production of Rattan Furniture Relies on Certain Distinctive Rattan Qualities

The third question aims to ascertain respondents' knowledge and opinions regarding whether the distinctive qualities of rattan, such as its flexibility, strength and lightness, are appropriate for furniture making. By posing this question, the researcher seeks to determine respondents' familiarity with the inherent attributes of rattan that render it a suitable material for crafting furniture. The focus lies in gaining insights into how users perceive the compatibility of these qualities with the practical requirements of furniture. Referring to Table 4, a significant majority of respondents—238 individuals, constituting 89.94 % of the total responses—answered "Yes," affirming the suitability of these characteristics for rattan furniture production. In contrast, a smaller proportion of 32 respondents, representing 10.16 % of the total, answered "No."

Based on [13], the findings exhibit a remarkable similarity to the previous study, with a substantial majority of respondents—89.94 % of the total—acknowledging the suitability of rattan's qualities for furniture production. The study also identified a small proportion of respondents, comprising 10.16 % of the sample, who disagreed with this notion.

**Table 4**  
 Knowledge of rattan furniture on characteristics of flexibility, strength and light suitable for production

Are the characteristics of flexible, strong and light suitable for producing rattan furniture	Yes	No	Total
Frequency	238	32	315
Percent	89.94 %	10.16 %	100 %

### 3.5 Factors Influencing the Purchasing of Rattan Furniture

Table 5 shows the significant influence of modernity, with 156 respondents (45.50 %) identifying it as the primary factor (Rank 1) influencing their decision to purchase rattan furniture. This highlights a pronounced preference among surveyed individuals for furniture that embodies contemporary design and innovative features, aligning with current furniture trends. The considerable percentage highlights a strong interest in rattan furniture that not only serves practical needs but also resonates with modern design preferences. Consumers place value on rattan furniture that reflects the latest trends and innovations in the industry, indicating a dynamic and forward-thinking consumer base. Consequently, there is a clear imperative for manufacturers and marketers to prioritize modernity in their product offerings to meet the prevailing consumer preference for cutting-edge and stylish rattan furniture. This finding contrasts with [14] study, where respondents primarily cited social status as the leading influence factor. Social status emerges as the most significant driver of consumers' intention to purchase rattan furniture in their study.

**Table 5**  
 Ranking of influence factors in purchasing rattan furniture

Influence factors in purchasing rattan furniture	Frequency	Percent	Rank
Sustainable consumption	40	12.70 %	3
Social status	32	10.16 %	4
Environmental safety	87	27.62 %	2
Modernity	156	45.50 %	1
Total	315	100 %	

Subsequently, it was revealed that environmental safety ranks as the second-highest influencing factor, with 87 respondents (27.62 %) selecting it. This notable percentage emphasizes a significant

level of awareness and concern among consumers regarding the environmental impact of their purchasing decisions, particularly concerning rattan furniture in this context. The focus on environmental safety reflects a broader societal trend toward sustainable and eco-friendly consumption habits. Consumers are actively seeking products that demonstrate a commitment to environmental responsibility, indicating a growing awareness of the ecological implications of their choices. This shift underscores a preference for environmentally conscious products and suggests that businesses emphasizing sustainability in their rattan furniture offerings are likely to resonate positively with consumers who prioritize ecological considerations. This finding differs from that of [14], where respondents identified modernity as the primary influencing factor. In contrast, the modernity of rattan furniture is likely to enhance consumer preferences and purchase intentions for these products.

Additionally, sustainable consumption emerges as a significant yet slightly less prominent factor, recognized by 40 respondents (12.70 %) and ranking third in importance. While not as prevalent as the emphasis on modernity or environmental safety, the inclusion of sustainable consumption among the top three factors suggests the presence of a discernible consumer segment. This group places importance on the long-term environmental impact and sustainability of rattan furniture. While the majority may lean towards prioritizing modern design or environmental safety, the data indicates a significant subset of consumers with a heightened awareness of the ecological footprint associated with their purchases. The acknowledgement of sustainable consumption within the top three factors underscores a growing consciousness within this segment, indicating a niche market where consumers actively consider and prioritize the environmental implications of their rattan furniture choices, favouring sustainable and eco-friendly options. In contrast, [14] found that environmental safety was most frequently chosen as the third influencing factor by respondents.

Lastly, social status emerges as a factor for 32 respondents (10.16 %), securing the fourth position in the ranking. This data suggests that a specific segment of consumers takes into account the social implications associated with rattan furniture when making purchasing decisions. In this context, social status may encompass elements such as prestige, exclusivity or societal perceptions linked to owning particular types of rattan furniture. Although not as universally influential as factors like modernity or environmental safety, the recognition of social status as a consideration underscores that, for certain consumers, the allure of rattan furniture extends beyond its functional or aesthetic qualities. It indicates that a subset of individuals values the symbolic or cultural significance attached to specific types of rattan furniture. This highlights the diverse range of factors that influence consumer preferences and decisions within the rattan furniture market. In contrast, [14] found that sustainable consumption was most frequently chosen as the least influential factor by respondents.

#### **4. Conclusion**

This study investigates consumers' knowledge of rattan products and the factors influencing their purchase decisions. It emphasizes the significance of recognizing rattan furniture as a notable household item, reflecting residents' awareness of this emerging trend. The findings indicate that respondents generally possess adequate knowledge and exposure to rattan furniture, as evidenced by their correct responses. Key influencers of purchase intentions encompass social status, modernity, and environmental safety, with modernity emerging as the primary driver for investing in rattan furniture. Given the complexity of consumer preferences, marketers are encouraged to employ a comprehensive approach in their strategies. The insights picked up from this study hold value not only for rattan furniture manufacturers and marketers but also for policymakers and environmentalists. Historically, rattan furniture has lacked sufficient market promotion compared to

wooden furniture, despite the increasing interest in Non-Timber Forest Products (NTFPs). Understanding the factors steering consumers' preference for rattan over other furniture types is crucial for stakeholders in this industry. Moreover, these findings enable manufacturers to pinpoint critical factors influencing consumers' choices, thereby guiding product design. Marketers can leverage these comprehensions to devise effective promotional strategies, such as highlighting the social and environmental benefits of rattan furniture. Customizing marketing approaches to resonate with consumers' environmental concerns or aspirations for social status can potentially drive higher market penetration and premium pricing through targeted segmentation.

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