

The Clean Beauty: Factors Affecting Organic Cosmetics Purchase Intention among Malaysian Millennials

Norazira Mohd Abas¹, Nurul Zamratul Asyikin Ahmad², Ahmad Harith Syah Md Yusuf³, Adi Hakim Talib⁴, Ridzuan Adli Azidin⁵

^{1,2}Faculty of Business & Management

³Academy of Language Studies

⁴College of Computing, Informatics, and Mathematics

⁵College of Creative Arts, Universiti Teknologi MARA Cawangan Melaka Malaysia

DOI: <https://dx.doi.org/10.47772/IJRISS.2024.8090253>

Received: 13 September 2024; Revised: 23 September 2024; Accepted: 27 September 2024; Published: 21 October 2024

ABSTRACT

There is a growing demand for organic cosmetic products among Malaysian consumers. This shift in consumer preferences has led to a surge in demand for products made with organic, plant-based extracts, cruelty-free, and vegan ingredients. Due to their heightened environmental awareness and inclination towards sustainable behaviour, millennial consumers are widely acknowledged as key drivers of the green consumption movement. This study aims to investigate the factors influencing the purchase intention of organic cosmetics among Malaysian millennials, discussing factors such as attitude, subjective norms, and perceived behavioural control, based on the Theory of Planned Behaviour (TPB).

Keywords: organic cosmetics, attitude, subjective norms, perceived behavioural control, millennials

INTRODUCTION

Despite increasing awareness of green and sustainable cosmetics, Malaysia continues to grapple with a significant number of illicit and synthetic cosmetic products in the market [1]. In March 2024, the Ministry of Health banned the sale of three cosmetic items categorised as poisons—hydroquinone, tretinoin, betamethasone 17-valerate, and mercury. The use of these substances in products without professional supervision can result in undesirable side effects, such as redness, discomfort, soreness, peeling, and hypersensitivity to sunlight. They may also be absorbed into the body, leading to kidney and nervous system damage, and in severe cases, impairing the brain development of young children or fetuses [2].

It is therefore crucial for consumers to shift from conventional cosmetics to sustainable alternatives. This transition is essential not only for preserving the environment [3][4] but also for safeguarding consumer health. Purchasing organic cosmetics is believed to help preserve the environment, minimise pollution, and encourage the use of healthier products [1].

Driven by growing transparency concerning ingredients, Malaysian consumers increasingly prioritise natural and organic skincare options. This shift in preferences has spurred a notable increase in demand for products formulated with organic, plant-based extracts, cruelty-free, and vegan ingredients. The beauty industry is undergoing an organic transformation, which has the potential to drive significant commercial growth in the coming years. A recent report projects that the global market for organic personal care ingredients will reach US\$11.1 billion (RM46.7 billion) by 2025, reflecting a compound annual growth rate of 5.4% from 2019 to 2025 [5].

In Malaysia, the natural cosmetics market is experiencing substantial growth, fuelled by consumers' preference for sustainable and organic beauty products, according to a recent survey [6]. In 2024, revenue from the natural

cosmetics market in Malaysia amounted to US\$51.48 million. The market is expected to grow at an annual rate of 2.42% (CAGR 2024-2028) [6].

Malaysia has integrated Sustainable Development Goals (SDGs) into its 11th Malaysia Plan, ensuring that the principles of the SDGs are embedded in all aspects of national development. The objectives of SDG 2030 cover a broad range of areas, including poverty eradication, quality education, gender equality, renewable energy, sustainable urban development, responsible consumption and production, climate action, and more [7]. The Malaysian government has actively incorporated SDG principles into policies and practices, leading to the proliferation of environmentally friendly products and increased consumer demand [8]. Consumers are encouraged to purchase green products [9], contributing to a more sustainable future for Malaysia [10].

Millennials, with their increased environmental awareness and inclination towards sustainable behaviour, are considered significant drivers of the green consumption movement. Sustainable consumption refers to purchasing goods and services that are environmentally friendly, such as organic, sustainably sourced, or minimally impactful products. Millennials represent the largest consumer demographic worldwide, and their shopping habits are characterised by a preference for environmentally friendly products [11].

The primary objective of this study is to assess the factors contributing to the purchase intention of organic cosmetics among Malaysian millennials. It is widely believed that purchase intention plays a decisive role in shaping consumer behaviour [12]. The stronger the intention to purchase organic cosmetics, the more likely consumers are to make the purchase. Consumers who shift towards organic products can reap numerous health benefits while contributing to environmental sustainability. The introduction of clean, safe, non-toxic, and environmentally friendly ingredients acts as a compelling motivator for consumers to choose organic over conventional cosmetics. Understanding consumer purchase intentions for green products is crucial for Malaysia's pursuit of a sustainable environment, as emphasised in SDG 2030.

The Theory of Planned Behaviour (TPB) [13] underpins this study by offering insights into predicting the purchase intention for organic cosmetics in Malaysia. TPB has been widely applied to predict human behaviour [17], serving as an effective explanatory tool and is frequently used for predicting intentions and behaviours [25].

LITERATURE REVIEW

The Theory of Planned Behaviour (TPB)

The TPB is an extension of the Theory of Reasoned Action (TRA), developed by Icek Ajzen [13], as a general model for predicting and explaining behaviour across various contexts. In the TPB, Ajzen aimed to evolve and extend the TRA by incorporating the construct of Perceived Behavioural Control (PBC). PBC describes the factors influencing an individual's decision to engage in a behaviour. This addition was necessary as the original model had limitations in predicting behaviours that were not entirely under an individual's volitional control [13]. PBC represents actual control and is expected to moderate the effect of intention on behaviour [15]. In the TPB, the intention to perform a behaviour is considered the key determinant of behaviour [16]. Furthermore, the TPB has been extensively applied to predict the intentions underlying human behaviour [17] and is widely used for predicting intentions and behaviours [25].

Various theoretical frameworks have been employed to explain green purchase behaviours, with notable ones including the TRA [31] and its extended version, the TPB [13], as well as the General Theory of Marketing Ethics [38] and Involvement Theory [39]. While some theories address specific antecedents of green behaviour, the TPB offers a more comprehensive framework capable of explaining diverse behavioural antecedents.

Within the TPB, behaviour is determined by the intention to behave. It is important to note that "at its core, the TPB is concerned with the prediction of intention" [14]. Whether this intention effectively predicts behaviour depends on factors beyond the individual's control [14]. Therefore, this study focuses on explaining intention, which is influenced by three major factors: attitude towards behaviour, subjective norms, and PBC [13]. The TPB has been applied across various behavioural fields and has demonstrated broad validity [15][33], making it

a valuable framework for understanding purchase intentions towards organic cosmetics. The TPB has effectively predicted pro-environmental behaviour in relation to organic and green products, such as green skincare [19], well-being food [20], organic products [21], organic food [22], and organic personal care [23]. According to the model, the three constructs of attitude, subjective norm, and PBC describe a person's intentions toward a product, behaviour, or innovation as either positive or negative [24].

The Theory of Planned Behaviour (TPB): Attitude

Attitudes refer to 'the extent to which a person has a favourable or unfavourable evaluation of the behaviour of interest' [25]. The attitude construct has been shown to support intention-based correlations within the context of organic or green consumption [26]. Attitudes are evaluations of specific human behaviours as favourable or unfavourable [13], and they play a significant role in the cognitive processes consumers rely on during the purchasing process [27]. Past literature on organic food consumption indicates that recognising the relationship between the environment and personal health influences attitudes toward purchasing organic food [28].

A positive relationship exists between consumer attitude and the behavioural intention to purchase environmentally friendly products across different cultures and a variety of product types [29]. The TPB demonstrated that 'an individual's behaviour is determined by their intention to perform the behaviour, and this intention is a function of their attitude toward the behaviour and their subjective norm.' The decision to purchase green products is a positive indicator of environmentally friendly behaviour [30]. Individuals who are environmentally conscious and have had positive experiences with ecological products are highly likely to have strong intentions to purchase green products due to their environmental attributes [32]. For instance, if an individual is committed to recycling or sorting waste conscientiously in daily life, they are more likely to buy environmentally friendly products.

In another study, it was found that attitude had a positive and significant impact on purchase intention for both utilitarian green products (e.g., energy-efficient household appliances) and hedonic green products (e.g., organic clothing) [33]. The primary objective of this study was to enhance understanding of purchase intention for green products by examining the impact of the extended TPB on different types of green products, specifically utilitarian and hedonic. The study covered two categories of green products: energy-efficient household appliances and organic clothing, representing utilitarian and hedonic green products, respectively.

Additionally, a study demonstrated that attitude toward sustainable behaviour positively influences the intention to change behaviour [35]. This study involved face-to-face interviews with a total of 14,233 students in Germany and sought to investigate the connection between attitudes towards sustainable behaviour, the environment, climate change, and the intention to engage in nature and environmental protection.

Moreover, attitude positively influences university millennials' purchase intentions for organic products [36]. This study aimed to provide a better understanding of university millennials' intention to purchase eco-friendly products, as well as the potential barriers to this intention. The study utilised the constructs of the TPB to measure whether the attitudes and subjective norms of Ecuadorian university millennials were related to their intention to purchase organic products. Additionally, attitude positively influenced the purchase intention for eco-friendly furniture [37]. This study, which employed the TPB framework as its main theoretical foundation, aimed to investigate the factors influencing Da Nang residents' decisions to purchase eco-friendly furniture. Eco-friendly furniture contributes to sustainable, low-impact living, though Da Nang consumers face challenges due to product scarcity and high prices.

The Theory of Planned Behaviour (TPB): Subjective Norms

Research has consistently highlighted the importance of subjective norms as a significant determinant of behavioural intention [18][65]. Individuals often consider and evaluate the opinions provided by reference persons to decide whether to align with their preferences. Consequently, subjective norms can be viewed as an individual's motivation and perceptual assessment of all relevant reference persons. As a result, subjective norms play a fundamental role in understanding the unique characteristics of social network services such as social commerce (s-commerce) [66]. In the context of the TPB, subjective norms play an essential role in defining an

individual's intention to purchase organic food. They represent the social factors influencing an individual's decision-making process. Therefore, understanding subjective norms helps in recognising how perceived societal influences and the expectations of others might shape consumers' intentions to purchase organic cosmetics.

Subjective norms have produced varying results in different studies [33]. For instance, they were found to have an insignificant influence on purchase intention for hedonic green products, such as energy-efficient household appliances. In contrast, subjective norms significantly and positively influenced purchase intention for utilitarian green products, exemplified by organic clothing.

Moreover, a recent study reported that subjective norms did not influence the intention to use injection therapy [40]. This outcome may be attributed to the fact that the significant others selected by the participants, such as colleagues or close friends, were not the primary factors influencing their intentions to use injection therapy. A previous study contributes to our understanding of the extent to which social factors, subjective norms, and personal factors, including internal values and attitudes, may influence green customer citizenship behaviours [41]. The results suggest that subjective norms significantly affect both green attitudes and green customer citizenship behaviours, contributing the most to the variance in green customer citizenship behaviours.

On the other hand, a study found that subjective norms had an insignificant effect on the purchase intention of green products [42]. This study aimed to explore the factors driving green purchase behaviours, as actual sales of green products have not met expectations, despite many consumers expressing concern about environmental issues and interest in purchasing green products. Meanwhile, another study found that subjective norms were the most significant predictor of energy-saving behaviours among high school students with physical impairments [43].

The Theory of Planned Behaviour (TPB): Perceived Behavioural Control

Perceived Behavioural Control (PBC) refers to the perceived difficulty or ease with which an individual can purchase green cosmetics. PBC is a dominant predictor of green consumption behavioural intention [44]. Since PBC reflects people's perception of control and their belief in their ability to behave in a desired way, it emphasises the importance of situational constraints [45]. PBC may include both internal factors (e.g. knowledge, skills, willpower) and external factors (e.g. time, availability, the cooperation of others). When people believe they have more resources, such as time, money, and skills, their perception of control increases, which in turn boosts their behavioural intentions. Conversely, if consumers perceive that they cannot afford products due to higher prices, they may opt not to purchase them, even if they hold positive attitudes towards these products. A person with the perception of capacity, ability, and responsibility develops an intention to purchase green products, including household goods, energy appliances, and reusable energy [46]. Previous studies have shown that PBC is positively related to the purchase intention of organic products [26].

Organic Cosmetics

Organic cosmetics are derived from naturally grown vegetable components, without the use of artificial additives or genetically modified organisms [47]. To be classified as organic, a cosmetic must contain a minimum of 95% organic ingredients and be free from formaldehyde, paraffin, petroleum-derived compounds, and synthetic colours. Organic cosmetics may not include synthetic or semi-synthetic raw materials in their formulations, with certain exceptions. While organic and natural cosmetics exhibit qualitative similarities in their formulations, they differ quantitatively [48]. They may contain raw materials derived from natural sources processed through approved methods, and must include ingredients of organic origin—the proportion of which varies between natural and organic products [67]. The use of organic cosmetics contributes to environmental preservation, minimising pollution, promoting responsible utilisation of non-renewable resources, and protecting biodiversity and animal welfare [26][49][50]. Since organic cosmetics are composed of recyclable and biodegradable materials, they are similar in both content and packaging.

In Malaysia, consumers have access to a wide range of organic cosmetics brands, both international and local. Kora Organics, Sephora Collection, Claire Organics, and Herbivore are popular international organic cosmetics

companies. Meanwhile, local producers such as Remedy, 100% Pure, Tanamera, and Orgga are among the most popular brands in the Malaysian market.

Millennials

Millennials were selected as the target respondents for this study due to their greater concern for environmental sustainability and preference for eco-friendly practices. This demographic is considered an appropriate study segment, as their actions are often geared towards environmental protection, they have the purchasing power to buy organic products, and they generate advocacy within their social circles, encouraging others to adopt similar purchasing decisions [51]. Since the COVID-19 pandemic, individuals, particularly millennials, have increasingly focused on sustainability, environmentalism, and consuming more organic and natural products [52].

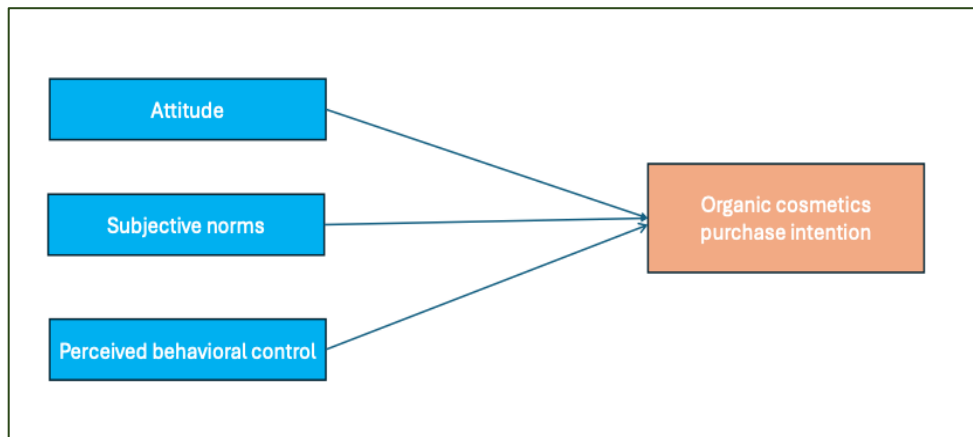


Fig. 1 Conceptual Framework

Figure 1 illustrates the proposed independent variables that contribute to organic cosmetics purchase intention among Malaysian millennials. The three main variables are derived from the Theory of Planned Behaviour (TPB): attitude, subjective norms, and perceived behavioural control.

Based on Figure 1, the following hypotheses can be formulated:

H1: Attitude has a significant effect on the purchase intention of organic cosmetics among Malaysian millennials.

H2: Subjective norms have a significant effect on the purchase intention of organic cosmetics among Malaysian millennials.

H3: Perceived behavioural control has a significant effect on the purchase intention of organic cosmetics among Malaysian millennials.

RESEARCH METHODOLOGY

This study investigates the relationship between the purchase intention of organic cosmetics among Malaysian Millennials as the dependent variable, and attitude, subjective norms, and perceived behavioural control as the independent variables. The research employs a descriptive research strategy to ensure a conclusive research design. The primary goal of this research is to understand how variables influence the purchase intention of organic cosmetics among Malaysian millennial consumers.

Research Design

This study will use a descriptive research methodology as its research design. The decision to employ the descriptive research method stems from how closely the study questions align with consumers' intentions to purchase organic cosmetics. The examined elements of attitude, subjective norms, and perceived behavioural

control relate to consumers' purchase intentions. This aids in examining the occurrence of a phenomenon, delineating trends or patterns within it, and describing the relationship between variables. This justification encourages using descriptive studies to shed light on these relationships. Data regarding participants is going to be gathered using a cross-sectional design.

Data Collection and Data Analysis

The study will conduct face-to-face customer surveys to investigate the abovementioned correlations and test the proposed hypotheses. The survey process will provide respondents with a questionnaire to complete. This study proposes a simple random sampling method, ensuring that every member of the population has an equal chance of selection. The sample should consist of Malaysian millennials aged from 28-43 years old, medium- to high-income households (RM7,971-RM19,752) [68], who resided in city areas located in the top three high-income states in Malaysia: Selangor, Kuala Lumpur, and Penang [69]. In addition, statistical analysis techniques will be employed to analyse the data collected. Partial Least Squares Structural Equation Modelling (PLS-SEM) can be used **to test the hypotheses**.

DISCUSSION AND CONCLUSION

Attitude, subjective norms, and perceived behavioural control are the three major components of TPB that predict consumer purchase intention. According to previous research, attitudes positively influence customers' purchasing intentions for green cosmetics [53]. The strong relationship between attitude and purchase intention is consistent with findings from prior studies [54][55][56]. This suggests that consumers with positive attitudes towards green products are more likely to purchase them, especially in the context of green cosmetics. As such, cultivating positive attitudes towards these products is crucial, as research has demonstrated that this can ultimately motivate consumers to purchase them. As an important predictor of organic cosmetics purchase intention, attitude reflects consumers' positive perceptions and beliefs about the benefits of these products, such as being safer, healthier, and environmentally friendly. A positive attitude towards organic cosmetics increases the likelihood of purchase, as consumers' values align with the perceived ethical, health, and environmental benefits of these products. This emotional and cognitive connection leads to increased purchasing intentions. Consumers are consistently drawn to the value of organic cosmetics due to their use of natural, plant-based ingredients, which are free from synthetic chemicals, pesticides, and fertilisers. This minimises exposure to potentially harmful substances, ultimately improving consumers' quality of life.

Previous research has consistently found that subjective norms have a positive and significant effect on behavioural intention [57][64]. However, some studies have shown that subjective norms have an insignificant effect on purchase intention [26][58]. In this context, subjective norms represent social pressure or influence from friends, family, and society. When individuals believe that important people in their lives approve of or expect them to use organic cosmetics, they are more likely to make purchasing decisions to meet these social expectations. This desire for social approval or conformity motivates consumers to make choices that are viewed positively by their social circle.

Perceived behavioural control has been consistently identified as a significant predictor of purchase intention in multiple studies [26][49][58][59][60][61][63]. However, other studies have reported an insignificant relationship [57][64]. Perceived behavioural control refers to an individual's perception of their ability to access and afford these products. Consumers are more inclined to develop a strong desire to purchase organic cosmetics when they believe they have the necessary resources (e.g., time, money, knowledge) and opportunities. They are more likely to act on their intentions when they perceive a high degree of control over their purchasing decisions, feeling empowered to make the purchase. Consumers are more likely to buy organic cosmetics when they have a positive attitude, receive support from loved ones, and find the purchase accessible and within their means.

This study's limitations include the need to examine the validity and reliability of the findings. Future research should focus on data collection and validating the proposed model. It is advisable to consider pricing and product availability in investigating organic cosmetics purchase intention among Malaysian millennials.

The higher pricing of organic cosmetics may not be affordable for all consumers, potentially discouraging them from purchasing these products. Furthermore, the availability of organic cosmetics may be limited in regions or

areas with relatively few specialty stores, making it difficult for consumers to locate them. Additionally, the range of organic cosmetics available in the market is somewhat limited compared to conventional brands. Consumers may find it challenging to evaluate and select the specific products they need. Therefore, it is recommended that future studies target millennials residing in urban areas with moderate to high income as respondents.

REFERENCES

1. Jaini, A., Quoquab, F., Mohammad, J., Hussin, N. (2019). Antecedents of Green Purchase Behavior of Cosmetics Products: An Empirical Investigation Among Malaysian Consumers. *International Journal of Ethics and Systems*. DOI 10.1108/IJOES-11-2018-0170
2. Bernama (2024). Govt bans sale of 3 cosmetic products containing scheduled poisons. <https://www.freemalaysiatoday.com/category/nation/2024/03/19/govt-bans-sale-of-3-cosmetic-products-containing-scheduled-poisons/>
3. Quoquab, F., & Mohammad, J. (2016). Malaysia Sustainable Consumption: Sacrificing for the Future. 6th International Research Symposium in Service Management, IRSSM-6 2015, 11-15 August 2015, UiTM Sarawak, Kuching. *Procedia - Social and Behavioral Sciences* 224 (2016) 599 – 604
4. Quoquab, F. & Mohammad, J. (2019). Green consumption by young consumers – pushing the boundaries. VOL. 20 NO. 4 2019, pp. 237-245, © Emerald Publishing Limited, ISSN 1747-3616. DOI 10.1108/YC-11-2019-983
5. PM MYT (2024). Organic beauty is big business right now. <https://www.malaymail.com/news/life/2019/08/29/organic-beauty-is-big-business-right-now/1785279>
6. Statista (2024). Natural Cosmetics (Malaysia). <https://www.com/outlook/cmo/beauty-personal-care/cosmetics/natural-cosmetics/malaysia>
7. SDG 2030, United Nations: Malaysia, Singapore, Brunei, <https://malaysia.un.org/en/sdgs>
8. MyHijau. <https://www.myhijau.my/green-procurement/garis-panduan-perolehan-hijau-kerajaan-2-0-2018-inner-fa/>
9. Rehman, Z. U., Seman, N.A.A., & Harun, A. (2023). Exploring the Significance of Malaysian Consumers' Intentions to Purchase Green Products. *Journal of International Business, Economics and Entrepreneurship* e-ISSN :2550-1429 Volume 8, (2) Dec 2023
10. Yusof, S., & Asmuni, S. (2021). Waste Management Behavior of Households in Klang Valley, Malaysia. *Journal of International Business, Economics and Entrepreneurship*, 6(1), 61. <https://doi.org/10.24191/jibe.v6i1.14209>
11. Carrión Bósquez, N.G.; Arias-Bolzmann, L.G. Factors influencing green purchasing inconsistency of Ecuadorian millennials. *Br. Food J.* **2022**, 124, 2461–2480. [[Google Scholar](#)] [[CrossRef](#)]
12. Blackwell, R.D., Miniard, P.W. and Engel, J.F. (2001), *Consumer Behavior* 9th, South-Western Thomas Learning, Mason, OH
13. Ajzen, I. (1991). The theory of planned behavior, *Organizational Behavior and Human Decision Processes*, Volume 50, Issue 2, 1991, Pages 179-211, ISSN 0749-5978
14. Ajzen, I. (2011). The theory of planned behavior: Reactions and reflections. *Psychology & Health*, 26 (9), 1113-1127. <https://doi.org/10.1080/08870446.2011.613995>
15. Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 32(4), 665–683. <https://doi.org/10.1111/j.1559-1816.2002.tb00236.x>
16. Armitage CJ, Conner M. Efficacy of the Theory of Planned Behaviour: a meta-analytic review. *Br J Soc Psychol.* 2001 Dec;40(Pt 4):471-99. doi: 10.1348/014466601164939. PMID: 11795063
17. Shin, Y. H., Im, J., Jung, S. E., & Severt, K. (2018). An Examination of Locally Sourced Restaurant Patronage Intention. *Journal of Quality Assurance in Hospitality & Tourism*, 19(1), 126–149. <https://doi.org/10.1080/1528008X.2017.1343170>
18. Shin, J.K., Chung, K.H., Oh, J.S., and Lee, C.W. (2013). The effect of site quality on repurchase intention in Internet shopping through mediating variables: The case of university students in South Korea, *International Journal of Information Management*, Volume 33, Issue 3, 2013, Pages 453-463, ISSN 0268-4012, <https://doi.org/10.1016/j.ijinfomgt.2013.02.003>

19. Bui, T.Q., Nguyen, N.T., Nguyen, K.K. & Tran, T.T(2021). Antecedents Affecting Purchase Intention of Green Skincare Products: A Case Study in Vietnam. **The Journal of Asian Finance, Economics and Business**. Volume 8 Issue 3, Pages.1295-1302. <https://doi.org/10.13106/jafeb.2021.vol8.no3.1295>
20. Lim, H.R., & An, S. (2021).Intention to purchase wellbeing food among Korean consumers: An application of the Theory of Planned Behavior, Food Quality and Preference, Volume 88, 2021, 104101, ISSN 0950-3293, <https://doi.org/10.1016/j.foodqual.2020.104101>
21. Photcharoen, C., Chung, R. & Sann, R. (2020). "Modelling Theory of Planned Behavior on Health Concern and Health Knowledge towards Purchase Intention on Organic Products," International Business Research, Canadian Center of Science and Education, vol. 13(8), pages 100-100, August
22. Asif, M., Xuhui, W., Nasiri, A., & Ayyub, S. (2017). **Determinant factors influencing organic food purchase intention and the moderating role of awareness: A comparative analysis. Food Quality and Preference**. Volume 63, January 2018, Pages 144-150. <https://doi.org/10.1016/j.foodqual.2017.08.006>
23. Ezlika, G., Chen, S.P., & Dilip, M., & Bang, N. (2017). **"Health and cosmetics: Investigating consumers' values for buying organic personal care products,"** Journal of Retailing and Consumer Services, Elsevier, vol. 39(C), pages 154-163
24. Akbari, M., Ardekani, Z.F., Pino, G., & Maleksaeidi, H. (2019). An extended model of Theory of Planned Behavior to investigate highly-educated iranian consumers' intentions towards consuming genetically modified foods, Journal of Cleaner Production, Volume 227, 2019, Pages 784-793, ISSN 0959-6526, <https://doi.org/10.1016/j.jclepro.2019.04.246>
25. Leong, G. Y. & Ng, Y. L. (2014). The factors influence consumer behaviour on the purchase of organic products. Undergraduate Research Project, University Tunku Abdul Rahman, Malaysia
26. Ghazali, E., Soon, P. C., Mutum, D. S., & Nguyen, B. (2017). Health and cosmetics: Investigating consumers' values for buying organic personal care products. Journal of Retailing and Consumer Services, 39, 154-163. <https://doi.org/10.1016/j.jretconser.2017.08.002>
27. Hill, H. and Lynchehaun, F. (2002), "Organic milk: attitudes and consumption patterns", British Food Journal, Vol. 104 No. 7, pp. 526-542. <https://doi.org/10.1108/00070700210434570>
28. Krystallis, A. and Chrysosoidis, G. (2005) Consumers' Willingness to Pay for Organic Food: Factors That Affect It and Variation per Organic Product Type. British Food Journal, 107, 320-343. <http://dx.doi.org/10.1108/00070700510596901>
29. Kim, H. Y., & Chung, J. E. (2011). Consumer Purchase Intention for Organic Personal Care Products. Journal of Consumer Marketing, 28, 40-47. <https://doi.org/10.1108/07363761111101930>
30. Liobikienė, G., Grincevičienė, S., & Bernatoniene, J. (2017). Environmentally friendly behaviour and green purchase in Austria and Lithuania. Journal of Cleaner Production, 142, 3789-3797
31. Ajzen, I. and Fishbein, M. (1980) Understanding Attitudes and Predicting Social Behavior. Prentice-Hall, Englewood Cliffs
32. Norazah, M. S. (2016). Green product purchase intention: Impact of green brands, attitude, and knowledge. British Food Journal, 118(12), 2893-2910. <https://doi.org/10.1108/BFJ-06-2016-0295>
33. Zhang, L., Fan, Y., Zhang, W., & Zhang, S. (2019). Extending the theory of planned behaviour to explain the effects of cognitive factors across different kinds of green products. Sustainability, 11(15), 4222. <https://doi.org/10.3390/su11154222>
34. Ajzen, I., & Fishbein, M. (2005). The Influence of Attitudes on Behavior. In D. Albarracín, B. T. Johnson, & M. P. Zanna (Eds.), The handbook of attitudes (pp. 173–221). Lawrence Erlbaum Associates Publishers
35. Gansser, O.A., & Reich, C.S (2023). Influence of the New Ecological Paradigm (NEP) and environmental concerns on pro-environmental behavioral intention based on the Theory of Planned Behavior (TPB), Journal of Cleaner Production, Volume 382, 2023, ISSN 0959-6526, <https://doi.org/10.1016/j.jclepro.2022.134629>
36. Bosquez, N. G. C., Bolzmann, L. G. A., & Kuroz, A. K. M. (2022). The influence of price and availability on university millennials' organic food product purchase intention. British Food Journal. <https://doi.org/10.1108/BFJ-12-2021-1340>
37. Yu, S.; Zhong, Z.; Zhu, Y.; Sun, J. Green Emotion: Incorporating Emotional Perception in Green Marketing to Increase Green Furniture Purchase Intentions. Sustainability **2024**, *16*, 4935. <https://doi.org/10.3390/su16124935>

38. Hunt, S.D. & Vitell, S. (1986). A General Theory of Marketing Ethics. *Journal of Macromarketing*, Volume 6, Issue 1. <https://doi.org/10.1177/0276146786006001>
39. Zaichkowsky, J. L. (1985). Measuring the Involvement Construct. *Journal of Consumer Research*, 12(3), 341–352. <http://www.jstor.org/stable/254378>
40. Hsu, S. H., Tang, K.P., Lin, C.H., Chen, P.C., & Wang, L.H. (2023). Applying the theory of planned behavior to investigate type 2 diabetes patients' intention to receive injection therapy. *Front Public Health*. 2023 Feb 16;11:1066633. doi: 10.3389/fpubh.2023.1066633. PMID: 36875423; PMCID: PMC9978190
41. Tonder, V., Fullerton, S., De Beer, L. T., & Saunders, S. G. (2023). Social and personal factors influencing green customer citizenship behaviours: The role of subjective norm, internal values, and attitudes. *Journal of Retailing and Consumer Services*, 71. <https://doi.org/10.1016/j.jretconser.2022.103190>
42. Kamalanon, P., Chen, J. S., & Le, T. T. Y. (2022). Why do we buy green products? An extended theory of planned behaviour model for green product purchase behaviour. *Sustainability*, 14(2), 689. <https://doi.org/10.3390/su14020689>
43. Suntornsan, S., Chudech, S., & Janmaimool, P. (2023). The role of the theory of planned behaviour in explaining the energy-saving behaviours of high school students with physical impairments. *Behavioral Sciences*, 12(9), 334. <https://doi.org/10.3390/bs12090334>
44. Afroz, R., Masud, M., Akhtar, R., Islam, M., & Duasa, J. (2015). Consumer purchase intention towards environmentally-friendly vehicles: An empirical investigation in Kuala Lumpur. *Environmental Science and Pollution Research*, 22, 16153–16163
45. Bamberg, S., & Moer, G. (2007). Twenty years after Hines, Hungerford, and Tomera: A new meta-analysis of psycho-social determinants of pro-environmental behavior. *Journal of Environmental Psychology*, 27, 14-25
46. Al Mamun, A., Mohamad, M. R., Yaacob, M. R. B. y Mohiuddin, M. (2018). Intention and behavior towards green consumption among low-income households. *Journal of environmental management*, 227, 73-86
47. Aswanth, B. S., Muthulakshmi, R., & Menon, R.J. (2024). A Study on the Organic And Conventional Products In The Cosmetics Industry. *Global Strategies for Sustainable Commerce and Innovative Management Practices in the 21st Century (GSSCIM-21C)*. https://www.researchgate.net/publication/379574330_A_STUDY_ON_THE_ORGANIC_AND_CONVENTIONAL_PRODUCTS_IN_THE_COSMETICS_INDUSTRY
48. Santos, B.F., Correa, M.A., and Chorilli, M. (2015). *Brazilian Journal of Pharmaceutical Sciences* vol. 51, n. 1, jan./mar., 2015 <http://dx.doi.org/10.1590/S1984-82502015000100002>. Sustainability, natural and organic cosmetics: consumer, products, efficacy, toxicological and regulatory considerations
49. Ali, S.; Usama Javed, H.M.; Ali, W.; Zahid, H. Decoding men's behavioral responses toward green cosmetics: An investigation based on the belief decomposition approach. *J. Environ. Plan. Manag.* **2022**, 1–28.
50. Lin, Y.; Yang, S.; Hanifah, H.; Iqbal, Q. An exploratory study of consumer attitudes toward green cosmetics in the UK market. *Adm. Sci.* **2018**, 8, 71
51. Carrión Bósquez, N.G.; Arias-Bolzmann, L.G.; Martínez Quiroz, A.K. The influence of price and availability on university millennials' organic food product purchase intention. *Br. Food J.* **2023**, 125, 536–550.
52. Ikram M, Sroufe R, Mohsin M et al (2019) Does CSR influence firm performance? A longitudinal study of SME sectors of Pakistan. *J Glob Responsib* 11:27–53. <https://doi.org/10.1108/jgr-12-2018-0088>
53. Nadim, S.D.K., and Jani, J.M (2021). Millennial's Behaviour and Attitude Towards Natural Cosmetics: A Case Study in Universiti Malaysia Terengganu. *Universiti Malaysia Terengganu Journal of Undergraduate Research* Volume 3 Number 1, January 2021: 63-74. <http://doi.org/10.46754/umtjur.2021.01.008>
54. Sing, L.S., Yi, S., Lee, K.Y.M., Edwin, A.M.A., and Ling, P.S. (2024). Do Environmental-Related Factors Stimulate Consumers' Green Cosmetic Purchase Intention? *International Journal of Sustainable Development and Planning* Vol. 19, No. 7, July, 2024, pp. 2605-2614 Journal homepage: <http://iijeta.org/journals/ijstdp>

55. Woo, E., Kim, Y.G. (2019). Consumer attitudes and buying behavior for green food products: From the aspect of green perceived value (GPV). *British Food Journal*, 121(2): 320-332. <https://doi.org/10.1108/BFJ-01-2018-0027>
56. Tano, D.G., Mendez, J.H., Diaz-Armas, R. (2022). An extended theory of planned behaviour model to predict intention to use bioplastic. *Journal of Social Marketing*, 12(1): 5-28. <https://doi.org/10.1108/JSOCM-09-2020-0190>
57. Duong, C.D., Doan, X.H., Vu, D.M., Ha, N.T., Dam, K.V. (2022). The role of perceived environmental responsibility and environmental concern on shaping green purchase intention. *Vision*, 1-15. <https://doi.org/10.1177/09722629221092117>
58. Shimul, A.S.; Cheah, I.; Khan, B.B. Investigating female shoppers' attitude and purchase intention toward green cosmetics in South Africa. *J. Glob. Mark.* **2022**, 35, 37–56
59. Tengli, A.; Srinivasan, S.H. An Exploratory Study to Identify the Gender-Based Purchase Behavior of Consumers of Natural Cosmetics. *Cosmetics* **2022**, 9, 101
60. Delistavrou, A.; Papaioannou, E.; Assimakopoulos, C. Consumers' decision to purchase online ecological personal care products: A moderated TPB model. *Int. J. Bus. Sci. Appl. Manag.* **2022**, 17, 34–47
61. Delistavrou, A.; Tilikidou, I. Consumers' Intentions to Buy Cosmetics and Detergents with Ingredients Made from Recycled CO₂. *Sustainability* **2022**, 14, 16069
62. Askadilla, W.; Krisjanti, M.N. Understanding Indonesian green consumer behavior on cosmetic products: Theory of planned behavior model. *Pol. J. Manag. Stud.* **2017**, 15, 7–15
63. Hsu, C.L., Chang, C.Y. and Yansritakul, C. (2017), "Exploring purchase intention of green skincare products using the theory of planned behaviour: testing the moderating effects of country of origin and price sensitivity", *Journal of Retailing and Consumer Services*, Vol. 34, pp. 145-152, doi: 10.1016/j.jretconser.2016.10.006
64. Magano, J.; Au-Yong-Oliveira, M.; Ferreira, B.; Leite, Â. A Cross-Sectional Study on Ethical Buyer Behavior towards Cruelty-Free Cosmetics: What Consequences for Female Leadership Practices? *Sustainability* **2022**, 14, 7786
65. Grappe, C.G.; Lombart, C.; Louis, D.; Durif, F. "Not tested on animals": How consumers react to cruelty-free cosmetics proposed by manufacturers and retailers? *Int. J. Retail Distrib. Manag.* **2021**, 49, 1532–1553
66. Sharma, S., Singh, G., & Sharma, R. (2021). For it is in giving that we receive: Investigating gamers' gifting behaviour in online games. *International Journal of Information Management*, 60, 102363. <https://doi.org/10.1016/j.ijinfomgt.2021.102363>
67. Shin, D. H., & Kim, W. Y. (2008). Applying the technology acceptance model and flow theory to Cyworld user behaviour: Implications of the Web 2.0 user acceptance. *Cyberpsychology & Behaviour*, 11(3), 378–382. <https://doi.org/10.1089/cpb.2007.0117>
68. IBD Certifications. (2010). Diretrizes para a certificação de produtos de saúde e beleza orgânicos e naturais e para matérias primas orgânicas e naturais (3rd ed.). Botucatu: IBD Certifications. http://ibd.com.br/Media/arquivo_digital/e6e22312-6ea4-4d77-ae91-168591124e24.pdf
69. Lim, J.L. (2023). T20, M40, B40 Household Income Update 2023. <https://www.mef.org.my/Attachments/MSN20230731a.pdf>
70. The Star, 2024. Selangor new high-income state according to World Bank Malaysia. <https://www.thestar.com.my/news/nation/2024/07/31/selangor-new-high-income-state-according-to-world-bank-malaysia>