

# Green Marketing for People and Planet: 7Ps and Green Knowledge Impact on Nestlé Single-Use Plastic Water Bottle Repurchase Intentions in Pakistan

Sapna V. Khemani<sup>1</sup>, Mazhar Ali<sup>2</sup> and Shumaila Kashif<sup>3</sup>

<https://doi.org/10.62345/jads.2025.14.2.148>

## Abstract

Pakistan is developing a National Plastic Action Partnership with the FMCG sector, bringing the "green" to the forefront of core marketing activities. The current study investigated how the 7Ps Green Marketing Mix (GMM) affects consumer repurchase intentions in Pakistan, specifically examining the role of green knowledge in the context of single-use plastic water bottles. Four hundred responses were collected through purposive sampling and analysed using SmartPLS SEM version 4. Results showed sufficient evidence of green knowledge enhancing the positive impact of GMM on consumers' repurchase intentions for responsible plastic bottle consumption. GMM influences consumer green knowledge by providing information, cues, and experiences, thereby enhancing their understanding of environmental issues and sustainable practices to achieve organisational goals while minimizing harm and promoting sustainable development goals. The GMM theory expanded our understanding of how effectively using the 7Ps can raise awareness of green knowledge, which is key to encouraging repurchase intentions. Incorporating green knowledge enriches this theory by recognising the importance of green marketing efforts in influencing favourable repurchase intention. From a practical standpoint, this research highlights the inclusive role of industry and consumers in effectively tackling the complex, conditional, and collective problem of single-use plastic waste pollution.

**Keywords:** Green Marketing Mix, Green Physical Evidence, Repurchase Intention, Green Knowledge.

## Introduction

The escalating environmental concerns and consciousness have propelled the concept of "green" to the forefront of marketing and consumer research (Jusoh & Mahalingam, 2023). This paradigm shift is gaining momentum, becoming a key factor in sustainability and a significant consideration in consumer purchasing decisions (Situmorang et al., 2021). Pakistan, ranking 179 out of 180 countries on the Environmental Performance Index 2024, underscores the urgency of the critical environmental situation (Yale Centre for Environmental Law & Policy & Yale Data-Driven Environmental Solution Group, 2024). The most visible and pressing challenge of sustainable consumption practices is plastic pollution, particularly from single-use plastics, such as water

<sup>1</sup>MS Scholar, SZABIST University, Karachi. Email: [sapna.vk999@gmail.com](mailto:sapna.vk999@gmail.com)

<sup>2</sup>Assistant Professor, Faculty of Management Sciences, SZABIST University, Karachi.  
Email: [mazhar.ali@szabist.edu.pk](mailto:mazhar.ali@szabist.edu.pk)

<sup>3</sup>Assistant Professor, Department of Marketing, Institute of Business Management, Karachi.  
Email: [shumaila.kashif@iobm.edu.pk](mailto:shumaila.kashif@iobm.edu.pk)

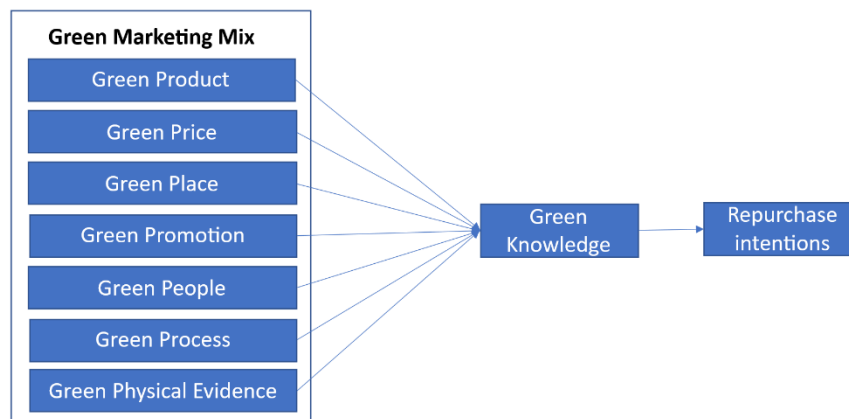


bottles. To undertake this, Pakistan has joined 128 countries in the fight against plastic pollution (Javaid & Khaliq, 2019). Single-use plastics cause pollution, consume valuable land, and squander limited natural resources (Chen et al., 2021), prompting bottled water companies to adopt green marketing strategies (Wanninayake & Randiwela, 2018). Nestle, a notable global fast-moving consumer goods (FMCG) brand, has made significant contributions by adopting green marketing, making it an ideal focus for this study (McNeish & Neufeldt, 2023). Moreover, Green knowledge, spurred by environmental campaigns (Hariyanto & Alamsyah, 2019), can act as a crucial mediator. This is significant, as current environmental awareness campaigns (Chen et al., 2018) and the growing age of the population have driven people to seek environmental knowledge (Kumar et al., 2021). The competitive landscape requires businesses to differentiate themselves by adopting sustainable practices and staying relevant and conscious (Hernández, 2023). However, from a practical standpoint, despite growing environmental degradation being a global issue, there is still a lack of research on the 7Ps of the green marketing mix influencing repurchase decisions, especially in the bottled water sector of Pakistan (Sultan et al., 2023).

Previous studies have had a limited focus on the impact of the 4Ps of the green marketing mix (Gümüş, 2022) on repurchase intentions, as well as the green knowledge interaction effect (Mahmoud et al., 2024). Hence, this study aims to analyse two primary research objectives: 1) To assess the impact of the 7Ps of the green marketing mix on repurchase intentions and 2) to evaluate the mediating role of green knowledge in the relationship between each element of the green marketing mix and repurchase intentions.

## Literature Review

Neil Borden first conceptualised and coined the marketing mix theory in 1949 (Borden, 1964), and it has undergone significant evolution since then. Borden's framework on marketing mix encompasses various elements that businesses can manipulate to achieve marketing objectives (Borden, 1964). However, the long list designed by Borden was distilled by E. Jerome McCarthy in 1964 (Allan & Chudry, 2000) to be more suited to business and widely recognisable, comprising the 4 Ps: Product, Price, Place, and Promotion (Nuseir & Madanat, 2015; Rafiq & Ahmed, 1995). The simplified version provided marketers with a more transparent structure to manage, strategise, and implement plans effectively and efficiently (Sanghvi, 2014). The 4Ps framework is a systematic approach to the decision-making process that meets consumer needs and preferences, thereby encouraging successful exchange between businesses and their consumers (Karim et al., 2021). As the business landscape evolved, particularly in the service industries, the 4Ps approach felt limited (Lahtinen et al., 2020). It was expanded (Goi, 2009) to include an additional 3Ps – people, process, and physical evidence - resulting in a total of 7 Ps of the marketing mix (Rafiq & Ahmed, 1995). The 7Ps of the green marketing mix—green product, price, place, promotion, people, process, and physical evidence - significantly influence consumer perception and encourage repurchase intentions that align with environmental values (Iannuzzi, 2024). It is particularly relevant when green products employ a sensitive place in the consumer's decision-making process (Mahmoud et al., 2024; Panci'c et al., 2023) by highlighting green attributes in marketing strategy (Putra et al., 2022) to influence positive customer attitudes and to motivate them to repurchase via the mediating effect of green knowledge enhancing consumer and societal values. Accordingly, the proposed conceptual framework is depicted in Figure 1.

**Figure 1: Proposed Conceptual Framework**

### **Green Product, Green Knowledge and Repurchase Intentions**

Green products tend to be safe for consumers to use and have an eco-friendly design using sustainable materials (Tsai et al., 2020), reducing the environmental impact. Winarni (2024) reinforces the implementation of green initiatives such as green packaging, effective logistics, minimal waste production, efficient disposal of waste materials, and green advertising to influence consumer trust and increase the likelihood of repurchases. Green knowledge among consumers has been an evident factor in the consideration of repurchase decisions (Simanjuntak et al., 2023). Previous studies indicate the presence of a parallel relationship between green knowledge and purchase intentions (Sulistio and Perilaku, 2024).

*H1: Green knowledge mediates the relationship between green products and repurchase intention.*

### **Green Price, Green Knowledge and Repurchase Intentions**

Green price is the additional cost consumer pay for the green products (Nguyen-Viet, 2023). The relationship between green prices and repurchase intentions is mediated by green knowledge, as it empowers consumers to comprehend the value of green pricing. This confidence enhances their willingness to pay premium prices for environmentally friendly products (Bingyu, 2024). Previous research indicates that informed consumers tend to evaluate the long-term benefits a green brand posits and can justify the premium prices (Putra et al., 2022). Moreover, the study of Mahmoud et al. (2024) showed that the combination of green knowledge and green marketing strategies acts as a favorable direction for consumer repurchases. The synergy between environmental concern and green practices of a brand strengthens the decision to strategize green pricing, and consumers with green knowledge are more inclined towards such eco-friendly products (Siyal et al., 2021).

*H2: Green knowledge mediates the relationship between green price and repurchase intention.*

### **Green Place, Green Knowledge and Repurchase Intentions**

Green place is the selection of appropriate channels for green product offerings with minimal environmental impact (Sohail, 2017). The relationship of green places and consumer repurchase intentions is influenced by environmental conscious behavior where green knowledge plays a mediating role (Hamzah & Tanwir, 2020). Evidence suggested that consumers are loyal toward brands with efficient logistics in the presence of green knowledge (Han et al., 2019). Wang et al.

(2023) observed that customer satisfaction is influenced by green practices and eventually leads to purchasing decisions, suggesting the crucial role of green knowledge. Concurrently, Suhartanto et al. (2021), stresses consumer attitudes playing a key role in the repurchase intention of green marketing.

*H3: Green knowledge mediates the relationship between green place and repurchase intention.*

### **Green Promotion, Green Knowledge and Repurchase Intentions**

Green promotion strategies significantly affect consumer repurchase intentions when the consumers have adequate green knowledge (Arianty & Ariska, 2023). An effective advertising campaign and a comprehensive green marketing initiative that raises awareness also build customer trust, which leads to long-term customer loyalty (Mahmoud et al., 2024). Promotion of green practices can significantly enhance consumers' green knowledge, which in turn influences them to repurchase the products (Mitariyani et al., 2022; Pancić et al., 2023). Mitariyani et al. (2022) emphasized the need to promote informed green strategies that resonate with consumers' environmental values, which can strengthen the green trust that supports repurchase intentions of the product

*H4: Green knowledge mediates the relationship between green promotion and repurchase intention.*

### **Green People, Green Knowledge and Repurchase Intentions**

Green people refers to the organizational members dedicated to promoting and implementing sustainable practices aligned with the organization's green marketing strategies (Iannuzzi, 2017). They play a vital place in differentiating brands and standing out in a competitive market (Bojanic, 2009). Therefore, the involvement of staff with a handful of knowledge of the green practices and effective, evident showcasing of green initiatives attracts and increases customer satisfaction, thereby leading to purchase decisions (Novela & Hansopaheluwakan, 2018). Moreover, consumer attitudes serve as a key motivating factor for the brand team to implement green practices (Woo & Kim, 2019). The green message conveyed via face-to-face interaction satisfies and clarifies the consumer perception towards the green brand (Sudari et al., 2019). Studies by Arizal et al. (2018) and Verma and Singh (2017) also indicated a positive relationship between green people and repurchase intentions, having a significant impact on customer satisfaction.

*H5: Green knowledge mediates the relationship between green people and repurchase intention.*

### **Green Processes, Green Knowledge and Repurchase Intentions**

Green process represents the methods and practices involved in producing and delivering the products (Ginsberg & Bloom, 2004). Novela and Hansopaheluwakan, (2018) argued that efficient processes tend to increase customer satisfaction, which acts as an integral part of purchase decisions. Chen and Lee (2015) emphasized that the integration of green processing in production and distribution strategies is a major factor in the inclination toward a brand. Therefore, research shows that green knowledge significantly influences purchase intentions (Debora Indriani et al., 2019; Wang et al., 2023). According to Wand et al. (2019) green knowledge serves as the foundation for customer trust, bolstering their belief in the brand's eco-friendly offerings and ultimately increasing the likelihood of purchase. Furthermore, the green perceived value towards the green process is also linked to the intent of purchase decisions (Bratasari et al., 2021; Huang et al., 2024).

*H6: Green knowledge mediates the relationship between the green process and repurchase intention.*

### **Green Physical Evidence, Green Knowledge and Repurchase Intentions**

Green physical evidence refers to the tangible characteristics of a product that display its environmental benefits, such as sustainable packaging (Arseculeratne & Yazdanifard, 2014). Green physical evidence contrasts with tangible elements that represent the brand identity. Such physical elements contribute to consumer perception of the brand, either positive or negative. As a result, these physical elements serve as one of factors influencing conscious or unconscious considerations in decision-making (Novela & Hansopaheluwakan, 2018). The impact of the mediation of green knowledge is elevated, with the green tangible cues of physical evidence (Han et al., 2019) translating in to purchase intentions. Furthermore, consumers who possess significant green knowledge tend to evaluate such cues more effectively (Martínez, 2015). Additionally, Fang et al. (2011) highlights that when consumers interact with green cues, it leads to purchases. A brand that evidently depicts green physical evidence fosters trust among consumers and promotes green brand purchases (Liao et al., 2020).

*H7: Green knowledge mediates the relationship between green physical evidence and repurchase intention.*

### **Materials and Methods**

To test the mediation of green knowledge, a non-probability purposive sampling was used based on the following criteria: a) Consumer of Nestle single-use plastic water brand, b) above the age of 18, 3) minimum intermediate education. Responses were measured via an online structured questionnaire using a 5-point Likert scale. The study collected 410 responses, among which 400 met the requirements. The measurement scales and items were adopted from previous studies (table-1 & table-3). The final questionnaire consisted of 36 questions analyzed with Smart PLS version 4 using Structural equation modeling.

**Table 1: Operationalization of Constructs**

| <b>Constructs</b>   | <b>Definition</b>                                                                                                                                                                      | <b>Author</b>                                |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Green Marketing Mix | The green marketing mix encourages firms to produce biodegradable and safe products made with eco-friendly materials and incorporate environmental consciousness during manufacturing. | (Kotler, 2011)                               |
| Green Product       | Green products tend to be safe for consumers to use and eco-friendly.                                                                                                                  | (Tsai et al., 2020)                          |
| Green Price         | Green prices are generally the additional costs consumers pay for green products.                                                                                                      | (Nguyen-Viet, 2023)                          |
| Green Place         | Green place is the selection of appropriate markets for green product offerings, which also involves channel selection with minimal environmental impact.                              | (Ahmed et al., 2023; Mukonza & Swarts, 2020) |
| Green Promotion     | Green promotion is the advertisement of the company's green environmental practices to consumers.                                                                                      | (Sohail, 2017a)                              |
| Green People        | Green people are a part of the organizational team dedicated to promoting and implementing sustainable practices aligned with the organization's green marketing strategies.           | (Iannuzzi, 2017)                             |

|                         |                                                                                                                                                         |                                      |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Green Process           | Green process includes the methods and practices involved in producing and delivering the products.                                                     | (Ginsberg and Bloom, 2004)           |
| Green Physical Evidence | Green physical evidence is defined as the tangible characteristics of a product that display its environmental benefits, such as sustainable packaging. | (Arseculeratne & Yazdanifard, 2014a) |
| Green Knowledge         | Green or environmental knowledge includes understanding and awareness of environmental challenges and solutions.                                        | (Taufique et al., 2016)              |
| Repurchase Intentions   | Repurchase intentions are a repetitive readiness and willingness to buy a product, depicting loyalty.                                                   | (Chuah et al., 2022)                 |

**Table 1: Demographic Characteristics of Study Respondents (N=400)**

| Demographic Profile    |               | Frequency (%) |
|------------------------|---------------|---------------|
| <b>Gender</b>          | Male          | 65.8%         |
|                        | Female        | 34.3%         |
| <b>Age (in years)</b>  | 18 – 25       | 50%           |
|                        | 26 – 35       | 46%           |
|                        | 36 – 45       | 3.8%          |
|                        | 46 – 55       | 0.3%          |
|                        | 56 or older   | 0%            |
| <b>Education level</b> | Intermediate  | 4.3%          |
|                        | Undergraduate | 40%           |
|                        | Postgraduate  | 52.8%         |
|                        | PhD           | 0.8%          |
|                        | Other         | 2.3%          |

## Results

The measurement model of the constructs was tested for reliability (Cronbach alpha and composite) and validity (AVE). Table 3 shows that  $CA > 0.6$ ,  $CR > 0.6$ , and  $AVE > 0.5$  well within the threshold (Hair et al., 2010). The tests indicated that CA ranges from 0.609 – 0.916, except 0.567 of PRI, and CR ranges from 0.768 – 0.941, representing the reliability of the constructs. Furthermore, the AVE ranges from 0.522 – 0.799, except for 0.444 of PRI and 0.455 of KNW.

**Table 2: Constructs with items and reliability and validity (N=400)**

| Constructs                                                                    | CA   | CR   | AVE  |
|-------------------------------------------------------------------------------|------|------|------|
| <b>Green Product (PRT), Anjani &amp; Perdhana (2021)</b>                      | 0.81 | 0.86 | 0.52 |
| The raw materials used are environmentally friendly.                          |      |      |      |
| The product does not generate excessive waste.                                |      |      |      |
| The product is safe for consumption.                                          |      |      |      |
| The packaging used is biodegradable and environmentally friendly.             |      |      |      |
| The product includes eco-labeling and relevant certifications.                |      |      |      |
| Consumers have a positive perception of the product's environmental benefits. |      |      |      |
| <b>Green Price (PRI), Anjani &amp; Perdhana (2021)</b>                        | 0.56 | 0.75 | 0.44 |
| Prices given are higher than other brands.                                    |      |      |      |
| The premium price is by the benefits received.                                |      |      |      |
| The premium price is according to product quality.                            |      |      |      |
| The prices given are proportional to what is done to the environment.         |      |      |      |



|                                                                                                                 |      |      |      |
|-----------------------------------------------------------------------------------------------------------------|------|------|------|
| The consumers are willing to pay environmentally friendly prices.                                               |      |      |      |
| <b>Green Place (PLA), Anjani &amp; Perdhana (2021)</b>                                                          | 0.70 | 0.81 | 0.53 |
| The product is easy to reach and find.                                                                          |      |      |      |
| The offline distributor stores are located strategically for convenient access.                                 |      |      |      |
| Online and offline distributor stores support environmentally friendly activities.                              |      |      |      |
| The product range is complete and readily available at both online and offline distributor stores.              |      |      |      |
| <b>Green Promotion (PRO), Chayomchai (2019)</b>                                                                 | 0.87 | 0.91 | 0.72 |
| Promotes environmental issues effectively.                                                                      |      |      |      |
| Advertise environmental issues to raise awareness.                                                              |      |      |      |
| Informs the public about environmental concerns.                                                                |      |      |      |
| Nestle utilizes sales promotions to support eco-friendly initiatives.                                           |      |      |      |
| <b>Green People (PEO), Solvalier (2010)</b>                                                                     | 0.77 | 0.87 | 0.69 |
| The employees are aware of energy savings.                                                                      |      |      |      |
| The bottled sector of Nestle tries to minimize waste.                                                           |      |      |      |
| Local government policies encourage businesses on environmental conservation practices.                         |      |      |      |
| <b>Green Process (PRS), Dzulkarnain et al. (2014)</b>                                                           | 0.79 | 0.87 | 0.70 |
| The production process is based on ISO 14001 certification.                                                     |      |      |      |
| The bottled sector of Nestle applies raw materials efficiency.                                                  |      |      |      |
| The bottled sector of Nestle applies an energy efficiency process.                                              |      |      |      |
| <b>Green Physical Evidence (PHY), Arseculeratne &amp; Yazdanifard (2014)</b>                                    | 0.64 | 0.81 | 0.58 |
| Eco-label is found on the product packaging.                                                                    |      |      |      |
| The dominance of green color identical to the environment is chosen for product packaging and store decoration. |      |      |      |
| Stores are located in strategic areas and accessible.                                                           |      |      |      |
| <b>Green Knowledge (KNW), Ali (2021)</b>                                                                        | 0.60 | 0.76 | 0.45 |
| Eco-friendly products provide higher quality than conventional products.                                        |      |      |      |
| I know more about recycling than the people around me.                                                          |      |      |      |
| I know a place that sells cheaper and good-quality green products.                                              |      |      |      |
| I know the meaning of the green symbol or label on the product packaging                                        |      |      |      |
| <b>Repurchase Intentions (ReI), Slatten (2021)</b>                                                              | 0.91 | 0.94 | 0.79 |
| I intend to shop at this store again in the future.                                                             |      |      |      |
| I am likely to visit this store again in the future.                                                            |      |      |      |
| I will probably use the products (and associated services) of this store in the future.                         |      |      |      |
| I will shop more at this store in the future.                                                                   |      |      |      |

The discriminant validity is measured using the AVE (Table 3) and correlations (Table 4) representing the strong validity of items.

**Table 3: Results of test for discriminant validity (N=400)**

|     | Mean  | KNW   | PEO   | PHY   | PLA   | PRI   | PRO   | PRS   | PRT   | ReI |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| KNW | 2.372 |       |       |       |       |       |       |       |       |     |
| PEO | 2.755 | 0.598 |       |       |       |       |       |       |       |     |
| PHY | 2.374 | 0.791 | 0.849 |       |       |       |       |       |       |     |
| PLA | 2.220 | 0.56  | 0.603 | 0.784 |       |       |       |       |       |     |
| PRI | 2.549 | 0.666 | 0.776 | 0.657 | 0.613 |       |       |       |       |     |
| PRO | 2.669 | 0.568 | 0.835 | 0.782 | 0.546 | 0.725 |       |       |       |     |
| PRS | 2.524 | 0.638 | 0.848 | 0.825 | 0.66  | 0.746 | 0.753 |       |       |     |
| PRT | 2.634 | 0.566 | 0.792 | 0.785 | 0.557 | 0.751 | 0.724 | 0.797 |       |     |
| ReI | 2.495 | 0.553 | 0.521 | 0.558 | 0.444 | 0.595 | 0.549 | 0.616 | 0.603 |     |

The results of the estimated mediation hypothesis conducted using Smartpls 4.0 with 5,000 bootstrap subsamples and a two-tailed significance level of 0.05 are presented in Table 5. Across all seven paths, the total effects of the independent variables on ReI were consistently positive and significant (all  $\beta$  values ranging from 0.37 to 0.53), all  $t > 7.00$ , all  $p < 0.001$ ). More significantly, the indirect effects of each independent variable on ReI through KNW were also uniformly positive and significant (all  $\beta$  values ranging from 0.11 to 0.15, all  $t > 4.00$ , all  $p < .001$ ) indicating that KNW plays a significant mediating role in how all independent variables influence ReI. Lastly, the direct effect of all independent variables on ReI remained significant even when accounting for mediator KNW (all  $\beta$  values ranging from 0.22 to 0.42, all  $t > 4.20$ , all  $p < 0.001$ ). This direct and indirect significance confirms partial mediation of every tested relationship.

**Table 4: Hypothesis Testing (N=400)**

| Mediation Path  | Indirect Effects<br>(Path coef./t<br>value/sig) | Direct Effects<br>(Path coef./t<br>value/sig) | Total Effects<br>(Path coef./t<br>value/sig) | Results   |
|-----------------|-------------------------------------------------|-----------------------------------------------|----------------------------------------------|-----------|
| PRT → KNW → ReI | 0.112 (4.247)**                                 | 0.42 (8.634)**                                | 0.532 (12.587)**                             | Supported |
| PRI → KNW → ReI | 0.129 (4.603)**                                 | 0.358 (7.237)**                               | 0.487 (10.649)**                             | Supported |
| PLA → KNW → ReI | 0.142 (4.63)**                                  | 0.224 (4.293)**                               | 0.487 (6.998)*                               | Supported |
| PRO → KNW → ReI | 0.120 (4.356)**                                 | 0.371 (7.00)*                                 | 0.492 (10.43)**                              | Supported |
| PEO → KNW → ReI | 0.131 (4.635)**                                 | 0.314 (5.943)*                                | 0.446 (9.299)**                              | Supported |
| PRS → KNW → ReI | 0.118 (4.075)**                                 | 0.406 (7.605)*                                | 0.534 (11.624)**                             | Supported |
| PHY → KNW → ReI | 0.150 (4.374)**                                 | 0.281 (4.246)*                                | 0.431 (7.547)**                              | Supported |

## Discussion

The study investigated the impact of each of the 7Ps on consumers' repurchase intentions by examining how green knowledge mediates this relationship. It posits that consumer awareness and understanding of environmental issues directly affect the relationship of the 7Ps and repurchase intentions by serving as significant mediator. The findings of this research add to the existing literature on limited studies conducted in the context of the 7Ps of the green marketing mix.

The result of the first hypothesis confirms a positive relationship aligning with the research of Nguyen-Viet's study (2023), which observed a positive relationship between green products and customer loyalty. Moreover, it also supports Chagwesha et al. (2023) by stressing eco-labeling and green branding to affect purchase decisions. However, it contradicts Mahmoud et al. (2024), which



found that green products have no impact on green repurchase intention in the presence of green knowledge as a moderator, which can be because of the diverse cultures and regions.

Another significant result of this study is that green prices positively impacted repurchase intentions, aligning with the results of Mahmoud et al. (2024) and Sohail (2017). The positive result suggests a high level of price consciousness among consumers regarding a brand's environmental attributes, implying that Nestle offers reasonable prices compared to its quality. The fourth hypothesis result posits that green advertisement activities act as a pivotal factor in consumer behavior to repurchase products. Our findings resonate with three other studies that indicated that green advertising reinforces repurchase intentions (Chagwesha et al., 2023; Al-Majali & Tarabieh, 2020; Taufique et al., 2019). The positive impact of green places on repurchase intentions highlights the importance of distribution channel selection and practices in influencing the decision-making of consumers to repurchase Nestle bottled water. This finding also aligns with several other studies, implying the underlying importance of logistics with minimal environmental damage and effective disposal practices (Anjani & Perdhana, 2021; Mahmoud et al., 2024; Mukonza & Swarts, 2020).

The remaining 3Ps of this research reveal a positive, strong relationship between green people, green processes, and green physical evidence, with green knowledge acting as a mediator to repurchase intentions. The result implies that not only are all elements of the 7Ps equally important and should be considered while formulating marketing strategies but also developing green knowledge of customers can increase repurchase intentions in line with the findings of Krishnan et al. (2022). Nestle's approach toward these Ps highlights the preference for products with green activities. Although limited studies have been conducted to evaluate the relationship our study measures, the study of Othman et al. (2021) showed that green people, processes, and physical evidence lead to customer loyalty.

## Conclusion

The plastic waste problem, particularly the single-use plastic bottle pollution, is complex, conditional, and collective. At the market level, single-use plastic bottles represent both a product and an industry. From the customer level, it is a habit of a systematic consumption cycle. To address this, companies and consumers participation is indispensable, along with the policymakers. Theoretically the findings strengthen the mechanism of attitude formation as well as signals to consumers through the GMM about the company's green commitment via green knowledge awareness and repurchase intentions. As per signaling theory, it reduces information asymmetry and increases green knowledge, making consumers more likely to repurchase. The main idea is that green knowledge helps connect the 7Ps of GMM to the likelihood of customers buying again (Bratasari et al., 2021; Huang et al., 2024; Mahmoud et al., 2024).

In practice the finding can assist marketers and managers of the bottled water industry in developing green marketing strategies for a widely consumed and produced product that creates high competition in the market and requires strategies that segregate the brand from the crowd.

Future studies can further explore other mediators, such as green brand image, brand identity, and satisfaction. Moreover, the study can incorporate diverse industries, local and international brands, and geographic locations. Finally, longitudinal data can unveil the dynamics of consumer behavior over time.

## References

- Ahmed, R. R., Streimikiene, D., Qadir, H., & Streimikis, J. (2023). Effect of green marketing mix, green customer value, and attitude on green purchase intention: evidence from the USA. *Environmental Science and Pollution Research*, 30(5), 11473–11495.
- Ali, M. (2021). A social practice theory perspective on green marketing initiatives and green purchase behavior. *Cross Cultural & Strategic Management*, 28(4), 815–838.
- Allan, S., & Chudry, F. (2000). The Internet—A fad or a fundamental for relationship marketing. *Journal of Database Marketing & Customer Strategy Management*, 8, 73–86.
- Al-Majali, M., & Tarabieh, S. (2020). Effect of internal green marketing mix elements on customers' satisfaction in Jordan: Mu'tah University students. *Jordan Journal of Business Administration*, 16(2), 411–434.
- Anjani, S., & Perdhana, M. S. (2021). Green Marketing Mix Effects on Consumers' Purchase Decision: A Literature Study. *Diponegoro Journal of Management*, 10(5).
- Arianty, N., & Ariska, D. (2023). Peran Mediasi Green Packaging: Green Promotion terhadap Repurchase Intention. *Jesya (Jurnal Ekonomi Dan Ekonomi Syariah)*, 6(2), 1675–1695.
- Arizal, N., Listihana, W. D., & Nofrizal, N. (2018). *The effect of marketing mix on satisfaction and its impact on hotel customer loyalty in Pekanbaru-Riau. In First Padang International Conference on Economics Education, Economics, Business and Management, Accounting and Entrepreneurship (PICEEBA 2018) (pp. 395–403). Atlantis Press. <https://www.atlantis-press.com/proceedings/piceeba-18/25902683>*
- Arseculeratne, D., & Yazdanifard, R. (2014). How green marketing can create a sustainable competitive advantage for a business. *International Business Research*, 7(1), 130.
- Bingyu, Y. (2024). Price Sensitivity and the Influence of Green Knowledge on Consumer Attitude and Purchase Intention in the Context of Sustainable Goods. *Evolutionary Studies in Imaginative Culture*, 8.2(S1), 36–46. <https://doi.org/10.70082/ESICULTURE.VI.794>
- Bojanic, D. (2009). *Hospitality marketing mix and service marketing principles. In Handbook of hospitality marketing management (pp. 59–84). Routledge. <https://doi.org/10.4324/9780080569437.ch3>*
- Borden, N. H. (1964). The concept of the marketing mix. *Journal of Advertising Research*, 4(2), 2–7.
- Bratasari, P. M., Rohman, F., & Prabandari, P. (2021). Repeat Purchase Intention of Coffee Shop in the COVID-19 Pandemic: A Green Approach. *The International Journal of Business & Management*, 9(4). <https://doi.org/10.24940/THEIJBM/2021/V9/I4/BM2104-012>
- Chagwesha, M., Mhlanga, D., Mveku, B., Matizanadzo, N., & Dzingirai, M. (2023). *Influence of Green Marketing Strategies on Consumer Purchase Decision: Evidence from Fast-Moving Consumer Goods Industry in Zimbabwe. In Advances in African Economic, Social and Political Development (pp. 327–343). Cham: Springer Nature Switzerland. [https://doi.org/10.1007/978-3-031-28686-5\\_17](https://doi.org/10.1007/978-3-031-28686-5_17)*
- Chayomchai, A. (2019). Key factors affecting product awareness and purchase decision: a study on green marketing and consumer attitudes in green-based city. *Asian Administration and Management Review*, 2(2), 10–22.
- Chen, C.-C., Chen, C.-W., & Tung, Y.-C. (2018). Exploring the consumer behavior of intention to purchase green products in belt and road countries: An empirical analysis. *Sustainability*, 10(3), 854.
- Chen, M.-F. & Lee, C.-L. (2015), "The impacts of green claims on coffee consumers' purchase intention". *British Food Journal*, 117(1), pp. 195-209. <https://doi.org/10.1108/BFJ-07-2013-0196>
- Chen, Y., Awasthi, A. K., Wei, F., Tan, Q., & Li, J. (2021). Single-use plastics: Production, usage, disposal, and adverse impacts. *Science of the total environment*, 752, 141772.
- Chuah, S. H.-W., Sujanto, R. Y., Sulistiawan, J., & Aw, E. C.-X. (2022). What is holding customers back? Assessing the moderating roles of personal and social norms on CSR'S routes to Airbnb repurchase intention in the COVID-19 era. *Journal of Hospitality and Tourism Management*, 50, 67–82.

- Debora Indriani, I. A., Rahayu, M., & Hadiwidjojo, D. (2019). The Influence of Environmental Knowledge on Green Purchase Intention the Role of Attitude as Mediating Variable. *International Journal of Multicultural and Multireligious Understanding*, 6(2), 627. <https://doi.org/10.18415/IJMMU.V6I2.706>
- Dzulkarnain, Santoso, I., Ariqoh, T., & Maulida, N. (2014). Green marketing strategy for local specialty agro-industry development to support creative agro-industry. *IOP Conference Series: Earth and Environmental Science*, 230, 012052.
- Fang, Y. H., Chiu, C. M., & Wang, E. T. G. (2011). Understanding customers' satisfaction and repurchase intentions: An integration of IS success model, trust, and justice. *Internet Research*, 21(4), 479–503. <https://doi.org/10.1108/10662241111158335>
- Ginsberg, J. M., & Bloom, P. N. (2004). Choosing the right green marketing strategy. *MIT Sloan Management Review*, 46(1), 79–84.
- Goi, C. L. (2009). A Review of Marketing Mix: 4Ps or More? *International Journal of Marketing Studies*, 1(1), 2–15.
- Gümüş, R. (2022). Role of Marketing Mix Perception and Participation on Repurchase Intention of Health Consumers. *Journal of Health Management*, 24(4), 525–538. <https://doi.org/10.1177/09720634221128395>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th ed). Prentice-Hall.
- Hamzah, M. I., & Tanwir, N. S. (2021). Do pro-environmental factors lead to purchase intention of hybrid vehicles? The moderating effects of environmental knowledge. *Journal of Cleaner Production*, 279, 123643.
- Han, H., Eom, T., Chung, H., Lee, S., Ryu, H. B., & Kim, W. (2019). Passenger repurchase behaviours in the green cruise line context: Exploring the role of quality, image, and physical environment. *Sustainability (Switzerland)*, 11(7). <https://doi.org/10.3390/SU11071985>
- Hariyanto, O. I. B., & Alamsyah, D. P. (2019). The relationship of environmental knowledge and green purchase intention. *International Journal of Engineering and Advanced Technology*, 8(5), 142–144.
- Hernández, M. S. (2023). Beliefs and attitudes of canarians towards the chilean linguistic variety. *Lenguas Modernas*, 62, 183–209. <https://doi.org/10.13039/501100011033>
- Huang, S. (Sam), Qu, H., & Wang, X. (2024). Impact of green marketing on peer-to-peer
- Iannuzzi, A. (2017). *Green Marketing. In Greener Products* (2nd ed., pp. 173–198). CRC Press.
- Iannuzzi, A. (2024). *Greener products: The making and marketing of sustainable brands*. CRC Press.
- Javaid, U. S., & Khaliq, R. N. (2019, June 10). *Doing our part to curb single use plastic in Pakistan*. World Bank Blogs. <https://blogs.worldbank.org/en/endpovertyinsouthasia/doing-our-part-curb-single-use-plastic-pakistan>
- Jusoh, Z. M., & Mahalingam, T. A. (2023). Factors Influencing Green Product Purchase Behavior among University Putra Malaysia Students. *Information Management and Business*
- Karim, R., Latip, N. A., Marzuki, A., Haider, S., Nelofar, M., & Muhammad, F. (2021). The impact of 4ps marketing mix in tourism development in the mountain areas: A case study. *International Journal of Economics and Business Administration*, 9(2), 231–245.
- Kotler, P. (2011). Reinventing marketing to manage the environmental imperative. *Journal of Marketing*, 75(4), 132–135.
- Krishnan, M. M., Manimekalan, A., & Radhakrishnan, K. (2022). Factors Influencing Repurchase Intention of Organic and Natural Cosmetics for Sustainable Development. *SAMVAD*, 25, 52–62.
- Kumar, A., Prakash, G., & Kumar, G. (2021). Does environmentally responsible purchase intention matter for consumers? A predictive sustainable model developed through an empirical study. *Journal of Retailing and Consumer Services*, 58, 102270.

- Lahtinen, V., Dietrich, T., & Rundle-Thiele, S. (2020). Long live the marketing mix. Testing the effectiveness of the commercial marketing mix in a social marketing context. *Journal of Social Marketing*, 10(3), 357–375.
- Liao, Y., Wu, W., & Sustainability, T. P. (2020). Examining the moderating effects of green marketing and green psychological benefits on customers' green attitude, value and purchase intention. *Sustainability*, 12(18), 7461. <https://www.mdpi.com/2071-1050/12/18/7461>
- Mahmoud, M. A., Seidu, A. S., Tweneboah-Koduah, E. Y., & Ahmed, A. S. (2024). Green marketing mix and repurchase intention: the role of green knowledge. *African Journal of Economic and Management Studies*, 15(3), 501–518. <https://doi.org/10.1108/AJEMS-04-2023-0137>
- Martínez, P. (2015). Customer loyalty: Exploring its antecedents from a green marketing perspective. *International Journal of Contemporary Hospitality Management*, 27(5), 896–917. <https://doi.org/10.1108/IJCHM-03-2014-0115>
- McNeish, J. E., & Neufeldt, J. (2023). *Can Nestlé Transform from a Corporation That 'Talks About Doing Good' to 'Doing Good' for the Environment? In Dealing with Socially Responsible Consumers (1st ed., pp. 429–426)*. Springer Nature.
- Mitriani, N. W. E., Salasa Gama, A. W., & Imbayani, I. G. A. (2022). Improving Repurchase Intention on Green Marketing Strategy. *Jurnal Organisasi Dan Manajemen*, 18(1), 126–137. <https://doi.org/10.33830/JOM.V18I1.2880.2022>
- Mukonza, C., & Swarts, I. (2020). The influence of green marketing strategies on business performance and corporate image in the retail sector. *Business Strategy and the Environment*, 29(3), 838–945.
- Nguyen-Viet, B. (2023). The impact of green marketing mix elements on green customer-based brand equity in an emerging market. *Asia-Pacific Journal of Business Administration*, 15(1), 131–144.
- Novela, S., & Hansopaheluwakan, S. (2018). Analysis of Green Marketing Mix Effect on Customer Satisfaction using 7p Approach. *Pertanika Journal of Social Sciences & Humanities*.
- Nuseir, M. T., & Madanat, H. (2015). 4Ps: A strategy to secure customers' loyalty via customer satisfaction. *International Journal of Marketing Studies*, 7(4), 78.
- Othman, B. A., Harun, A., De Almeida, N. M., & Sadq, Z. M. (2021). The effects on customer satisfaction and customer loyalty by integrating marketing communication and after sale service into the traditional marketing mix model of Umrah travel services in Malaysia. *Journal of Islamic Marketing*, 12(2), 363–388.
- Pancić, M., Serdarusić, H., & Čučić, D. (2023). Green Marketing and Repurchase Intention: Stewardship of Green Advertisement, Brand Awareness, Brand Equity, Green Innovativeness, and Brand Innovativeness. *Sustainability (Switzerland)*, 15(16). <https://doi.org/10.3390/SU151612534>
- Putra, I. K. M., Wirga, I. W., Sanjaya, I. B., Pasek, I. K., & Sukarta, I. W. (2022). Does green perceived value impact the green repurchase intention? *International Journal of Business, Economics & Management*, 5(3), 176–180. <https://doi.org/10.21744/IJBEM.V5N3.1933>
- Rafiq, M., & Ahmed, P. K. (1995). Using the 7Ps as a generic marketing mix: an exploratory survey of UK and European marketing academics. *Marketing Intelligence & Planning*, 13(9), 4–15.
- Sanghvi, V. (2014). The marketing mix: a review. *ELK Asia Pacific Journal of Marketing and Retail Management*, 5(4), 1–18.
- Simanjuntak, M., Nafila, N. L., Yulianti, L. N., Johan, I. R., Najib, M., & Sabri, M. F. (2023). Environmental Care Attitudes and Intention to Purchase Green Products: Impact of Environmental Knowledge, Word of Mouth, and Green Marketing. *Sustainability (Switzerland)*, 15(6). <https://doi.org/10.3390/su15065445>
- Situmorang, T. P., Indriani, F., Simatupang, R. A., & Soesanto, H. (2021). Brand positioning and repurchase intention: the effect of attitude toward green brand. *The Journal of Asian Finance, Economics and Business*, 8(4), 491–499.



- Siyal, S., Ahmed, M. J., Ahmad, R., Khan, B. S., & Xin, C. (2021). Factors Influencing Green Purchase Intention: Moderating Role of Green Brand Knowledge. *International Journal of Environmental Research and Public Health*, 18(20), 10762.
- Slatten, T., Krogh, C., & Connolley, S. (2011). Make it memorable: customer experiences in winter amusement parks. *International Journal of Culture, Tourism and Hospitality Research*, 5(1), 80–91.
- Sohail, M. S. (2017). Green marketing strategies: how do they influence consumer-based brand equity? *Journal for Global Business Advancement*, 10(3), 229–243.
- Solvalier, I. (2010). *Green marketing Strategies - Case Study about ICA Group AB Master Thesis in Business Administration and Economics*. Karlstar University Sweden.
- Sudari, S. A., Tarofder, A. K., Khatibi, A., & Tham, J. (2019). Measuring the critical effect of marketing mix on customer loyalty through customer satisfaction in food and beverage products. *Management Science Letters*, 9(9), 1385–1396.
- Suhartanto, D., Kartikasari, A., Hapsari, R., Budianto, B. S., Najib, M., & Astor, Y. (2021). Predicting young customers' intention to repurchase green plastic products: incorporating trust model into purchase intention model. *Journal of Asia Business Studies*, 15(3), 441–456.
- Sulistio, M., & Perilaku, M. A. (2024). *Analysis Pengaruh Environmental Knowledge Dan Brand Image Terhadap Purchase Intention*. Jurnal Manajemen Pemasaran Dan Perilaku. <https://jmppk.ub.ac.id/index.php/jmppk/article/view/259>
- Sultan, M. F., Tunio, M. N., Shaukat, G., & Asim, M. (2023). *Green Marketing Mix From the Perspective of Service Sector: Leveraging Marketing of Services With Green-SIVA Marketing Mix Elements*. In S. A. Raza, M. N. Tunio, M. Ali, & C.-H. Puah (Eds.), *Entrepreneurship and Green Finance Practices* (pp. 267–283). Emerald Publishing Limited.
- Taufique, K. M. R., Polonsky, M. J., Vocino, A., & Siwar, C. (2019). Measuring consumer understanding and perception of eco-labelling: item selection and scale validation. *International Journal of Consumer Studies*, 43(3), 298–314.
- Taufique, K. M. R., Siwar, C., Chamhuri, N., & Sarah, F. H. (2016). Integrating general environmental knowledge and eco-label knowledge in understanding ecologically conscious consumer behavior. *Procedia Economics and Finance*, 37, 39–45.
- Tsai, P.-H., Lin, G.-Y., Zheng, Y.-L., Chen, Y.-C., Chen, P.-Z., & Su, Z.-C. (2020). Exploring the effect of Starbucks' green marketing on consumers' purchase decisions from consumers' perspective. *Journal of Retailing and Consumer Services*, 56, 102162.
- Verma, Y., & Singh, M. R. (2017). Marketing mix, customer satisfaction and loyalty: an empirical study of telecom sector in Bhutan. *Indian Journal of Commerce and Management Studies*, 8(2), 121–129. <https://doi.org/10.18843/ijcms/v8i2/17>
- Wang, H., Baolong, M., & Rubing, B. (2019). How does green product knowledge effectively promote green purchase intention? *Sustainability*, 11(4), 1193. <https://www.mdpi.com/2071-1050/11/4/1193>
- Wang, J., Xu, S., Zhang, S., Sun, C., & Wu, L. (2023). Research on the Impact of Consumer Experience Satisfaction on Green Food Repurchase Intention. *Foods*, 12(24). <https://doi.org/10.3390/FOODS12244510>
- Wanninayake, W. M. C. B., & Randiwela, P. (2018). *Consumer attractiveness towards green products of FMCG sector: an empirical study*. Proceedings of the Oxford Business and Economics Conference, Oxford: UK.
- Winarni, R. S. D. (2024). The influence of green products on green purchase intention mediated by green brand awareness. *International Journal of Applied Finance and Business Studies*, 12(1), 44–51. <https://doi.org/10.35335/IJAFIBS.V12I1.285>
- 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.
- Yale Center for Environmental Law & Policy & Yale Data-Driven Environmental Solutions Group. (2024). *Environmental Performance Index*. Yale University. <https://epi.yale.edu/measure/2024/EPI>