Environmental Knowledge as a Mediator between Green Price, Green Promotion and Consumer Buying Behavior in Hypermarkets of UAE

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Abstract **– This paper investigates the mediating role of environmental knowledge and its effect on green pricing, promotion, and consumer buying behaviour in hypermarkets in Ajman, UAE. Two hundred twenty questionnaires were distributed to hypermarket customers, with a return rate of 76.8%. The study utilized SPSS version 28 to conduct exploratory factor analysis on 21 items, focusing on item loading, convergent validity, and internal consistency. Correlation tests were performed to determine the strength of associations between variables, and multiple regression and mediation analysis was used to test the hypothesis. The results found that green pricing substantially affects consumer buying behaviour and environmental knowledge. The results showed that green promotion considerably impacts consumer buying behaviour and ecological knowledge. Additionally, environmental knowledge partly mediated the connection between green prices and CBB and green promotion and CBB. However, the study's findings are limited to Ajman, UAE, and cannot be generalized.**

Keywords **– environmental knowledge (EK), green price, green promotion, consumer buying behaviour (CBB), UAE.**

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1. Introduction

More consumers are turning to environmentally friendly items because of their growing concerns about the state of the globe. Due to this, businesses have started to create their marketing plans to capitalize on consumers' growing awareness of environmental friendliness. These strategies are known as "green marketing". Businesses have begun implementing them in their products, price, promotion, and placement practices [12]. The International Chamber of Commerce estimates that the UAE green market will grow to an estimated USD 2.74 trillion by 2020 due to consumers choosing green marketing-related goods and services. Consumer interest in sustainable living and green marketing is rising in the UAE. Because of this, businesses are adopting eco-friendly practices, and they are marketing their goods and services as eco-friendly. To encourage customers to make more environmentally responsible purchases, hypermarkets in the UAE have implemented green marketing techniques like promotion and pricing [26]. Nevertheless, the effectiveness of such tactics may depend on consumer environmental awareness, which can affect how they view green pricing and advertising and, ultimately, how they choose to spend their money [10].

In the United Arab Emirates, several hypermarkets have understood the benefits of implementing sustainable practices and encouraging customers to buy eco-friendly goods. The transition to "green" may have some upfront expenditures, but in the long run, it may be beneficial in terms of cost savings and brand reputation.

Green marketing is defined as "all components of marketing that try to build or retain customer connections by appealing to consumers' environmental values and concerns" [6]. According to the BCG study, customers' environmental knowledge was a mediating factor in how willing they were to pay for green items when green pricing was in place.

Customers with more knowledge of the environment were likely to pay more for eco-friendly goods. To raise customer awareness of environmental issues and improve the efficiency of green pricing, hypermarkets in the United Arab Emirates should invest in consumer education and awareness initiatives [8]. Customers with more knowledge of the environment were more likely to view green marketing as a moral and reliable tactic and were also more willing to buy green goods [7]. This paper sought to determine the mediating role of environmental knowledge on the link among green pricing, green promotion, and consumer purchasing behavior in UAE supermarkets. There are numerous studies which were done in both developed and emerging economies [3], [14], [18], [20].

The UAE has yet to receive much attention regarding green marketing and customer behavior about the environment. Even though studies have investigated these concepts in various settings, including the retail, hospitality, and internet purchasing industries, it is significant to know that many studies conducted in other regions, like Europe and the United States, may not directly apply to the UAE hypermarket context due to cultural, social, and economic differences.

Additionally, the collaborative mediation function of environmental knowledge about the link among green pricing, green promotion, and consumer purchasing behavior in UAE hypermarkets. Green pricing, green promotion, customer habits, and environmental understanding have all generally been examined independently in the field of marketing research [24], [26]. Hence, there is a need for research that examines how green pricing and green promotion interact to affect consumer buying behavior, as well as how environmental knowledge may act as a mediator in UAE hypermarkets.

2. Literature Review

Green pricing refers to companies' pricing techniques to market sustainable goods and services [22]. The concept of green pricing has gained significant attention in recent years, as more consumers become environmentally conscious and seek eco-friendly alternatives [27]. Green pricing can take several forms, including price discounts for eco-friendly products, premium pricing for sustainable products, and differential pricing that reflect a product's or service's environmental effect. Green marketing entails "using promotional techniques to communicate to targeted audiences the ecologically friendly characteristics of a product, service, or firm [28].

Consumers are more inclined to trust businesses that are open and sincere in their efforts at green marketing, it can also assist in increasing brand loyalty and reputation [27]. Environmental concerns and beliefs can influence consumer attitudes toward green products, such as their perceived benefits, quality, and reliability [11]. The degree to which a person is aware of how their actions affect the environment and the advantages of sustainable practices is their level of environmental knowledge. According to research, the higher levels of environmental awareness can impact consumer attitudes and behavior in favor of eco-friendly items [12].

2.1. Green Price and Consumer Buying Behavior

Green pricing is a marketing tactic that considers environmental considerations when a firm decides on its prices, promotions, locations, and product development. This tactic aims to raise consumers' perceptions of its value by emphasizing a product or service's eco-friendliness. Numerous papers assessed the effect of green pricing on consumer purchasing decisions, and they all found benefits [18]. Consumers are prepared to pay more for goods that are marketed as environmentally friendly [19]. Additionally, [12] study discovered that a green pricing mix affects customers' perceptions of product quality, brand perception, and purchase intention in a positive way. People are more prepared to pay a premium price for eco-friendly products. After all, they prefer to link them with higher quality and better brand image. In addition, a study discovered that consumers will pay a higher price if they care about the environment [23]. H1. Green prices significantly affect consumer buying behavior.

2.2. Green Promotion and Consumer Buying Behavior

Green promotion can make consumers more aware of environmentally friendly products and their advantages. The business can educate buyers about the outcomes of their buying choices on the environment and persuade them to make more sustainable decisions by showcasing a product's sustainability attributes [25]. Eco-friendly items may appear to have more value thanks to green marketing, which increases consumer interest in them. To support sustainability, consumers can be willing to pay more for things they believe to be ecologically friendly [5]. Green advertising raised consumers' environmental consciousness and aspirations to adopt eco-friendly practices [17].

H2. Green promotion has a substantial effect on the CBB.

2.3. Green Pricing and Environmental Knowledge

The effects of green prices on customers' environmental knowledge of eco-friendly items have also been investigated, and the results point to a potential positive impact. The green price positively impacts customers' environmental knowledge and attitudes about green products. The survey discovered that customers who care more about the environment are more likely to be persuaded by green pricing options while purchasing [16]. Green pricing and environmental knowledge are related in a way that they complement and support one another. Green pricing initiatives can create awareness and educate people about the advantages of renewable energy and sustainable practices, and greater environmental knowledge can result in paying more for eco-friendly products [15].

H3. There is a significant positive relationship between the green price and consumers' environmental knowledge.

2.4. Green Promotion and Environmental Knowledge

This study investigates how environmental knowledge, attitudes, and behavior are impacted by green marketing. According to the findings, a combination of green promotions positively impacts consumers' environmental awareness and attitudes toward green products, encouraging greater ecologically responsible behavior [24]. The necessity for consumers to make sustainable decisions and environmental challenges can be brought up by promoting eco-friendly items. Companies may help consumers understand the environmental effect of their choices and help them make better decisions by showcasing the eco-friendly characteristics of their products [14]. Using their promotional efforts, companies can persuade consumers to adopt more sustainable practices. For instance, they could advocate for green habits like recycling, minimizing waste, or energy conservation. Companies may assist consumers become more environmentally aware and motivate them to take action to safeguard the environment by supporting certain habits [9].

H4. A significant positive correlation exists between the success of green promotion and environmental knowledge.

2.5. Consumer Buying Behavior and Environmental Knowledge

Environmental knowledge and consumer purchasing behavior are strongly related because consumers' awareness of environmental issues and level of environmental knowledge can affect their purchasing choices.

According to Solaiman et al [26] consumers more informed about sustainability and environmental issues are more inclined to make eco-friendly purchases. Research revealed that buyers were more likely to buy eco-friendly stuff when they had more knowledge about the environment [3]. Environmental knowledge can affect consumers' attitudes and views about sustainability and their shopping decisions. For example, a 2007 study indicated that customers who had a greater grasp of environmental issues were more likely to see sustainability as a moral and ethical issue and to be driven by a feeling of responsibility to the environment [9].

H5. There is a positive relationship between CBB and the environmental knowledge of consumers.

2.6. Green Pricing and CBB Mediated by Environmental Knowledge

Higher levels of environmental knowledge are likely to result in more environmentally conscious purchasing behavior, according to the link between CBB and EK. For instance, a customer who is conscious of the harm plastic trash causes to the environment might opt to buy products that come in minimal or biodegradable packaging. Similarly, a customer aware of the carbon emissions caused by transportation may decide to purchase locally made goods to lessen their carbon footprint [11]. The connection between green pricing, consumer behavior, and environmental understanding has been the subject of numerous research. For instance, a study indicated that customers' intentions to buy eco-friendly products were positively influenced by green pricing and that this effect was moderated by consumers' environmental understanding [13]. Customers more informed about environmental issues were more likely to be swayed by environmentally friendly pricing tactics, such as rebates for environmentally friendly goods. The authors contend that increasing consumer views of the worth of environmentally friendly goods can enhance their likelihood of favoring green pricing techniques [1]. Similar findings from other studies point to the value of EK in moderating the link between green pricing and consumer behavior. Customer perceptions of these products' environmental advantages are associated with consumer environmental knowledge and inclined to pay more for the products [25].

H6. Environmental knowledge mediates the link between green pricing and consumer buying behavior.

2.7. Green Promotion and Consumer Buying Behavior Mediated by Environmental Knowledge

Environmental knowledge can also be a mediator in the green promotion mix, which means that a consumer's level of environmental awareness can influence how they react to green marketing tactics. Buyers are likely to respond favorably to green marketing when informed about ecological challenges and the advantages of eco-friendly stuff [26]. Numerous researches have investigated the connections between consumer behavior, environmental knowledge, and green promotion [4]. The consumers' intentions to buy green products increased in response to eco-friendly advertising messages and that this effect was mediated by environmental knowledge [20]. Consumers with environmental knowledge were more likely to respond favorably to eco-friendly advertising messages [24].

H7. Environmental knowledge mediates the link between green promotion and consumer buying behavior.

3. Methodology

3.1. Measurements

A study was done in two hypermarkets in Ajman that sell eco-friendly goods using the devised questionnaire. Customers presumably visit these hypermarkets mainly to purchase eco-friendly goods. For the field survey, respondents were chosen through purposive sampling. This type of sampling is employed when a specific set of requirements has to be met for survey participants to be eligible. To determine how green pricing and promotion affected consumers' decisions and emotions, this study included consumers from a hypermarket who spent money on eco-friendly items and were aware of the environment. There are four parts to the questionnaire. Information on demographics was gathered in the first part. In the second part, the green promotion was evaluated using a 4-item scale created by Hashem and Al-Rifai (2021). By using the 3-item, the green price is self-developed. The third part contains eight statements from Rezai et al. (2012) and Chiu et al. (2013), which indicate the reality of the consumer's purchasing behavior. In contrast, the fourth portion contains six questions from Mostafa's (2009) questionnaire measuring environmental knowledge. Five Likert scale is used to evaluate all the constructs.

3.2. Participants and Instruments

The research employs a quantitative research approach that places data collecting and analysis. A survey design method was used to obtain primary data, and academic journals, books, and other published materials were used to gather secondary data. Customers in various hypermarkets in Ajman, United Arab Emirates, received 220 surveys. 169 of the 220 questionnaires were returned, with a return rate of 76.8%. Respondents were asked to engage willingly and were guaranteed complete privacy. In the sample used for this study, there were 52% men and 48% women participants. When broken down by age groups, those in the sample who are between the ages of 30-49 make up 45% of the total population, while those between the ages of 18 and 29 make up 28.4% of the sample and those between the ages of 49 and 59 make up only 26.6%. According to marital status, 66.9% of people are married, while 28.4% are single. According to education, the sample comprises 50.9% of people with master's degrees, 26.6% with PhDs, and 13.6% with bachelor's degrees. 1.2% was over 60. Less than 3500 and between 3500 and 8900 were 18.3%, between 9000 and 14900 were 26.6%, and beyond 15000 were 36.7% of the respondents' monthly income in UAE dirhams.

3.3. Data Analysis

Exploratory factor analysis was performed using SPSS 28 on the 21 items, using three items to measure green price, four to measure green promotion, eight to test consumer buying behavior, and six to measure environmental understanding. The study examined if an item's loading was more than or equal to 0.5 by using an Excel spreadsheet and SPSS (28). By demonstrating that its average extracted variance was higher than 0.5, it was shown to have convergent validity, and its composite dependability ratings were more than 0.7 by Hair et al. [7]. The correlation analysis explores the nature and strength of the associations among all research variables. Multiple regression is employed to test the hypothesis since there are two IVs (green price and green promotion) and one DV (customer buying behavior). Lastly, the mediating role of environmental knowledge among green price and CBB and green promotion and CBB was examined using Andrew F. Hayes's (2022) techniques for mediation analysis.

3.4. Normality

The normality test is assessed by the skewness-kurtosis approach by using SPSS 28. [2]. Each was found to be within the limits of its respective range.

As indicated in Table 1, all skewness values are below the "3" cutoff, and all kurtosis levels are below the cutoff "8" [2].

Table 1. Table of Normality

Items	Mean	Std. Deviation	Skewness	Kurtosis
EK1	4.0769	1.06346	1.387	1.428
EK2	4.0237	0.79397	.403	.434
EK3	4.0828	0.75135	.308	.668
EK4	3.5325	1.21516	.288	1.201
EK5	3.8994	0.90399	.484	.516
EK6	3.2840	1.19614	.005	1.309
CB1	3.8284	0.95126	.363	.806
CB2	3.6864	1.10835	-.441	-.853
CB3	3.9349	0.90067	.415	.688
CB4	3.9586	1.01392	.783	-.015
CB5	3.8757	1.03622	-.690	.385
CB6	3.9645	0.85142	-.400	-.574
CB7	4.0414	0.88206	.555	.526
CB8	3.7337	1.07741	.520	.765
Promo1	3.7219	1.09090	.819	.045
Promo2	3.9053	1.03649	.717	.606
Promo3	3.6746	1.18297	0.610	-0.700
Promo4	3.8343	0.93656	0.938	0.656
Price1	4.1538	0.83808	0.973	0.643
Price2	4.2485	0.71365	0.802	0.745
Price3	4.2695	0.72665	0.893	0.785

3.5. Model Fitness

An EFA was carried out using principal component analysis and varimax rotation. Some initial model signs were eliminated to enhance the model's fitness. After being loaded onto a factor other than its underlying factor, there were 1 item from the green price scale, 1 item from the green promotion scale, 1 item from the environment knowledge scale, and 2 things from the customer buying behavior scale. As a result, these materials were excluded from further analysis. From the above analysis, it is evident that the model fits the requirements. The indicator reliability was assessed using the indication loadings. Indicator loadings of 0.70 and higher are recommended Hair et al. [7]; Schumacker and Lomax [21], although, under this criterion, loading values of less than 0.4 were excluded from their relevant constructs. Kaiser-Meyer-Olkin MSA was 0.806 and considered suitable as the value exceeds 0.800. An essential step in assessing the correlation matrix's overall importance was Bartlett's Test of Sphericity, which computes its substantial relationships among its elements. x2 (n = 120) = 1890.97 (p 0.001), which implies that factor analysis is appropriate. The four dimensions and all communalities explained that 71.4% of the variance among the study's items exceeded the 0.50 value. The model is shown in Fig. 2, along with the loadings for the indicators utilized in the research.

3.5.1. Construct Reliability and Validity

The validity and reliability tests to evaluate the goodness of measure of the research construct's measure were computed using SPSS version 28 and Excel. Table 2 shows that all the constructs have Cronbach's alpha (CA) values greater than 0.70 [2] and CR is within the value of 0.70 [7]. Convergent (AVE) is greater than 0.50 [2], [7], [21]. The results of the factor loading, CA, CR, and AVE on green pricing, green promotion, CBB, and EK were summarized in Table 2.

Table 2. Factor Loading, Constructs Reliability and Convergent Validity

Constructs	Items	FR	λ^2	1 - λ^2	CA	CR	AVE
Green Price	GPrice 1	.94	.88	.11	.798	.96	.77
	GPrice 2	.81	.66	.33			
Green Promotion	GPro1	.95	.91	.084	.874	5.8	.67
	GPro3	.93	.87	.129			
	GPro4	.49	.24	.755			
Environment Knowledge	EK1	.94	.88	.112	.875	.99	.57
	EK2	.73	.53	.462			
	EK3	.72	.51	.481			
	EK4	.69	.48	.518			
	EK6	.68	.47	.529			
Consumer Buying Behaviour	CBB7	.88	.78	.215	.909	.99	.64
	CBB6	.87	.76	.236			
	CBB5	.80	.65	.345			
	CBB3	.78	.62	.377			
	CBB2	.77	.60	.397			
	CBB1	.66	.44	.552			

Table 3. Discriminant Validity

	Environment Knowledge	Consumer Buying Behaviour	Green Promotion	Green Price
EK	**0.76**			
CBB	.600**	**0.803**		
Green Promotion	.524**	.611**	**0.822**	
Green Price	.367**	.418**	.517**	**0.822**

Table 3 guarantees that the model satisfies the standard for discriminant validity, r ≤ 0.90. The square roots of EK, CBB, green promotion, and green price are all more robust than their association with other constructs at 0.76, 0.80, 0.82, and 0.82 respectively. This model can be acknowledged for its discriminant validity between the constructs.

Table 4. Item total Pearson's correlation of all independent variables & dependent variables.

Variables	Environment Knowledge	Consumer Buying Behaviour	Green Promotion	Green Price
EK	1			
CBB	.600**	1		
Green Promotion	.524**	.611**	1	
Green Price	.367**	.418**	.517**	1

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

Table 4 illustrates that relationship between CBB, green prices, green advertising, and environmental knowledge is significant at the 0.01% level in a 2-tailed test.

4. Results

The results indicated that green price and CBB are significantly correlated in hypermarkets of UAE (b = .605, t= 1.973, p .005); hence, H1 is accepted. The findings show a strong correlation between green promotion and CBB (b = .910, t= 7.582, p .001). Therefore, hypothesis H2 is accepted. The results indicated that green price and environmental knowledge are significantly correlated (b = 1.22, t= 5.102, p 0.001), so H3 is accepted. The results indicated that the findings show a strong link between environmental knowledge and green promotion (b = .681, t= 7.94, p .001); therefore, hypothesis H4 is accepted. The results indicated that consumer buying behavior and environment knowledge are significantly correlated (b = .780 t= 9.79, p .001); therefore, H5 is accepted. For all the hypotheses t-value is better than 1.96, and the p-values are lower than .05. Therefore, all the hypotheses are significantly correlated. Table 5 provides a summary of the hypothesis testing.

Green price and green promotion significantly predicted F (2, 166) = 52.447 p .001 shows that green price and green promotion significantly predicted CBB in hypermarkets of UAE, demonstrating their importance in determining CBB. Additionally, it is possible to calculate that endogenous latent variables have an impact with R2 values of .02, mean low, .13 means normal, and .26 means higher impact.

They indicate that green price and green promotion together account for 38.7% of the variance in CBB, and the R2 value for consumer buying behavior was.387. As the R2 values for CBB were higher than 0.26, therefore it is indicated that the effect is strong and the model data is fit.

Table 5. Hypothesis Testing

Hypothesis	Regression Weights	Beta Coefficient	t-value	p-value	Hypothesis Decision
H1	Green Price →CBB	.605	1.97	.005	Accepted
H2	Green Promotion → CBB	.910	7.58	.001	Accepted
H3	Price →EK	1.22	5.10	.001	Accepted
H4	Green Promotion → EK	.681	7.94	.001	Accepted
H5	CBB → EK	.780	9.69	.001	Accepted

4.1. Mediation Analysis

In the UAE's hypermarkets, the findings assessed the mediating impact of EK on the link among green pricing, green promotion, and consumer purchasing behavior (Figure 1 and Table 6). The study assessed how EK mediated the association between green prices and consumer purchasing behavior in hypermarkets in UAE. The findings supported hypothesis number six by showing a significant indirect impact of green prices on customer purchasing behavior (b=.819, t=4.606). Additionally, the direct relationship between green price and CBB in the occurrence of a mediator is significant (b=.988, p .005). Consequently, the association between green prices and CBB is partially mediated by environmental knowledge. The study results evaluated how environmental knowledge (EK) mediated the association between CBB and green promotion in hypermarkets of UAE. The findings supported H7 and showed a substantial indirect effect of green advertising on CBB (b=.342, t=4.981). Additionally, the direct connection between green promotion and CBB in the occurrence of a mediator was significant (b=.69, p .000). Therefore, environmental awareness had a role in mediating the relationship between green promotion and CBB.

Table 6 provides a summary of the mediation analysis (Appendix).

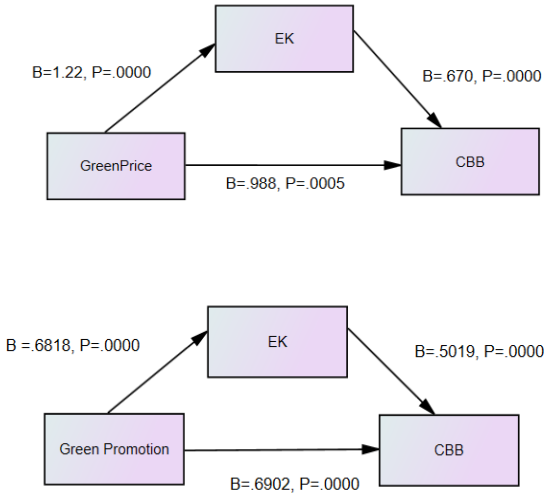

Figure 1. Mediation Model
Source: Computed by own and results are reported.

5. Discussion

The results indicated that green price and CBB are significantly correlated in the hypermarkets of UAE. Hence, H1 is accepted. An essential contribution to CBB and environmental knowledge is that green prices and CBB are highly connected in hypermarkets of the United Arab Emirates. Customers are more aware of the environmental impact of their buying and are prepared to make decisions consistent with their environmental beliefs; green price and consumer buying behavior (CBB) are highly associated by Michael et al. [25]. Consumers pay more for eco-friendly products, and green pricing is a helpful strategy for promoting long-term purchase decisions.

The findings show that green promotion and consumer buying behavior (CBB) are strongly correlated in UAE hypermarkets. Hence, hypothesis 2 is achieved. Green promotion techniques can grab consumers' attention and raise their knowledge of the environmental impact of their purchasing decisions. These techniques include advertising, packaging, and in-store displays that promote the eco-friendliness of items. Customers are more inclined to select the environmentally friendly alternative when they know the advantages of a product for the environment [13]. Businesses have to make honest and truthful environmental claims to avoid greenwashing and preserve customer trust. Understanding the function of knowledge in influencing sustainable consumer behavior is made possible by the finding that green price and environmental knowledge H3 are significantly connected in UAE hypermarkets.

The likelihood that customers will esteem eco-friendly items more and be willing to pay more for them may increase with their level of environmental understanding [15]. Consumers are leaning more to get eco-friendly products when they are taught about the environmental advantages of these products.

Given that H4 found a significant correlation between environmental knowledge and green promotion in UAE hypermarkets, using green promotion techniques could assist in raising customer awareness of environmental issues and encourage sustainable behavior. Employing green promotion techniques, such as promoting eco-friendly certifications or features, can raise customer awareness of eco-friendly products and their environmental advantages [24]. When consumers know more about how their purchasing choices affect the environment, they may be more inclined to select eco-friendly products and encourage sustainable behavior.

Hypothesis 5 states that customer purchasing behavior and environmental knowledge are substantially correlated in UAE hypermarkets. The outcomes show that consumers are more likely to make environmentally responsible purchases if they understand environmental issues better. Buyers are likely to be aware of the potential environmental effects of their shopping decisions when they better understand the environment. People may prefer eco-friendly products or use them less overall because of this improved understanding, which may influence their buying habits [26].

The study assessed how EK mediated the association among green prices and consumer purchasing behavior. The findings supported H6. Consequently, the association between green prices and CBB is partially mediated by environmental knowledge. Cherian and Jacob [3] undertook a study to understand how environmental knowledge affects the link between green prices and consumer purchasing behavior. According to their research, there is a link between green costs and consumers' willingness to pay for ecologically friendly goods [16]. Cuc et al. [4] conducted a study to understand better how environmental information affects the link between green costs and consumer purchasing decisions. Their results show that the link between green prices and consumers' pay for ecologically friendly products is moderated by environmental knowledge.

The study evaluated how environmental knowledge (EK) mediated the association between CBB and green promotion. The findings supported H7 and showed a substantial indirect effect of green advertising on CBB.

Additionally, the direct connection between green promotion and CBB in the presence of a mediator was also found to be highly significant.

Therefore, environmental knowledge had a role in mediating the relationship between green promotion and CBB. EK affected the link between green promotion and consumer purchasing patterns. Their research revealed that customers' intentions to buy green items positively correlate with green advertising and environmental knowledge [17].

6. Conclusion

The study emphasizes the significance of environmental knowledge and understanding for customers to make ecologically responsible purchase decisions. By highlighting eco-friendly products and their advantages and informing customers about how their purchases affect the environment, hypermarkets can help promote environmental knowledge. The results support the idea that EK mediates the relationship between green pricing and CBB and green promotion and CBB in hypermarkets. It has been discovered that environmental knowledge partially mediates the association between these variables, suggesting that customers' responses to green pricing and promotion may be more strongly influenced by their level of environmental understanding. According to the available research, boosting sustainable consumer behavior in hypermarkets by raising consumer environmental awareness can be successful. Hypermarkets can utilize green pricing and promotion to entice customers to buy environmentally friendly goods. Green promotion refers to advertising and other promotional efforts to increase awareness of the advantages of eco-friendly products. Green pricing refers to setting a premium price for eco-friendly items. Environmental knowledge is a significant element that might affect consumer purchasing decisions. Environmental knowledge is a mediator between green pricing and CBB. In other words, customers who are more aware of environmental concerns may be more apt to see the advantages of eco-friendly items and may be more prepared to pay a premium for them.

Similarly, environmental knowledge acts as a mediator between green promotion and CBB. Consumers aware of environmental issues may be more receptive to the influence of green promotion and, thus, more likely to buy eco-friendly goods. Therefore, the connection between green pricing, green promotion, and CBB in hypermarkets is mediated by environmental knowledge. UAE hypermarkets can use this information to create efficient marketing plans that promote environmentally friendly consumer behavior.

The study's findings highlight the significance of environmental knowledge in shaping consumer behavior and the need for hypermarkets to adopt environmentally sustainable practices, develop successful marketing plans highlighting eco-friendly products, and inspire customers to make environmentally responsible purchases.

References:

[1]. Arli, D., Tan, L. P., Tjiptono, F., & Yang, L. (2018). Exploring consumers' purchase intention towards green products in an emerging market: The role of consumers' perceived readiness. *International Journal of Consumer Studies*, *42*(4), 389–401.

[2]. Byrne, B. M. (2016). *Structural Equation Modeling With AMOS Basic Concepts, Applications, and Programming (3rd ed.)*. New York: Taylor and Francis Group.

[3]. Cherian, J., & Jacob, J. (2012). Green Marketing: A Study of Consumers' Attitude towards Environment-Friendly Products. *Asian Social Science*, *8*(12). Doi: 10.5539/ass.v8n12p117

[4]. Cuc, L. D., Pelau, C., Szentesi, S. G., & Sanda, G. (2022). The Impact of Green Marketing on the Consumer's Intention to Buy Green Products in the Context of the Green Deal. *Amfiteatru Economic*, *24*(60), 330-345. Doi: 10.24818/ea/2022/60/330

[5]. Delafrooz, N., Taleghani, M., & Nouri, B. (2014). Effect of green marketing on consumer purchase behaviour. *QScience Connect*, *2014*(1), 5. Doi: 10.5339/connect.2014.5

[6]. de Freitas Netto, S. V., Sobral, M. F. F., Ribeiro, A. R. B., & Soares, G. R. D. L. (2020). Concepts and forms of greenwashing: A systematic review. *Environmental Sciences Europe*, *32*(1), 1-12. Doi: 10.1186/s12302-020-0300-3

[7]. Hair, J. F., Black, W. C., & Babin, B. J. (2010). *Multivariate Data Analysis: A global perspective (7th ed.)*. Upper Saddle River, NJ: Pearson/Prentice-Hall. Retrieved from: https://books.google.rs/books/about/Multivariate_Data_Analysis.html?id=SLRPLgAACAAJ&redir_esc=y [accessed: 18 March 2023].

[8]. Hildebrandt, Rizzi, Birkebaek, Chalouhi, Atassi, & Rafih. (2021). *Are Consumers in the Gulf States Ready to Go Green?* BCG Global. Retrieved from: https://www.bcg.com/publications/2021/gulf-state-consumer-sentiment-toward-green-agenda [accessed: 12 February 2023].

[9]. Horner, S., & Swarbrooke, J. (2020). *Consumer Behaviour in Tourism (4th ed.)*. Taylor and Francis. Retrieved from: https://www.perlego.com/book/2194261/consumer-behaviour-in-tourism-pdf [accessed: 13 April 2023].

[10]. Joghee, S., Dubey, A. R., & Singh, S. (2021). Investigation of green marketing practices of UAE hypermarkets. *International Journal of Enterprise Network Management*, *12*(4), 367-381. Doi: 10.1504/ijenm.2021.119665

[11]. Joshi, Y., & Rahman, Z. (2015). Factors Affecting Green Purchase Behaviour and Future Research Directions. *International Strategic Management Review, 3*, 128–143. Doi: 10.1016/j.ism.2015.04.001

[12]. Kousar, S., Afzal, M., Ahmed, F., & Bojnec, Š. (2022). Environmental awareness and air quality: The mediating role of environmental protective behaviors. *Sustainability, 14*(6), 3138. Doi: 10.3390/su14063138

[13]. Khan, K. U., Atlas, F., Arshad, M. Z., Akhtar, S., & Khan, F. (2022). Signaling Green: Impact of Green Product Attributes on Consumers Trust and the Mediating Role of Green Marketing. *Frontiers in Psychology, 13*. Doi: 10.3389/fpsyg.2022.790272

[14]. Kim, W. H., Malek, K., & Roberts, K. R. (2019). The effectiveness of green advertising in the convention industry: An application of a dual coding approach and the norm activation model. *Journal of Hospitality and Tourism Management, 39*, 185–192. Doi: 10.1016/j.jhtm.2019.04.007

[15]. Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing, 18*(6), 503–520. Doi: 10.1108/eum0000000006155

[16]. Martins, A. (2021). Green marketing and perceived SME profitability: the meditating effect of green purchase behaviour. *Management of Environmental Quality: An International Journal, 33*(2), 281–299. Doi: 10.1108/meq-04-2021-0074

[17]. Majeed, M. U., Aslam, S., Murtaza, S. A., Attila, S., & Molnár, E. (2022). Green Marketing Approaches and Their Impact on Green Purchase Intentions: Mediating Role of Green Brand Image and Consumer Beliefs towards the Environment. *Sustainability, 14*(18), 11703. Doi: 10.3390/su141811703

[18]. Mehraj, D., & Qureshi, I. H. (2022). Does green brand positioning translate into green purchase intention?: A mediation–moderation model. *Business Strategy and the Environment, 31*(7), 3166–3181. Doi: 10.1002/bse.3069

[19]. Mostafa, M. M. (2007). Gender differences in Egyptian consumers? green purchase behaviour: the effects of environmental knowledge, concern and attitude. *International Journal of Consumer Studies, 31*(3), 220–229. Doi: 10.1111/j.1470-6431.2006.00523.x

[20]. Rahnama, H., & Rajabpour, S. (2017). Identifying effective factors on consumers' choice behavior toward green products: the case of Tehran, the capital of Iran. *Environmental Science and Pollution Research, 24*(1), 911–925. Doi: 10.1007/s11356-016-7791-x

[21]. Schumacker, R. E., & Lomax, R. G. (2010). *A Beginner's Guide to. Structural Equation Modeling (3rd Edition)*. New York: Taylor & Francis Group. Doi: 10.4324/9780203851319

[22]. Sohail, M. S. (2017). Green marketing strategies: how do they influence consumer-based brand equity? *Journal for global business advancement, 10*(3), 229-243. Doi: 10.1504/jgba.2017.10005507

[23]. Simanjuntak, M., Nafila, N. L., Yuliati, 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, 15*(6), 5445. Doi: 10.3390/su15065445

[24]. Joghee, S., Dubey, A. R., & Singh, S. (2021). Investigation of green marketing practices of UAE hypermarkets. *International Journal of Enterprise Network Management, 12*(4), 367-381. Doi: 10.1504/ijenm.2021.10043386

[25]. Michael R. Solomon, Margaret K. Hogg, Søren Askegaard and Gary Bamossy (2020). *Consumer Behaviour: A European Perspective, 7th Edition.* Pearson. Retrieved from: https://www.pearson.com/nl/en_NL/higher-education/subject-catalogue/marketing/Solomon-consumer-behaviour-European-perspective-7e.html [accessed: 12 April 2023].

[26]. Solaiman, Osman, & Suberi Bin Ab Halim. (2015). Green Marketing: A Marketing Mix Point of View. *International Journal of Business and Technopreneurship, 5*(1), 87–98. Retrieved from: https://www.researchgate.net/publication/364900941_Green_Marketing_A_Marketing_Mix_Point_of_View[accessed: 13 April 2023].

[27]. Peattie, S., & Peattie, K. (2003). Ready to fly solo? Reducing social marketing's dependence on commercial marketing theory. *Marketing theory, 3*(3), 365-385.

[28]. Polonsky, M. J., & Rosenberger III, P. J. (2001). Reevaluating green marketing: a strategic approach. *Business horizons, 44*(5), 21-21.

Appendix

Table 6. Summary of Mediation Analysis

Hypothesis	Relationship	Total Effect	Direct Effect	Indirect Effect	Confidence Interval		t-statistics	Conclusion
H6	Green Price -> EK -> CB	1.808	0.988	0.819	Lower Bound	Upper Bound	4.606	Partial Mediation
					0.476	1.181		
H7	Green Prom -> EK -> CB	1.032	0.69	0.342	LB	UB	4.981	Partial Mediation
					0.212	0.485		