



UNIVERSITI
TEKNOLOGI
MARA

Cawangan Perak

e-Proceedings

V-GOGREEN2021

29-30
SEPT

VIRTUAL GO GREEN: CONFERENCE AND PUBLICATION

“Rethinking Built Environment: Towards a Sustainable Future”



Organiser:
**Research, Industrial Linkages, Community
& Alumni Network (PJIM&A)**

Co-organiser:
**Department of Built Environment Studies & Technology (JABT),
Faculty of Architecture, Planning & Surveying (FSPU)**

PUBLICATION DATE: 1st JUNE 2022

e-Proceedings

V-GOGREEN2021 ²⁹⁻³⁰
SEPT

VIRTUAL GO GREEN: CONFERENCE AND PUBLICATION

“Rethinking Built Environment: Towards a Sustainable Future”

Organiser:

**Research, Industrial Linkages, Community
& Alumni Network (PJIM&A)**

Co-organiser:

**Department of Built Environment Studies & Technology (JABT),
Faculty of Architecture, Planning & Surveying (FSPU)**

Green Marketing Mix and Intention to Purchase Green Cosmetic Product: Mediating Effect of Self-efficacy

Mawaddah Mohamad¹

¹*Department Operation Management,
School of Technology Management & Logistics,
Universiti Utara Malaysia
Sintok, 06010 KEDAH, Malaysia*

mawaddah.mohamad@uum.edu.my

Abstract

As the concept of green cosmetic products emerged, customers began to exploit green cosmetics as they prioritise their health in avoiding the risk from the chemical products. Scholars argued that the adoption of green products is influenced by the green marketing concept. To understand up to what extent customers' self-efficacy plays a role in connecting the Marketing Mix and purchase intention, this study aims to examine the mediating effect of consumer Self-efficacy on the relationship between Green Marketing Mix which consist of 4Ps elements; Green Product (GProduct), Green Price (GPrice), Green Place (GPlace), and Green Promotion (GPromo) and the intention to purchase Green Cosmetic Product (GCP). By employing the survey method, a total of 268 students from Universiti Utara Malaysia participated in this study. The results suggested that Self-efficacy mediates the relationship between GPrice, GPlace, GPromo on purchase intention. Through the Self-efficacy enhancement, the element of price, place and promotion were significantly affected by the purchase intention. Whilst, the relationship between GProduct and purchase intention is not mediated by Self-efficacy. Thus, this implies that even though customers believe the GCP are safe and have many benefits, it still could not increase their Self-efficacy which can continue with the purchasing. This study has expanded the Marketing Mix and Self-efficacy theory in the form of understanding the green elements that contribute to customers' purchase intention.

Keywords: *Marketing mix; 4Ps; Self-efficacy; Intention to purchase; Green cosmetic product*

1.0 Introduction

According to Organisation for Economic Co-operation and Development (OECD, 2016), consumers make a very important element in a sustainable production implementation. More than 60% of the consumers are the final consumption in the OECD countries. Moreover, it was reported that consumers' awareness towards environmental protection is increasing over the years (e.g. CEAP, 2007; Eurobarometer, 2011; Nielson, 2014). As public interest in sustainability keeps showing positive feedback, many manufacturers including the cosmetic industry have executed the process of getting natural or organic materials for their products. Knowing the demand for green products is climbing, the natural cosmetic market continues to grow rapidly. But, in the meantime, they also compete with conventional cosmetics as it also shows an increasing number of products that offer a lower price (Singhal & Malik, 2018). Owing to the growth of the cosmetics market, the buying power relies on the consumers, it all depends upon the consumers' decisions to purchase their product preferences. It is undeniable that many consumers value the environment and believe in the importance to protect the earth for the sake of humans and other creatures well-being. Although the awareness on the environmental issue is being closely focused on, it is not necessary that consumers' purchasing should lie on this basis.

The green cosmetic products purchasing phenomenon is extremely complex and little is understood or proved concerning its functioning or about the factors influencing consumers' response to green cosmetic products. Studies from (Jaiswal & Kant, 2018) and (Uddin & Khan, 2018) discovered that environmental concerns influence the willingness to purchase green products. Although much

marketing literature has highlighted the importance of marketing mix (which consist of 4Ps elements such as product, price, place and promotion) in understanding consumer behaviour, a study focusing on the green marketing mix is still lacking (Febriani, 2019). Thus, study on how these factors contribute to green cosmetic products purchasing still needs to be given focus. Despite that, scholars have demonstrated the impacts of marketing mix on consumers' behaviour at the aggregate level; however, they have not fully analysed how individuals' differences such as consumers' self-efficacy play a role in a purchasing decision-making process. According to Tsarenko and Strizhakova (2013), self-efficacy is individuals' belief that they can perform a set of a particular behaviour. The differences may exist between different individuals' purchasing decisions towards green cosmetic products (Amberg & Fogarassy, 2019). Their efficacy may react differently to some important factors (i.e 4Ps marketing mix which consists of product, price, place, and promotion) which contribute to green products' purchase. To the best of the researchers' knowledge, studies concerning this variable in green cosmetic products' purchasing have been scarce, thus driving this study to examine the central theoretical role self-efficacy might play in explaining the relationship between the marketing mix elements and purchasing behaviour. Particularly, this study seeks to understand the mediating effect of self-efficacy in explaining the relationship between the green marketing mix and intention to purchase green cosmetic products.

2.0 Review Literature

2.1 Intention to Purchase a Green Cosmetic Product

Green cosmetic product refers to the product that is made up of natural ingredients such as plant and fruits extracts. The concept is claimed as a safe product and contains fewer chemical sources. Meanwhile, consumers' purchase intention is the individuals' expectations to purchase specific brands that they have identified after thorough investigation and gathering of information processes conducted. The intention to purchase a specific product is a good indicator of actual behaviour in purchasing the product (Widayati, 2020; Amberg, 2019; Mahmoud, 2018; Chen & Chai, 2010). This study highlighted the intention to purchase green products as the intention itself has been proven as a good indicator of the actual act.

2.2 4Ps Green Marketing Mix

Green marketing is defined as a process employed by an organization to ensure the products are green and safe (Rahman, Barua, Hoque, & Zahir, 2017), focuses on the use of environmental concepts in decision making throughout the organization (Hasan & Ali, 2015) and it involves product, price, place (distributing) and promotion without harming the environment. Those 4Ps elements are discussed below.

Green Product. The green product concept is well known for its various advantages. For instance, the products use less energy for production, and importantly the amount of pollution is lower, thus keeping the environment clean (Zappelli, Barbulova, Apone, & Colucci, 2016). The trend of using green cosmetics gained momentum all around the Globe (Amberg & Fogarassy, 2019). Many studies found a positive relationship between green products and intention to purchase green cosmetic products (Widayati, 2020; Amberg, 2019; Mahmoud, 2018; Chen & Chai, 2010). Those studies highlighted that the intention to purchase green products influences by-product value, product quality and product features.

Green Price. The other important element in the marketing mix is the price which is also related and lies in the cost need to be paid for getting the actual value of the product. According to (Mahmoud, 2018), consumers' perception of the products' values such as the benefit of the product will trigger them to pay for the premium price. Another value includes products' performance, functions, designs, visual aesthetics or taste (Sharma, 2011). Thus, as the customers do not only pay for the products, but

the value in them, the green price became an important point should these marketers wish to stay competitive in the cosmetic industry. Chaudhary (2018) indicated that many consumers are willing to pay extra money for green products. On the other hand, Nugroho and Irena (2017) stated that the competitive price that customers bear for the products' benefits has a positive influence on customers' decisions to purchase the products.

Green Place. Place refers to physical or virtual stores that represent the locations where products are available. The place itself also refers to the distribution channel used by marketers to promote the availability of their products. Green place, on the other hand, deals with green products within the supply chain channel which focuses on several factors such as customers' convenience, facilitating delivery and protecting the environment (Hashem & Al-Rifai, 2011). For example, one of the popular trends for green places adopted by organisations is via e-commerce (Adnan, 2014). It serves as an environmentally friendly distribution channel and an appropriate choice for placing the green products that belong to the vendors.

Green Promotion. Marketers introduce their new products through promotional activities. Promotions are also conducted to remind the consumers of the existing products. Nowadays, a lot of organisations choose to promote green cosmetic products via environmental advertisement such as using recycled sources. This activity can be seen as green promotional practice. Studies have highlighted the importance of green promotion in purchase decisions. For example, Mahmoud (2018) found that green promotion which is by sharing information about natural products has positively influenced consumers' purchase intentions. Similarly, (Uddin & Khan, 2018), revealed that advertisements posted on social media platforms that include the element of green marketing resulted in a higher purchase intention among the potential customer.

2.3 Self-Efficacy as Mediating Variable

The case for mediation role of self-efficacy in human behaviour can be made by exploring the sources from which these beliefs are developed. The most influential source of these beliefs is the interpreted result of one's mastery of experience and vicarious experience (Nugroho & Irena, 2017). Mastery experience refers to the act of the individuals gauging the effects of their actions, and their perceptions of these effects that help to create their belief efficacy. On the other hand, vicarious experiences are obtained through other people's actions or performances. Self-efficacy can be found as a mediator in a few studies related to customers' behaviour. A study conducted by (Li, Gao, & Xu, 2020) has discovered that self-efficacy mediates the relationship between smartphone addictions and academic performances. On the other hand, results obtained from a study conducted (Saade & Kira, 2009) indicated that self-efficacy has a strong significant mediating effect on lowering anxiety in terms of online learning. This suggests that before introducing prospective customers to online learning, they should be tested for any anxieties beforehand. Individuals also create and develop self-efficacy as a result of verbal persuasions they receive from others (Gabler et al., 2004; Gao et al., 2018). In the marketing mix concept, green promotion could play an important part in the development of the individuals' self-belief. Meanwhile, a study conducted by (Li, Xu, & Xu, 2018) has shown that the effect of perceived control on purchase intentions was significantly mediated by self-efficacy. This implies that customers' perceptions of greater control towards online shopping can enhance their self-efficacy, and later induce stronger purchase intention. In particular, a higher self-efficacy embraced by consumers will induce more positive in terms of their abilities and confidence to completely perform the purchases. With regards to the role of self-efficacy as a mediator, the following hypotheses were proposed:

H1: Self-efficacy plays a mediating role in the relationship between the green product and intention to purchase the green cosmetic product.

H2: Self-efficacy plays a mediating role in the relationship between the green price and intention to purchase the green cosmetic product.

H3: Self-efficacy plays a mediating role in the relationship between the green place and intention to purchase the green cosmetic product.

H4: Self-efficacy plays a mediating role in the relationship between green promotion and intention to purchase a green cosmetic product.

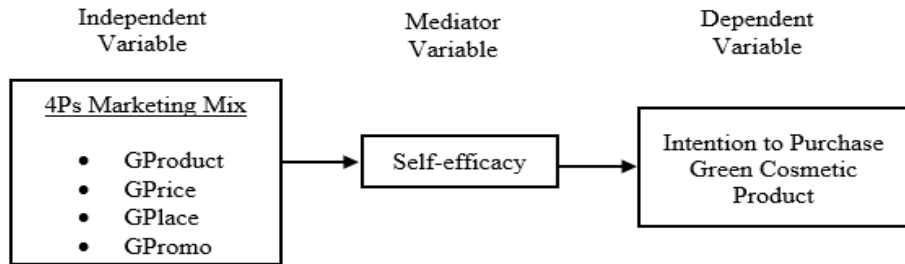


Figure 2.1. Research Framework

3.0 Methodology

This study is a cross-sectional study that employed a set of a self-administered questionnaires. A probability sampling method of simple random sampling was used for this study where the respondents were the Universiti Utara Malaysia, UUM students aged above 18 years old. The respondents were chosen among the university students due to the reason that they are familiar with the information provided on the green product. Secondly, they have the power to make their own decisions in choosing the right products among many available choices (Rahbar & Abdul, 2011; Wilson, Harun, Sulong, & Jaratin, 2014). During the pandemic situation, the data was collected by using a set of self-administered questionnaires (in the form of Google Form) from the students in UUM. The survey was attached with a cover letter pointing out the purpose of the study, confidentiality of the gathered data, a short description of green cosmetic products, and instruction on how to answer the questionnaires.

4.0 Findings and Discussions

A total number of 268 students participate in this study, by right mean that the response rate is more than 60%. All the responses obtained were eligible for further analysis with the consideration of no missing value. The setting in the online questionnaire was all set to compulsory, resulting in the information gathered being completed answered. Using the structural equation modelling approach, the result from the structural model is summarised in Table 4.1.

Table 4.1. Testing Hypothesis (Indirect relationship)

Hyp	Construct	Beta value	P Values	Decision
H1	GProduct → Self-Efficacy → Intention	-0.029	0.159	Not supported
H2	GPrice → Self-Efficacy → Intention	0.071	0.009	Supported
H3	GPlace → Self-Efficacy → Intention	0.067	0.037	Supported
H4	GPromo → Self-Efficacy → Intention	0.107	0.002	Supported

Note: Green product (GProduct), Green price (GPrice), Green place (GPlace), Green Promotion (GPromo), Intention to Purchase Green Cosmetics Product (Intention), and Self-Efficacy (Self-Efficacy)

Based on Table 4.1, the result could not prove the indirect effect of Green Product on purchase intention via self-efficacy, thus H1 is not supported. This implies that even though customers have information about the products' features and were likely to perceive a lower risk of green products. Yet, it still could not increase the self-efficacy which can continue the procurement of green cosmetic products. The result obtained is contradicting with the findings from a study conducted by Orubu (2016) and Fraizier and Caston (2015).

The findings indicated that the relationship between Green Price and Intention to Purchase is mediated by customers' self-efficacy. With regards to Bandura's Theory, self-efficacy has something to do with how confident customers are in deciding to buy the desired products. It suggests that "what people think, believe, and feel affects how they behave" (Bandura, 1986). Customers who believe the value they paid can provide environmental benefits to them and the society, would successfully purchase the green products. Thus, customers who are confident with the price tags will intend to purchase green products through self-efficacy enhancement.

As reported in Table 4.1, Self-efficacy mediates the relationship between Green Place and Intention to purchase green cosmetic products. Customers who initially intended to only do window shopping will have the desire or purchase intention when they see the products being displayed in the store. As suggested by Mahmoud (2018), organisations are required to employ environmental friendly distribution channels such as the use of vehicles that reduce lower carbon dioxide. This is to ensure customers get a better green place while purchasing. Apart from that, product positioning must be effectively performed to ensure the marketing messages resonate with customer's self-efficacy, thus compelling them to take action. This is supported by Widayanti et al., (2020) and Gittel, Magnusson and Mirenda (2015) who believed that location plays an essential role in the buying process. Customers rather choose shop locations that are closer to their homes or office, instead of travelling far only to get the green products. This implies that the accessibility to goods or services has an impact on customers willingness to buy the desired green cosmetic products. Therefore, customers who perceived green cosmetic products as easily accessible in the marketplace will enhance their self-efficacy to encourage the purchasing of green products.

Hypothesis 4 which proposed that self-efficacy mediates the relationship between Green Promotion and Intention to Purchase is supported. Promotion such as advertising, sales promotion, public relation, and personal selling can help to enhance self-efficacy and later, increase customers' intention to purchase green cosmetic products. According to Bathmathan and Rajadurai (2019), the promotion of the marketing mix involves the communication of information. Therefore, the presence of the promotion of the green cosmetic product that promotes natural ingredients can aid the verbal persuasion method of self-efficacy. A study conducted by Ansar (2013) has discussed the promotional campaigns such as the use of recycled post-consumer products for the packaging of the products that can trigger some consumers to adopt the innovative products which they believe that using the recycled goods will protect the environment.

5.0 Conclusion

In summary, this research aims to highlight the presence of customer self-efficacy as a mediator variable. Specifically, it was conducted to explore how it affects the relationship between the 4Ps elements and intention to purchase. It has been proven that self-efficacy mediates the relationship between Green Price and Intention, Green Place and Intention, Green Promotion and Intention. Hence, marketers should apply the strategy of a green marketing mix to boost customer self-efficacy towards green cosmetic products.

This research has contributed to enriching the existing body of knowledge on the Intention to purchase green products literature. This research contributes to the theoretical implication, by developing and validating research models that focus on self-efficacy and adoption. As discussed earlier in the problem statements, a limited amount of research has examined the green factors (especially in the context of the 4Ps marketing mix) that influence Green Cosmetic adoption among students in Malaysia. Besides, most studies discussed the effect of marketing mix on adoption as a

single factor and this study brings a different angle of exposure by looking at which element (Product, Price, Place, Promotion) contributes towards the intentions to purchase the green products. Apart from that, this study also put into account the relevance to include the mediating effect of individuals' self-efficacy in the current study model because many researchers argued that the success of technology adoption may differ with the level of self-efficacy standpoint.

References

- Adnan, H. (2014). An Analysis of the Factors Affecting Online Purchase Behavior of Pakistani Consumers. *International Journal of Marketing Studies*, 6(5), 133-149.
- Amberg, N., & Fogarassy, C. (2019). Green consumer behavior in the cosmetics market. *Resources*, 8(3). <https://doi.org/10.3390/resources8030137>
- Bathmathan, V., & Rajadurai, J. (2019). Green Marketing Mix Strategy using Modified Measurement Scales: A Performance on Gen Y Green Purchasing Decision in Malaysia. *International Journal of Engineering and Advanced Technology*, 9(1), 3612-3618.
- Febriani, S. (2019). Pengaruh Green Marketing Mix Terhadap Green Product Purchase Intention Pada Product Innisfree di Jakarta dengan Consumer's Attitude sebagai Variabel Mediasi. *Jurnal Manajemen Bisnis dan Kewirausahaan*, 3(1), 49-60.
- Hasan, Z., & Ali, N. (2015). The impact of green marketing strategy on the firm's performance in Malaysia. *Procedia-Social Behavioral Science*, 172 (2015), 463-470.
- Jaiswal, D., & Kant, R. (2018). Green purchasing behaviour: A conceptual framework and empirical investigation of Indian consumers. *Journal of Retailing and Consumer Services*, 41, 60-69.
- Li, L., Gao, H., & Xu, Y. (2020). The mediating and buffering effect of academic self-efficacy on the relationship between smartphone addiction and academic procrastination. *Computers and Education*, 159(August), 104001. <https://doi.org/10.1016/j.compedu.2020.104001>
- Li, Y., Xu, Z., & Xu, F. (2018). Perceived Control and Purchase Intention in Online Shopping: The Mediating Role of Self-efficacy. *Social Behavior and Personality*, 46(1).
- Mahmoud, T. O. (2018). Impact of green marketing mix on purchase intention. *International Journal of Advanced And Applied Sciences*, 5(2), 127-135. <https://doi.org/10.21833/ijaas.2018.02.020><https://doi.org/10.21833/ijaas.2018.02.020>
- Nugroho, A. R., & Irena, A. (2017). The Impact of Marketing Mix, Consumer's Characteristics, and Psychological Factors to Consumer's Purchase Intention on Brand "W" in Surabaya. *International Business Management*, 5(1), 55-69.
- Rahman, A. S. M. S., Barua, A., Hoque, R., & Zahir, R. (2017). Influence of Green Marketing on Consumer Behavior: A Realistic Study on Bangladesh. *Global Journal of Management and Business Research: E Marketing*, 17(1), 1-9.
- Rahman, A. S. M. S., Barua, A., Hoque, R., & Zahir, R. (2017). Influence of Green Marketing on Consumer Behavior: A Realistic Study on Bangladesh. *Global Journal of Management and Business Research: E Marketing*, 17(1), 1-9.
- Singhal, A., & Malik, G. (2018). The attitude and purchasing of female consumers towards green marketing related to cosmetic industry. *Journal of Science and Technology Policy Management*, 12(3), 514-531. <https://doi.org/10.1108/JSTPM-11-2017-0063>
- Soerjanatamihardja, K. A., & Fachira, I. (2010). Study of Perception and Attitude Towards Green Marketing of Indonesian Cosmetics Consumers. *Journal of Business and Management*, 38(10), 760-772.
- Uddin, S. M. F., & Khan, M. N. (2018). Young Consumer's Green Purchasing Behavior: Opportunities for Green Marketing. *Journal of Global Marketing*, 31(4), 270-281. <https://doi.org/10.1080/08911762.2017.1407982>
- Zappelli, C., Barbulova, A., Apone, F., & Colucci, G. (2016). Effective active ingredients obtained through biotechnology. *Cosmetics*, 3(4), 1-7. <https://doi.org/10.3390/cosmetics3040039>

Surat kami : 700-KPK (PRP.UP.1/20/1)

Tarikh : 20 Januari 2023

Prof. Madya Dr. Nur Hisham Ibrahim
Rektor
Universiti Teknologi MARA
Cawangan Perak



Tuan,

**PERMOHONAN KELULUSAN MEMUAT NAIK PENERBITAN UiTM CAWANGAN PERAK
MELALUI REPOSITORI INSTITUSI UiTM (IR)**

Perkara di atas adalah dirujuk.

2. Adalah dimaklumkan bahawa pihak kami ingin memohon kelulusan tuan untuk mengimbas (*digitize*) dan memuat naik semua jenis penerbitan di bawah UiTM Cawangan Perak melalui Repositori Institusi UiTM, PTAR.

3. Tujuan permohonan ini adalah bagi membolehkan akses yang lebih meluas oleh pengguna perpustakaan terhadap semua maklumat yang terkandung di dalam penerbitan melalui laman Web PTAR UiTM Cawangan Perak.

Kelulusan daripada pihak tuan dalam perkara ini amat dihargai.

Sekian, terima kasih.

"BERKHIDMAT UNTUK NEGARA"

Saya yang menjalankan amanah,

SITI BASRIYAH SHAIK BAHARUDIN
Timbalan Ketua Pustakawan

nar

Setuju.

27.1.2023

PROF. MADYA DR. NUR HISHAM IBRAHIM
REKTOR
UNIVERSITI TEKNOLOGI MARA
CAWANGAN PERAK
KAMPUS SERI ISKANDAR