

The Effect of Quality, Price and Trust towards Consumers' Green Beauty Product Loyalty

Costa Synodinos^{1*}, Riané Dalziel²

¹Marketing Management, North-West University, Vanderbijlpark, South Africa,
Orcid: 0000-0001-5770-535X

²Marketing Management, North-West University, Vanderbijlpark, South Africa,
Orcid: 0000-0002-8576-8443

Keywords

Green beauty products

Green product loyalty

Green trust

Price perception

Quality perception

Abstract

Over recent years, a noticeable shift in the beauty industry has been observed as consumers are becoming more environmentally conscious which has altered their beauty product purchase decisions. Consumers are in search of products that enhance their appearance while aligning up with their sentiments of environmental responsibility and their values of sustainability. Creating a trustworthy brand is paramount to the success of green beauty products. The problem is identified as to what degree do the factors of price, quality and trust pose on consumer loyalty of green beauty products in the South African context. A descriptive research design using a single cross-sectional sampling approach was implemented to collect the data.

The research company IPSOS was employed to collect 500 consumer responses. The results indicate that quality perception, price perception and green trust significantly influence green beauty product loyalty of South African consumers. Perceived price influences consumers' green beauty product loyalty to a greater extent than the perceived quality of a green beauty product. As such, strategies should be focused on emphasising both the price and quality of green beauty products. This will assist green beauty product retailers and brands to increase profits as they would generate loyal customers.

*Corresponding Authors

¹*Costa.Synodinos@nwu.ac.za

² Riane.Dalziel@nwu.ac.za

1. Introduction

1.1. Background

Over recent years, a noticeable shift in the beauty industry has been observed as consumers are becoming more environmentally conscious, which has altered their beauty product choices (Wong, Law & Wu, 2023:447; Paramita & Saputri, 2022:121). Consumers are in search of products that enhance their appearance all the while align up with their sentiments of environmental responsibility and their values for sustainability. It is this upsurge in new product demand that has given rise to green beauty products, a culmination of natural ingredients, ethical practices, and conscious consumerism. Green beauty or green products features a variety of aspects such as being natural or clean via a wide range of personal care, cosmetics and skincare products that are made from natural organic materials which are free from non-toxic ingredients. Moreover, these products are developed from sustainable ingredients that do not have harmful chemicals or synthetic fragrances or any other harmful substances which are found in common or conventional beauty products (Paramita & Saputri, 2022).

Consumers have become more aware of the harmful effects mass produced consumer goods have towards the natural environment and as such they feel obligated to not only lower their carbon emissions but also limit their own environmental impact as much as possible (Wong et al., 2023:447; Liobikiene & Bernatoniene, 2017:110). As such, organisations have seen a market opportunity to develop environmentally friendly beauty products to both satisfy consumers' needs while becoming more sustainably responsible towards the environment themselves (Paramita & Saputri, 2022:122). The need for green beauty products has emerged in South Africa, at a rapid pace, creating a potential market for cosmetic producers (Shimul, Cheah & Khan, 2022:37). However, as is the case with many environmental products, a growing concern and outcry for these products does not always translate into actual purchase behaviour (Shimul et al., 2022:37). Often the stigma of high pricing and poor product quality of environmentally friendly products are the main contributors to the lack of purchase behaviour (Ahmed, Khan, Qalati, Naz, & Rana, 2021:800; Molinillo, Vidal-Branco, & Japutra, 2020:1).

1.2. Problem Statement

The beauty or cosmetics industry is a large market amongst consumers today (Paramita & Saputri, 2022:122) and introducing ethical and sustainable business practices of beauty products into organisations business models is imperative for them to remain competitive in today's market (Ahmad, Omar, Amirul, & Dousin 2021:41). The world's population is ever growing, projected to reach 9 billion by 2037, it stands to reason that the earth's natural resources will not be able to sustain the demand of humankind (United Nations, 2023). It can be argued that the "star categories" of environmentally friendly products are organic food products, energy saving products and resource reducing methods (i.e., sustainable farming practices). Little attention has been given to the green beauty product industry and generally this industry trails behind others (Ahmad, et al., 2021:41). Consumer loyalty poses a

significant challenge in most industries, the same can be said for the green beauty industry. Even though the demand for environmentally friendly products is high, there remains a gap in the explanation of factors that would drive consumer loyalty of green beauty products (Paramita & Saputri, 2022). The negative price, quality and credibility dogma associated with green products hinders consumer trust in both the green products themselves and the organisations producing them (Bernabéu, Nieto & Rabadán., 2022). As such, there is an apparent need to investigate the factors that influence consumer loyalty towards green beauty products. The problem may then be identified as to what degree do factors of price, quality and trust pose on consumer loyalty of green beauty products in the South African context.

1.3. Research objectives

The following research objectives were formulated for the study:

- To critically examine the relationship between green beauty product quality perception, perceived price, trust and loyalty.
- To research the effect perceived quality has on green beauty product loyalty.
- To examine the effect perceived price displays towards green beauty product loyalty.
- To explore the effect trust has on green beauty product loyalty.

The layout of this paper is as follows, literature review, research methodology, results, findings, managerial implications, conclusions, limitations and future research.

2. Literature Review

Consumers are now actively seeking out environmentally friendly alternatives as opposed to traditional products (Amberg & Fogarassy, 2019), this can be attributed to the ever-growing environmental crisis. Furthermore, consumers have taken note of the personal health benefits associated with environmentally friendly or green products (Singh, Chiliya, Chikandiwa & Chodokufa., 2016:468). When it comes to the ethical or sustainable aspect of the fashion industry, animal cruelty and toxic chemicals used in products often take the spotlight (Suphasomboon & Vassanadumrongdee, 2022:231). As such, the so-called environmental consumer is actively searching for companies that have incorporated ethical and sustainable practices into their business models (Beneke, Frey, Deuchar, Jacobs, & Macready, 2010:478).

Cosmetic giants L'Oréal, amongst others, discussed at length at implementing sustainability goals aimed at carbon emission reduction and incorporating more organic ingredients in their products at the Paris Climate Conference (COP 21) in 2015 (Lavuri, Jabbour, Grebinevych & Roubaud, 2022:1). More recently, Genomatica and Unilever (London) has pledged \$120 million dollars to develop an alternative to palm oil production via biotechnology as palm oil production is one of leading causes of global deforestation (Clemetson, 2022:6). Incorporating natural raw materials into beauty products mitigates the negative stigma attached to the cosmetic industry (Lavuri et al., 2022:1). The repurchase of any

product or product loyalty is largely influenced by a various number of factors, such factors include brand image, price, quality, and trust amongst others these factors need to be explored in the green beauty product sector (Paramita & Saputri, 2022:124).

2.1. Perceived price and perceived quality of green beauty products

In the green marketing realm, it is quite well-known that the factors of price and quality of environmentally friendly products have tarnished backgrounds. This is a result of deceitful organisations implementing exorbitant pricing strategies and poor-quality controls when producing and marketing environmentally friendly products (Edwards, 2023). Thus, consumers have become cynical or sceptical over “green products” as a whole. This cynicism has spilled over into the green beauty industry who in addition to having to deal with green washing organisations, also have a long history of animal cruelty associated to the industry (Suphasomboon & Vassanadumrongdee, 2022:231). However, the green marketing sector has come a long way since then and stricter protocols have been put in place towards preventing green washing (Edwards, 2023), so much so that consumers are willing to pay premium prices for green products.

Paramita and Saputri (2022:122) staff this point and claim that consumers are willing to pay premium prices for green products if they know that green products will give them value over conventional products. This is paramount for the success of green products as price plays a significant role in both a consumers product choice and repurchase possibility (Liang, 2016; Kotler & Armstrong, 2012). The high price of green products is attributed to organic raw materials which can be difficult to cultivate (growing plants without pesticides) and are often difficult to source (Amberg & Fogarassy, 2019). This is even more true for beauty products which often have natural ingredients that are difficult to come by (Paramita & Saputri, 2022:124). Similarly, quality of products also determines if consumers are loyalty and repeat purchasers of beauty products (Wong et al., 2023; Amberg & Fogarassy, 2019:367; Mai, 2016). Both perceived product quality and price of consumers play significant roles in the purchase of green beauty products, so much so that organizations selling products with greater perceived quality are able to sell them at premium prices increasing profits (Paramita & Saputri, 2022:134; Chhetri, Fernandes & Baby, 2021:776; Mai, 2016:27). Therefore, the study poses two hypotheses based on the relationship loyalty has concerning both quality and price perceptions of South African consumers towards green beauty products. The hypothesis are as follows:

H₁: Quality perception has a significant positive influence on consumers' green beauty product loyalty.

H₂: Price perception has a significant positive influence on consumers' green beauty product loyalty.

The proceeding section elaborates on consumers trust towards green beauty products.

2.2. Consumer trust

Trust is a complex aspect with many definitions across a multitude of disciplines and is a critical aspect of building long lasting relationships between consumers and organisations. Should a consumer not

trust an organisation, that consumers intent and ultimately their loyalty to the company would be non-existent (Lavuri et al., 2022:4). Trust in the green beauty product spectrum can be defined in this study as the extent to which a consumer believes their purchase of a green beauty product from an organisation directly results in a positive impact towards the natural environment. Wong et al. (2023:450) explain how “green trust” positively effects consumers repurchasing decisions and customer satisfaction, which consequently creates good customer loyalty.

Paramita and Saputri (2022:124) add that if green beauty trust is present for a particular brand, brand loyalty increases, and consumers will repeatedly purchase from that brand. Green trust also acts as an advocate towards green beauty product purchase intent. This allows organisations to apply premium pricing strategies towards green beauty products (Amberg & Fogarassy, 2019:137). This view is confirmed by the results of Lavuri et al. (2022:4) and Paramita and Saputri (2022:135) who found that increased trust added value to green beauty products and noted that consumers are willing to pay premium prices for green beauty products of brands which they trusted. Therefore, trust is a vital component in the success of green beauty product adoption and warrants further investigation. As such the final hypothesis was formulated as:

H₃: Green trust has a significant positive influence on consumers’ green beauty product loyalty.

2.3. Green beauty product loyalty

Product loyalty refers to a consumer that shows commitment towards a brand or product by showcasing repeat purchases to an organisation. In order to achieve loyalty from a customer, a relationship built on trust between the organisation and consumer is a necessity (Lavuri et al., 2022). On the other hand, green product or customer loyalty can be described as a consumer’s intent to uphold a committed relationship with an organisation that employs an environmentally agenda in their business model. Moreover, consumers must commit to consistently select, buy and use green beauty products over conventional products at present and in the future. Loyalty to green beauty products can be formed from various factors such as resource depletion, personal health concerns and concerns for the natural environment being amongst the leading drivers (Seal & Bag, 2022).

Lavuri et al. (2022) argue to increase consumer trust and loyalty of green products to build a reputable brand name that could lead to a boost in profits and income. If this is done, brand loyalty encourages consumers to both accept premium prices for green beauty products and install repeat purchases which further increase organisation profits (Paramita & Saputri, 2022:125). As such, it is vital to investigate the factors of perceived price, perceived quality and trust to explain green beauty product loyalty.

3. Research Methodology

3.1. Research design

A descriptive research design, with a single cross-sectional sampling approach was utilised to collect the necessary data for this study. Using this approach implies that data collection only takes place at one point in time (Malhotra, Nunan, & Birks, 2017).

3.2. Target population, sampling and data collection

The target population was delineated as South African consumers between the ages of 18 and 65. Convenience sampling was employed via IPSOS, an internationally renowned research data-collecting company. This company has a panellist data set of approximately 40 000 South African consumers. Participants were contacted by the research data-collecting company and asked to voluntarily complete a computer-administered survey. The sample included 500 participants and only comprised South African citizens between the ages of 18 and 65. The response rate was 100% which is not an unusual phenomenon for a research data-collecting company with such a substantial participant pool. The data collection period was three days. Although the participants receive incentives like shopping vouchers, the results obtained from these participants are not biased as IPSOS guarantees that ethical research practices are followed and that the POPI Act of South Africa is adhered to.

3.3. Research instrument

The self-administered questionnaire used to gather the data for this study was administered online. IPSOS makes use of an analysis program, FastFacts to collect the required data from the participants. The questionnaire was divided into two sections, with the first section gathering participants' demographical data and their beauty product usage behaviour. The second section measured the participants' green beauty product perceptions, including their quality perception (4 items), price perception (4 items), green trust (4 items) and product loyalty regarding green beauty products (5 items). These constructs were measured using items from previously validated scales (Ailawadi, Pauwels, & Steenkamp, 2008, Besharat, 2010, Cheung, Lam, & Lau, 2015, Dabija, 2018, Ha, Ngan, & Nguyen, 2022 & Yoo, Donthu, & Lee, 2000). The responses of the participants on these scaled items were measured by means of a 6-point Likert-type scale, ranging from 1 (strongly disagree) to 6 (strongly agree). The questionnaire was preceded by a cover letter that explained the purpose of the study, guaranteed the participants' anonymity as no identifiable information was requested and included the contact information of the researchers.

3.4. Data analysis

The data were captured and analysed using IBM's Statistical Package for Social Sciences (SPSS), in conjunction with Analysis of Moment Structures (AMOS), Version 28.0. Statistical analysis included descriptive statistics, a one-sample t-test and structural path analysis. With Cronbach alpha and composite reliability (CR) values exceeding the 0.70 level, the previously validated measurement model

demonstrated internal consistency as well as CR. Construct and convergent validity of the model was inferred based on all of the standardised loading estimates and AVE values exceeding 0.50. As one of the square roots of the computed AVE values of each of the factors was not greater than their relevant correlation coefficients, the Heterotrait-Monotrait ratio values for the constructs were calculated. Based on those values being below 0.85, discriminant validity was concluded. The validated measurement model also exhibited acceptable model fit, with a NFI of 0.95, a TLI of 0.957, an IFI of 0.965, a CFI of 0.965, a SRMR of 0.036 and a RMSEA of 0.069 (Dalziel, 2023). Accordingly, the structural model specified in the current study is based on this previously validated model.

3.5. Hypotheses

The following hypotheses were formulated for the study:

- *H1: Quality perception has a significant positive influence on consumers' green beauty product loyalty.*
- *H2: Price perception has a significant positive influence on consumers' green beauty product loyalty.*
- *H3: Green trust has a significant positive influence on consumers' green beauty product loyalty.*

3.6. Ethics

Before data collection commenced, ethical clearance was obtained from the North-West University's Economics and Management Sciences Research Ethics Committee with the ethics number NWU-01875-22-A4.

4. Results and Findings

Descriptive statistical analysis was run, including the means and standard deviations. A one-sample t-test with the expected mean set at the 3.5 level was computed as well. These values were computed in order to evaluate the extent to which South African consumers' green beauty product loyalty is influenced by quality and price perception as well as green trust. The means, standard deviations, t-values and p-values for the three latent factors are presented in the following table.

Table 1: Descriptive statistics

Constructs	Mean	Standard deviation	t-values	p-values	99% confidence interval of the difference	
					Lower	Higher
Quality perception	4.53	1.03	98.42	.000	4.4154	4.6536
Price perception	4.21	1.13	83.02	<.001	4.0798	4.3422
Green trust	4.54	1.09	93.30	.000	4.4127	4.6643
Green beauty product loyalty	3.94	1.16	76.00	<.001	3.8036	4.0716

*Significant at $p \leq 0.01$

Source: Own compilation

The table above presents the means of the participants' responses which were recorded on the six-point Likert-type scale. These means were all significantly ($p \leq 0.01$) above the expected mean value of 3.5. As per the means, these consumers deem quality more important (mean = 4.53) than price (mean = 4.21), however, it seems that trust in green products is the most important factor in this model (mean = 4.54). While green trust produced a lower mean value (mean = 3.94), this is still significantly ($p \leq 0.01$) in the agreement area of the scale. The absence of a zero value in the confidence intervals, also concludes the significance of the calculated mean values (Lane, 2008). From these results, it is evident that the perception consumers hold of the quality of a green beauty product is more important to them than the perception they hold of the price of a green beauty product, which is surprising given the economic strain South African consumers are under currently. Furthermore, it is important for marketers and retailers in the green beauty product industry to note the imperative role of green trust in the minds of these consumers. The South African consumer segment also seems to lean more towards being loyal to green beauty products, which would assist retailers in cutting costs if these consumers are successfully retained.

After extensively reviewing the literature, a structural model was specified to test these theorised paths that quality perception, price perception and green trust have a direct and positive influence on consumers' green beauty product loyalty. This proposed model is shown in the following figure.

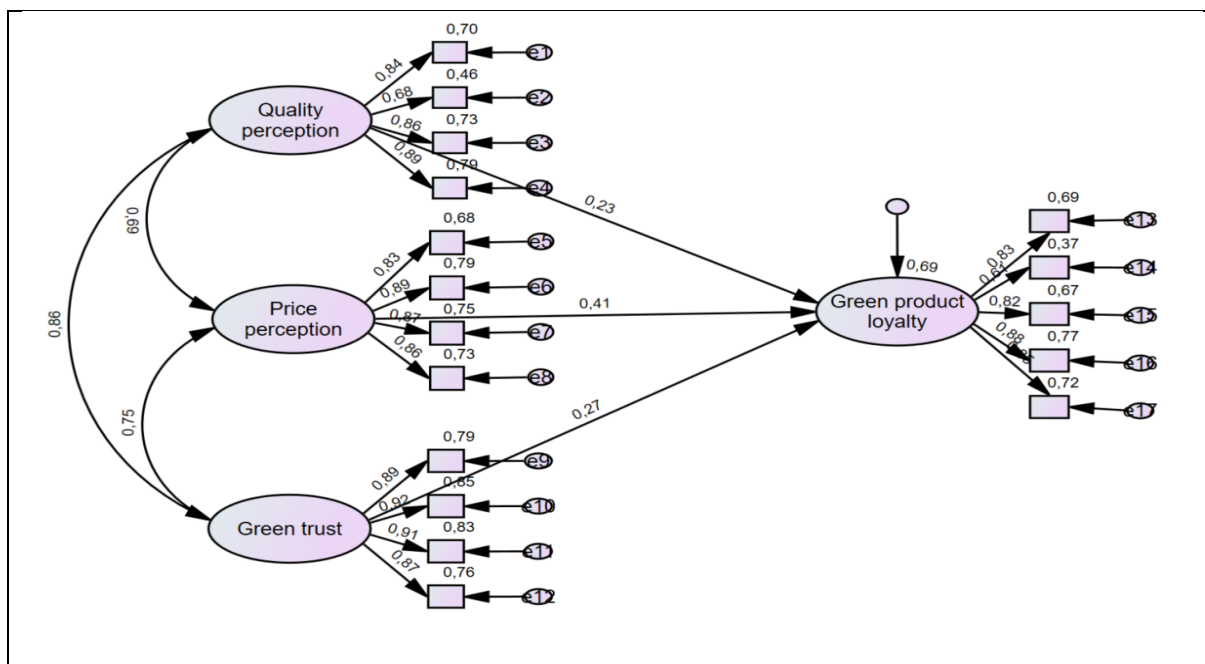


Figure 1: Structural model
Source: Own compilation

Although the model presented in Figure 1 produced a significant chi-square value of 381,214 with 113 degrees of freedom (df), the model fit was evaluated with alternative model fit indices, as the chi-square value might be affected by large sample sizes. The alternative fit indices all suggested good model fit, with the comparative-fit-index (0.965), the incremental-fit index (0.965), the Tucker-Lewis index

(0.957) and the goodness-of-fit index (0.912) above the value of 0.90, and the standardised root mean square residual (0.0361) and the root mean square error of approximation (0.069) values not exceeding 0.08 (Hair, Black, Babin, & Anderson, 2010; Malhotra et al., 2017). The following table includes the standardised regression coefficients, standard error estimates and p-values as calculated by AMOS for the structural model specified.

Table 2: Standardised regression estimates and p-values

	Standardised β	SE	<i>p</i>
Quality perception → Green beauty product loyalty	0.228	0.086	0.002
Price perception → Green beauty product loyalty	0.413	0.054	0.000
Green trust → Green beauty product loyalty	0.266	0.088	0.000
β : beta coefficient; SE: standardised error; <i>p</i> : two-tailed statistical significance			

Source: Reference or Own compilation

According to the results presented in Table 2, all the hypothesised regression paths were positive and statistically significant. Accordingly, all three proposed hypotheses are supported. These results indicate that quality perception ($\beta = 0.228$, $p = 0.002 < 0.05$), price perception ($\beta = 0.413$, $p = 0.000 < 0.05$) and green trust ($\beta = 0.266$, $p = 0.000 < 0.05$) have a statistically significant influence on South African consumers' green beauty product loyalty. The factor that influences these consumers the most is price perception, followed by green trust and quality perception. The calculated squared multiple correlation coefficient for green beauty product loyalty (0.694) denotes that these three factors explain nearly 67 percent of the variance in South African consumers' product loyalty towards green beauty products.

5. Managerial Implications

In today's world, it is of utmost importance for a retailer or brand to make strategic marketing decisions toward green products in order to survive the difficulties they face with regard to the economy and environmental concerns. Retailers and brands can also ensure sustainability by cutting costs in terms of their marketing expenses by successfully retaining customers and ultimately getting these customers to be loyal to their product or brand. The research findings highlight the significant influence of quality perception, price perception, and green trust on green beauty product loyalty among South African consumers. These findings offer valuable insights into marketing strategies and managerial decision-making.

The fact that price perception has been identified as the most influential factor followed by green trust and quality perception indicates several key implications for businesses operating in the green beauty product sector. As price perception holds the strongest influence, green beauty retailers should implement pricing strategies that are aligned with their target market's expectations. This could include competitive pricing, value-based pricing, or implementing pricing tactics such as bundles, discounts, or

loyalty programs, keeping affordability and the perceived value of the products in mind to ensure sustainable loyalty. The results of this study indicate the level of trust a consumer has in green beauty products as the second most important influencing factor. For green beauty product retailers to capitalise on this finding, these retailers should invest in transparent communication about the environmental sustainability of their products. This can be implemented by sharing information about the sourcing and production processes followed as well as their eco-friendly packaging and green certifications obtained by them.

The environmental claims, statements, promises and commitments of green beauty products should be kept in order to establish and maintain a strong green reputation that will positively impact loyalty. Although quality perception is ranked as the third important influencing factor, it remains an integral part of driving loyalty. Retailers in all industries not only in the green beauty product industry should strive to consistently deliver high-quality products that will meet or even exceed consumers' expectations. Retailers should communicate this high-quality assurance to consumers through marketing campaigns, customer reviews, and endorsements from trusted sources. Furthermore, green beauty product retailers should invest in capturing influencers and everyday users demonstrating the tangible benefits and effectiveness of the products as this will enhance the perceived quality. Green beauty product retailers and marketers should integrate all these factors in a holistic marketing approach, by highlighting the value proposition of green beauty products and placing emphasis on the affordability, environmental responsibility, and performance of the green beauty products they are marketing.

6. Conclusions, Limitations and Future Research

This study was undertaken to investigate the influence of quality perception, price perception and green trust on the green beauty product loyalty of South African consumers. This research was deemed necessary as consumers are becoming more environmentally concerned, and this is reflected in their purchases. The findings of this study will prove to be valuable for retailers, marketing practitioners and brand managers within the green sphere of the beauty product industry, as this industry is showing substantial growth. The findings indicate that quality perception, price perception and green trust influence the green beauty product loyalty of South African consumers, and as such, all three of the proposed hypotheses are supported. This is in line with various previous studies (Wong et al., 2023; Paramita & Saputri, 2022; Chhetri et al., 2021; Amberg & Fogarassy, 2019).

The findings of this study provide theoretical contributions as there is limited research based on South African consumers' green beauty product loyalty. Additionally, the contributions this study provides to retailers, marketing practitioners and brand managers are significant, as these parties will be able to retain consumers more effectively within the green beauty product industry. This will assist green beauty product retailers and brands to be more profitable as they would have a decreased expenditure on acquiring new customers. This study focused only on three factors including quality perception,

price perception and green trust, that might affect green beauty product loyalty, there is a possibility that other factors might also influence green beauty product loyalty. This is evident as the three factors investigated in this study explained approximately 67% variance of green beauty product loyalty. Furthermore, a single cross-sectional sampling approach was followed that provides results based on a single snapshot at one point in time. Accordingly, a longitudinal study can be attempted as this may provide more insight into consumers' green beauty product loyalty. Future research can be conducted to determine whether there are differences regarding green beauty product loyalty based on consumers' gender.

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