

# FACTORS DRIVING FEMALE CONSUMERS INTENTION TO PURCHASE NATURAL BEAUTY PRODUCTS

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**Abstract:** *Today, numerous illnesses related to beauty products consumption have led many companies to opt for a better solution that emphasis on green, and natural products ingredients. To this date, women consumers in beauty product industry is considered as one of the biggest population that contribute significantly to economic growth worldwide. Understanding the facts that women consumers do concern on their health and environmental matters, should be the guideline for marketers in promoting their products in the market. This study aims to investigate the female consumer perspective in relation to the health and environment. From 350 questionnaires distributed, 200 were returned and usable. The findings indicated that factors like attitude and behavioural control do influence women consumer's intention to purchase natural beauty product. Specifically, health consciousness and environment consciousness are significant in influencing their consumers' purchase intention. Practically, the findings helped marketers to be creative when promoting the beauty products by highlighting on sustainability and product safety to feed into the women's attitude toward natural beauty products.*

**Keywords:** *Women Consumers, Natural beauty products, environmental consciousness, health consciousness, attitude, subjective norms, behavioural control.*

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## Introduction

Over the years, the effect of purchasing power of women consumers especially in the cosmetic and beauty care industry are steadfast increased globally. The global cosmetic sales have been growing since the last decade and will continue to grow steadily in emerging market until now (Barbalova, 2011). The global beauty market is divided into five main business segments: skincare, haircare, color (make-up), fragrances and toiletries and divided into subdivision of premium and mass production segments which covers brand prestige, price and distribution channels used. The mass segment represented 72% of total sales in 2010 of the global market and the premium segment accounted for the remaining 28%. In addition, of global premium cosmetics sales is concentrated within the developed markets mostly in US, Japan and France

(Barbalova, 2011). However, the trends of beauty products consumption among women consumers have changed dramatically over the years. Women are becoming more safety and health conscious, demanding vast product knowledge, considerable equipped ability in making choices and preferences with positive consumption attitude (Pudaruth, Juwaheer, & Seewoo, 2015). This has resulted the business innovation among the industry players such as going green to serve the market of environmentally friendly female consumers (Nagasawa & Kizu, 2012; Hassali, Al-Tamimi, Dawood, Verma, & Saleem, 2015) . However, in the context of cosmetic and beauty care industry in Malaysia, specific studies on green purchasing behavior for eco-friendly products are under studied. Consumers' concerned on environmental was reflected as an important determinant that shows how engaging the consumers are toward environmentally purchasing behavior (Chen, Chen, & Chen, 2014; Łopaciuk & Łoboda, 2013) . Hence, this paper provides an understanding of women consumers attitude on sustainable cosmetics and beauty products. Malaysia is still at the growth stage of implementing an environmentally-friendly products within the context of sustainability (Kessler, 2015). Women are getting conscious on the kind of cosmetics they are putting on their skin, which might have negative side effect on their health, but at the same time they are often unaware of the health risks that are hidden in the products they buy (Yeob, Oark, & Sung, 2015). Thus, the purposes of this investigate are:

- i. To examine the influence of health consciousness on female consumers' attitude towards natural beauty product
- ii. To examine the influence of environmental consciousness on female consumers' attitude towards natural beauty product
- iii. To examine the influence of peers on female consumers' subjective norms towards natural beauty products
- iv. To study the influence of attitude, subjective norms and perceived behavioral control of the female consumers' purchase intention of natural beauty products

## **Literature Review**

### **Attitudes**

According to Ajzen, Timko, & White, (1982) attitude is a consolidate part that classify an individual's sense about an action and his or her opinion of the positive and negative elements of the object of that behavior. Previous literature that studied attitude towards cosmetics, with regards to health consciousness and environmental consciousness have established comprehensive investigation on the request of female consumer on natural beauty care in Malaysia.

*H1: Female consumers' attitude has an influence on their purchase intention of natural beauty products*

### ***Environmental Consciousness***

Environment awareness is not only a concern for its ecological associations and organizer but also important for marketing and sales (First & Khetriwal, 2010; Bartels & Onwezen, 2014). Based on Olsen, Slotegraaf, & Chandukala, (2014) consumer's interest regarding ecological matters explained their attitudes towards a goods and buying behaviors, exceptionally for environmentally or ecological products.

*H2 – Female consumers’ environmental consciousness has an influence on their attitude towards natural beauty products*

### ***Health Consciousness***

Based on M. Chen, (2009) women can adapt their consumption patterns when they accepted that their behaviors affect their health. Female consumers purchase green or environmentally-friendly goods not only as of their relevance for eco-friendly protection but also for their own health (De Mooij & Hofstede, 2011). Supported in another study, Dutch customers also pursued by health consciousness when buying organic food purchase. Even though investigation have focused in health as the compared to environmental protection (Yadav & Pathak, 2016) the outcome may be combined by customers’ position of natural nutrition and time.

*H3 – Female consumers’ health consciousness has an influence on their attitude towards natural beauty products*

### ***Subjective Norms***

According to Coleman et.al (2011) the determinants of subjective norm as a function of the individual’s belief to participate or not in an activity is influenced by the person’s readiness to obey to the situation. A person may perform certain behavior with the influence of families, or social groups (Shah Alam and Sayuti, 2011). According to the Kalafatis et.al (1999), the subjective norm can control one’s behavior which is different from the way a person desires to perform act. According to the Ewing (2001) research also found that social norms are important motivator for ecologically responsible behavior. In addition, study done by Qader and Zainuddin, (2011) states that one of the major social influences was whereas media exposure, which significantly influence a consumer’s purchase intention of environmentally friendly goods.

*H4: Subjective norms has an influence on female consumers’ intention to purchase natural beauty products*

### ***Peers Influence***

Peers influence, friends or colleagues may have a direct influence on consumers behavior on product choice. If the consumers believe what were shared by their friends and colleagues, hence this will increase their intention to buy these products. In a study on sustainable consumption product, author Vermeir and Verbeke (2006) indicated that consumers who do not feel positive or sensible about buying Le Premier products are less involved with sustainable consumption, hence influence of others like family members and friends may change the consumers decision. In addition, supported by a study on halal meat consumption in France have concluded that influence of peers over consuming halal meat have contributed to predict the intended consumption of halal mean among Muslims (Bonne, Vermeir, Bergeaud-Blackler, & Verbeke, 2007). Therefore, it can be hypothesized that:

*H5: Peers influence has an influence on their subjective norms towards natural beauty products*

### ***Perceived behavioural control***

Perceived behavioural control is indicated as an individual's perceived ease or strength of bringing out an intended behaviour by (Ajzen, 1991). This was decided by the person's trusts regarding the ability of both situation and domestic aspects to assist in seeing the behaviour. According to Kim and Chung (2011) state that tough people consider they have extra capability such as expertise, learning, period and cash, their understandings of limitation and bold are extreme as follow get up their behavioural intention. Thus, the developed hypothesis is:

*H6 - Perceived behavioural control has an influence on female consumers' intention to purchase natural beauty products*

### ***Purchase Intention***

For these researchers, intention is the most highly expected element for behaviour. Commonly, additional attitude and subjective norm are advantageous, extra perceived control is to increase and additional intention of individual performs behaviour in issue. In addition, Hur, Kim, & Park, (2013) analysed the influence of the customer principles on the buying intention of natural beauty care product and the modulate result of behavioural control perceived on the connection among attitude and purchasing intention. The outcomes verify that principles of environmental positively influence attitudes towards natural beauty care products. The previous research also influenced aspects of buying intention perceived behavioural control moderates the relationship between attitude and purchasing intention.

### **Methodology**

The respondents for this study are women who have been using the natural beauty product for the past three years. These respondents can understand the phenomenon of using natural beauty product and consequences on chemical substance in conventional product. Data were collected using questionnaires that were distributed among the potential respondents, in which the data is collected from the right sample group. In this study, Partial Least Squares (PLS) analysis technique using SmartPLS 3.0 software was used to analyse the research model (Ringle et al. 2015). As suggested by Anderson and Gerbing (1988), two-stage analytical procedures was conducted. The researcher tested the measurement model reliability of the measures, followed by an examination of the structural model (Hair et al, 2014; Ramayah et al. 2013) and Bootstrapping method was also used to test the significant path coefficients and the loadings.

### ***Demographic Profiling***

From the descriptive statistics, Table 1 summarised that most of the female respondents are married, educated and have between 1 to 2 children. They earned a monthly income that is higher than RM5000 per person. Most of the respondents are between the aged of 30 to 40 years old.

**Table 1: Sample Profiling**

Variable	Categories	Frequency	Percentage
Age	20 to 30 years	28	14
	31 to 40 years	120	60
	41 to 50 years	35	17.5
	More than 50 years	17	8.5
Marital Status	Single	30	15
	Married	167	83.5
	Divorced/Widowed	3	1.5
Number of Children	None	31	15.5
	1 to 2	115	57.5
	3 to 4	30	15
	More than 5	24	12
Employment Status	Full-time job	119	59.5
	Part-time job	35	17.5
	Student	15	7.5
	Unemployed	5	2.5
	Own Business	26	13
Education	High School	30	15
	Diploma	38	19
	Graduate	97	48.5
	Post-Graduate	25	12.5
	Doctorate	10	5
Monthly (RM) Income	Less than 2000	5	2.5
	2001 – 4000	24	12
	4001 – 6000	33	16.5
	6001 – 8000	105	52.5
	Above 8000	33	16.5

*Measurement Model Evaluation*

Two types of validity were engaged in order to evaluate the measurement model. The first known as the convergent validity followed by discriminant validity. In the case of convergent validity, it is a measurement model that is examining the loadings, average variance extracted (AVE) and also the composite reliability (Gholami et al. 2013). As suggested by Hair et al. (2014), the loadings were all higher than 0.7, the composite reliabilities were all higher than 0.7 and the AVE were also higher than 0.5 (refer Table 2).

**Table 2: Convergent Validity of Measurement Model**

CONSTRUCT	ITEMS	LOADINGS	CRONBACH ALPHA	AVE	CR
<b>Health Consciousness</b>	HC1	0.796	0.877	0.579	0.905
	HC2	0.839			
	HC3	0.829			
	HC4	0.836			
	HC5	0.629			
	HC6	0.719			

<b>Environment Consciousness</b>	EC1	0.667	0.824	0.532	0.871
	EC2	0.606			
	EC3	0.739			
	EC4	0.777			
	EC5	0.811			
	EC6	0.758			
<b>Attitude</b>	Att1	0.805	0.872	0.610	0.903
	Att2	0.777			
	Att3	0.686			
	Att4	0.816			
	Att5	0.800			
	Att6	0.795			
<b>Perceived Behavioural Control</b>	PBC1	0.839	0.881	0.657	0.912
	PBC2	0.852			
	PBC3	0.870			
	PBC5	0.755			
	PBC6	0.786			
<b>Subjective Norms</b>	SN3	0.516	0.744	0.650	0.840
	SN4	0.981			
	SN5	0.850			
<b>Peers Influence</b>	Peers1	0.544	0.867	0.529	0.886
	Peers2	0.771			
	Peers3	0.802			
	Peers4	0.813			
	Peers5	0.694			
	Peers6	0.759			
	Peers7	0.672			
<b>Purchase Intention</b>	PI1	0.897	0.880	0.807	0.926
	PI2	0.909			
	PI3	0.888			

Note: SN1, SN2, SN6, PCB4 were deleted due to low loadings

**Table 3: Discriminant Validity of Measurement Model**

	<b>Attitude</b>	<b>Environment Cons</b>	<b>Health Cons</b>	<b>PBC</b>	<b>PI</b>	<b>Peers</b>	<b>SN</b>
Attitude	<b>0.781</b>						
Environment Cons	0.402	<b>0.73</b>					
Health Cons	0.346	0.366	<b>0.761</b>				
PBC	0.326	0.305	0.216	<b>0.821</b>			
PI	0.575	0.339	0.353	0.311	<b>0.898</b>		
Peers	0.003	-0.074	0.008	-0.025	-0.051	<b>0.727</b>	
SN	-0.044	-0.057	0.009	0.064	-0.098	-0.091	0.806

Note: Values on the diagonal (bolded) represent the square a root of AVE while the off-diagonals represent the correlation

The discriminant validity of the measures was tested according to Fornell and Larcker (1981) criterion of comparing the correlations between constructs and the square root of the AVE for the construct (Refer to Table 3). Based on Table 2, the square root of the AVEs as characterized by the bolded values on the diagonals were greater than the corresponding row and column values (correlation between constructs) representing the measures were discriminant.

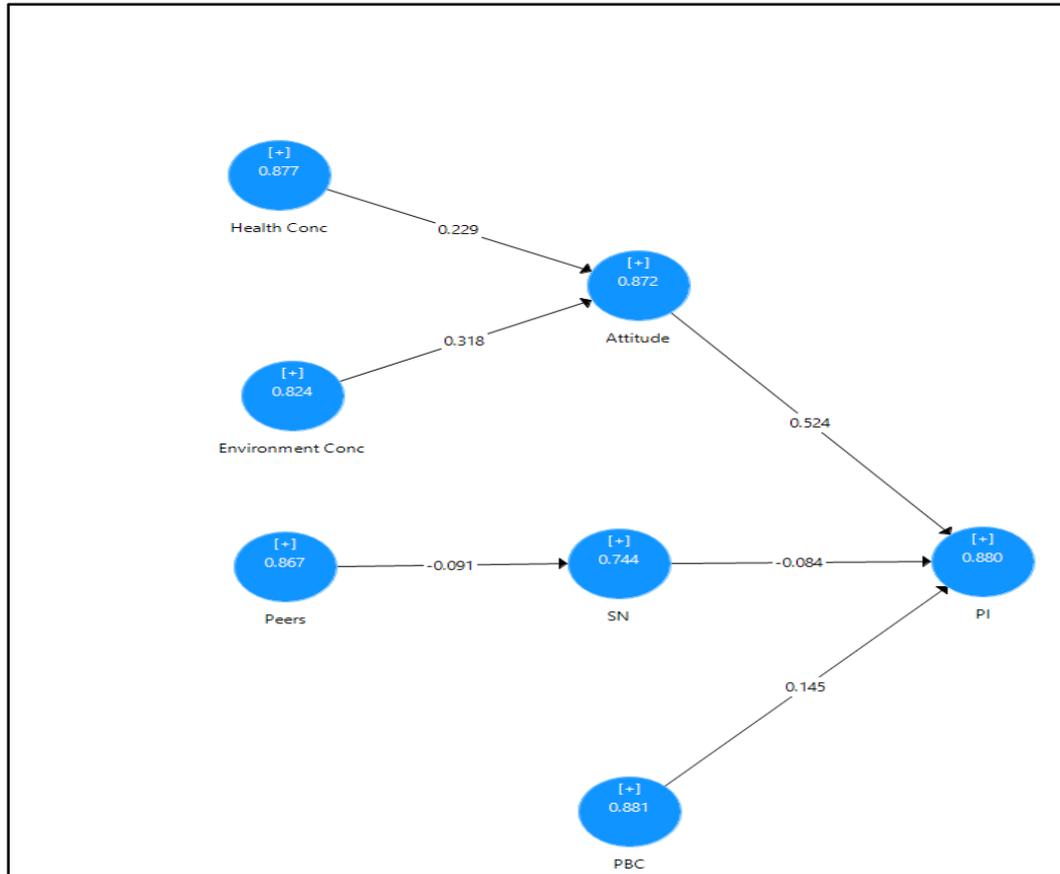
### *Structural Model Evaluation*

The structural model involved by calculating  $R^2$ , beta and the corresponding t-value (Hair et al., 2014), and a bootstrapping procedure with 5000 resamples was applied. The researchers also reported on the predictive relevance ( $Q^2$ ) and effect sizes ( $f^2$ ) (Hair et al., 2014). Standardised coefficient estimates pointed that path between attitude and purchase intention ( $\beta=0.146$ ;  $t=10.476$ ;  $p<0.01$ ), between Perceived Behavioural Control and purchase intention ( $\beta=0.524$ ;  $t=2.462$ ;  $p<0.05$ ) were significant and positive, however, path between Subjective Norms and purchase intention was not significant ( $p>0.05$ ). Furthermore, the direct influence of Environment consciousness and attitude ( $\beta=0.318$ ;  $t=5.493$ ;  $p<0.01$ ), and health consciousness on attitude ( $\beta=0.229$ ;  $t=3.435$ ;  $p<0.01$ ), were found to be positive and significant (Table 4).

Further, environment consciousness and health consciousness explained 20.7% on the variance of attitude whereas attitude and perceived behavioural control explained 35.6% on the variance of purchase intention. The  $R^2$  value of 0.356 was higher than the 0.35 (substantial) value suggested by Cohen (1988). The study also measured effect sizes ( $f^2$ ) as recommended by Sullivan and Feinn, (2012). Hair et al (2014) proposed that the change in the  $R^2$  value should also be studied. The method suggested is to examine the  $R^2$  change when a specified exogenous construct is absent from the model. As suggested by Cohen (1988), the standard to measure the magnitude of the effect size is 0.02 (small), 0.15 (medium), and 0.35 (Large). Looking at the  $f^2$  value in Table 4, it can be perceived that the relationship of both significant predictors was ranged from small and medium. In addition, we also calculated the predictive relevance of the model by using the blindfolding procedure. According to Chin, (1998) and Henseler et al (2009) blindfolding is a sample reuse technique that remove every  $d$ th data point in the endogenous construct's indicators and estimates the parameters with the remaining data points. Furthermore, Hair et al (2014) stated that if the value of  $Q^2$  is larger than 0 the model has predictive relevance for a certain endogenous construct and otherwise if the value is less than 0. From Table 4 we can see that  $Q^2$  values is 0.263 and 0.116 which suggests that the model has sufficient predictive relevance.

**Table 4: Result of the Structural Model Analysis (Hypotheses Testing)**

<b>Relationship</b>	<b>Beta Value</b>	<b>Std Error</b>	<b>T-Value</b>	<b>Decision</b>	<b>R<sup>2</sup></b>	<b>F<sup>2</sup></b>	<b>Q<sup>2</sup></b>
HAttitude -> PI	0.524	0.049	10.733	Support	0.355	0.387	0.262
Environment Conc -> Attitude	0.318	0.054	5.947	Support	0.207	0.111	0.116
Health Conc -> Attitude	0.229	0.068	3.357	Support		0.057	
SN -> PI	-0.084	0.07	1.205	Not Support	0.008	0.011	0.001
Peers -> SN	-0.091	0.154	0.593	Not Support		0.008	
PBC -> PI	0.145	0.062	2.354	Support		0.029	



**Figure 1.0**

### Discussion and Conclusion

This study aimed to investigate the factors that may influenced women consumers intention to purchase natural beauty products using theory of planned behavior. The study developed a conceptual model by incorporating major predictor such as personal values into the well-established theory of planned behavior. Overall, the developed model of the study brings some contribution to the theory which is discussed in the following. Based on the findings, it was confirmed that only attitude and perceived behavioral control provide significant influence on women consumers’ intention towards natural beauty products. Peers influence and Subjective norms were found to be insignificant to consumers’ purchase intention. This is supported by study done by Paul, Modi, and Patel, (2016). To reduce perceived difficulty, cosmetic marketers must focus on communicating with the female consumers on the availability of the natural beauty to enhance the consumers perceived of product availability. Furthermore, the study found that subjective norms has insignificant relationship with purchase intention. This indicated that consumers would feel that consent or suggestions from others like peers and family members on their choice of beauty products is not an important factor. Hence family and friends failed to provide any thrust concerning to buy natural beauty products.

In the second analysis, the dimension of attitudes includes perceived health consciousness and environmental consciousness. Based on the result environment consciousness contributed to the highest variance of the women’s purchase intention of natural beauty product followed by health consciousness. Therefore, it is highly recommended to include these two variables as the indicator of purchase intention of natural beauty products. In terms of health and environmental

consciousness, the result showed women consumers with greater concern for their health will have a higher intention to purchase natural beauty products. They also indicated how environmentalism as important to protecting themselves and their families. also having more positive feelings about environmental activities and are concerned about environmental risks towards their health. Hence, it is suggested for the retail cosmetic stores to implement effective marketing strategies emphasizing on ecological beauty or product safety to satisfy the values of potential consumers. As women are mostly the users of cosmetics and beauty products, hence it is recommended that retailers might want to change consumers' perception of higher price to affordable prices using multiple marketing strategies which implement the ideas that they capable to buy the sustainable and natural beauty products.

Furthermore, policy makers must able to develop public interventions by publicizing messages about how the use of eco-friendly products by environmentally concerned consumers would potentially reduce environmental problems. Female consumer who are concern of their action and choice of product should be more pro-active considering that their consumption will affect not only themselves but also their love ones.

## References

- Ajzen, I., Timko, C., & White, J. B. (1982). Self-monitoring and the attitude-behavior relation. *Journal of Personality and Social Psychology*, 42(3), 426–435. <https://doi.org/10.1037//0022-3514.42.3.426>.
- Barbalova, I. (2011). Global beauty and personal care: the year in review and winning strategies for the future. *Euromonitor International*, 12(3), 29–31.
- Bartels, J., & Onwezen, M. C. (2014). Consumers' willingness to buy products with environmental and ethical claims: The roles of social representations and social identity. *International Journal of Consumer Studies*, 38(1), 82–89. <https://doi.org/10.1111/ijcs.12067>.
- Bonne, K., Vermeir, I., Bergeaud-Blackler, F., & Verbeke, W. (2007). Determinants of halal meat consumption in France. *British Food Journal*, 109(5), 367–386. <https://doi.org/10.1108/0070700710746786>.
- Chen, C., Chen, W., & Chen, W. (2014). Understanding The Effects Of Ewom On Cosmetic Consumer Behavioral Intention, 5(1), 97–102. <https://doi.org/10.7903/ijecs.1030>.
- Chen, M. (2009). Attitude toward organic foods among Taiwanese as related to health consciousness, environmental attitudes, and the mediating effects of a healthy lifestyle. *British Food Journal*, 111(2), 165–178. <https://doi.org/10.1108/00070700910931986>.
- Chin. (1998). Issues and Opinion on Structural Equation Modeling. *MIS Quarterly*, 22(1).
- De Mooij, M., & Hofstede, G. (2011). Cross-cultural consumer behavior: A review of research findings. *Journal of International Consumer Marketing*, 23(3–4), 181–192. <https://doi.org/10.1080/08961530.2011.578057>.
- F Hair, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>.
- First, I., & Khatriwal, D. S. (2010). Exploring the relationship between environmental orientation and brand value: Is there fire or only smoke? *Business Strategy and the Environment*, 19(2), 90–103. <https://doi.org/10.1002/bse.619>.
- Hassali, M. A., Al-Tamimi, S. K., Dawood, O. T., Verma, A. V., & Saleem, F. (2015). Malaysian Cosmetic Market: Current and Future Prospects. *Pharmaceutical Regulatory Affairs*, 4(4), 1000155. <https://doi.org/10.4172/2167-7689.1000155>.

- Hur, W. M., Kim, Y., & Park, K. (2013). Assessing the Effects of Perceived Value and Satisfaction on Customer Loyalty: A “Green” Perspective. *Corporate Social Responsibility and Environmental Management*, 20(3), 146–156. <https://doi.org/10.1002/csr.1280>.
- Kessler, R. (2015). Cosmetic changes. *Environmental Health*, 123(5), 120–127. <https://doi.org/10.1038/scientificamerican1010-10>.
- Łopaciuk, A., & Łoboda, M. (2013). Global Beauty Industry Trends in the 21st Century. *Knowledge Management & Innovation Knowledge and Learning*, 1079–1087. Retrieved from <http://www.toknowpress.net/ISBN/978-961-6914-02-4/papers/ML13-365.pdf>.
- Nagasawa, S., & Kizu, Y. (2012). Green Action as a Luxury Strategy in the Field of Cosmetics. *Waseda Business & Economic Studies*, 48(48), 1–17. Retrieved from [http://dspace.wul.waseda.ac.jp/dspace/bitstream/2065/39562/1/WasedaBusiness&EconomicStudies\\_48\\_Nagasawa.pdf](http://dspace.wul.waseda.ac.jp/dspace/bitstream/2065/39562/1/WasedaBusiness&EconomicStudies_48_Nagasawa.pdf).
- Olsen, M. C., Slotegraaf, R. J., & Chandukala, S. R. (2014). Green Claims and Message Frames: How Green New Products Change Brand Attitude. *Journal of Marketing*, 78(5), 119–137. <https://doi.org/10.1509/jm.13.0387>.
- Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services*, 29, 123–134. <https://doi.org/10.1016/j.jretconser.2015.11.006>.
- Pudaruth, S., Juwaheer, T. D., & Seewoo, Y. D. (2015). Gender-based differences in understanding the purchasing patterns of eco-friendly cosmetics and beauty care products in Mauritius: a study of female customers. *Social Responsibility Journal*, 11(1), 179–198. <https://doi.org/10.1108/SRJ-04-2013-0049>.
- Sullivan, G. M., & Feinn, R. (2012). Using Effect Size—or Why the *P* Value Is Not Enough. *Journal of Graduate Medical Education*, 4(3), 279–282. <https://doi.org/10.4300/JGME-D-12-00156.1>.
- Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer “attitude - Behavioral intention” gap. *Journal of Agricultural and Environmental Ethics*, 19(2), 169–194. <https://doi.org/10.1007/s10806-005-5485-3>.
- Yadav, R., & Pathak, G. S. (2016). Young consumers’ intention towards buying green products in a developing nation: Extending the theory of planned behavior. *Journal of Cleaner Production*, 135, 732–739. <https://doi.org/10.1016/j.jclepro.2016.06.120>.
- Yeob, S. Y., Oark, E.-A., & Sung, M. (2015). Cosmetics advertisements in women’s magazines: A cross-cultural analysis of China and Korea. *Social Behavior and Personality*, 43(4), 685–704. <https://doi.org/10.2224/sbp.2015.43.4.685>