

Consumers' Intention to Switch from Green and Conventional Cosmetics

Asri Sekar Mawar Firdausi¹, Resita Septia Rahma², Lita Ningrum Afriani³

1. Universitas Pembangunan Nasional "Veteran" Yogyakarta, Jl. SWK Jl. Ring Road Utara No.104, Ngropoh, Condongcatur, Kec. Depok, Kabupaten Sleman, Daerah Istimewa Yogyakarta 55283
2. Politeknik Piksi Input Serang, Jl. Raya Cilegon No.km.8, Serang, Kec. Kramatwatu, Kabupaten Serang, Banten 42161
3. Politeknik Madyathika Purbalingga, Kedung Menjangan, Kec. Purbalingga, Kabupaten Purbalingga, Jawa Tengah

ARTICLE INFO	ABSTRACT
<p>Keywords: Push Mooring Pull Switching Intention Green Product Conventional Product</p> <p>Kata Kunci: Dorong Tambat Tarik Niat Beralih Conventional Product</p>	<p>Consumers play an essential role in consuming activities since it can impact environmental preservation. However, previous research stated that the ineffectiveness of green products resulted in consumers choosing to use conventional products. Hence, this study aims to determine the factors that cause consumers to switch from green products to conventional products in cosmetics. The theory applied in explaining the phenomenon is migration theory by using the push-pull-mooring framework. The subjects of this study were 205 green cosmetics consumers who collected the data using questionnaires. Based on the results of data analysis, the pull factors and push factors are the most decisive factors that influence the consumers switching intention to conventional cosmetics. Meanwhile, the mooring factors does not moderate the push and pull factors on the customers' switching intentions to conventional cosmetics.</p>
<p>Corresponding author: Asri Sekar Mawar Firdausi asrisekarmf@upnyk.ac.id</p> <p>Copyright © 2023 by Authors, Published by IRJBS. This is an open access article under the CC BY-SA license</p> 	<p style="text-align: center;">SARI PATI</p> <p><i>Konsumen memegang peranan penting dalam kegiatan konsumsi karena dapat berdampak pada kelestarian lingkungan. Namun, penelitian sebelumnya menyatakan bahwa ketidakefektifan produk hijau mengakibatkan konsumen memilih untuk menggunakan produk konvensional. Oleh karena itu, penelitian ini bertujuan untuk mengetahui faktor-faktor yang menyebabkan konsumen beralih dari produk hijau ke produk konvensional dalam konteks kosmetik. Teori yang digunakan dalam menjelaskan fenomena tersebut adalah teori migrasi dengan menggunakan kerangka dorong-tarik-tambat. Subyek penelitian ini adalah 205 konsumen kosmetik hijau yang pengumpulan datanya menggunakan kuesioner. Berdasarkan hasil analisis data, faktor tarik dan faktor dorong merupakan faktor yang paling mempengaruhi niat beralih konsumen ke kosmetik konvensional. Sementara itu, faktor tambat terbukti tidak memoderasi faktor dorong dan tarik pada niat beralih pelanggan ke kosmetik konvensional.</i></p>

INTRODUCTION

People's awareness of the environmental problem has increased in the last decades. It also increased their intention to search and buy eco-friendly products. Nowadays, several companies have more concerned about eco-friendly products due to people's awareness of environmental preservation (Kumar et al., 2017; Kapoor et al., 2019). Companies demand eco-friendly products as an appropriate strategy and increase competitiveness (Karya, 2014). In order to support eco-friendly products, most Indonesian customers have agreed to choose products that are eco-friendly, drifted-free, and recyclable (Chairy, 2012). The cosmetic industry is one of the Indonesian industries that continuously wants to improve its eco-friendly products.

Nowadays, Indonesian consumers are more concerned about their welfare, hygiene and appearance (European-Indonesia Business Network, 2019), including choosing the right cosmetics. The awareness of hygiene and the influence of popular culture are reasons for the increasing popularity of cosmetic brands in Indonesia (European-Indonesia Business Network, 2019). Based on analytical predictions, Indonesia will become one of the top five cosmetic markets in the upcoming 10 to 15 years (The International Trade Administration: the U.S Commercial Service and Industry & Analysis, 2016). Due to the trends related to the popularity and awareness of cosmetics made from organic and natural products (Australian Trade and Investment Commission, 2018), the number of green cosmetic producers increased. Demand from beauty service providers, such as salon and spa services, that use natural and organic products is also increasing (Australian Trade and Investment Commission, 2018). Green cosmetics are made from organic and natural materials (Amberg & Fogarassy, 2019). Moreover, green cosmetics defined as beauty care and decoration products that use natural ingredients to preserve environmental sustainability. Green cosmetic consists of natural ingredients without chemical materials, and in the manufacturing process it does not need animal

testing and uses recyclable packaging (Kapoor et al., 2019).

Hence, green cosmetics components can consider affecting nature positively. In addition, it is recommended for consuming green cosmetic brands continuously. However, based on a survey of consumers' experiences conducted on 91 respondents in September 2020, 54.9 percent of respondents stated that they have considered switching from green cosmetics to conventional cosmetic brands immediately. The main reason is that the price of conventional branded cosmetics is much more affordable, as stated by 52.7 percent of the respondents. Meanwhile, another reason is their intention to make variations by using other cosmetic brands, as stated by 41.8 percent of respondents. Regarding this phenomenon, there is a possibility of losses that green cosmetic producers can experience if the consumers choose to switch to conventional branded cosmetics. Besides causing disadvantages for the company, the consumers' switching intention from green branded cosmetics to conventional cosmetic brands can also hurt the environment.

Based on research conducted by Ursey et al. (2020), although consumers have green buying behaviour, they often buy conventional products as an alternative. This is because there is an assumption from consumers that green products are considered less effective. This research can show the transition that occurs between green to non-green products. However, developments in green marketing can provide a variety of benefits, such as maintaining nature conservation, improving the economy, providing more benefits for consumers, increasing the company's profit, improving the value of the products, and having advantages in the production and supply process (Dahlstrom, 2011: 8-13). It is in line with Amberg and Fogarassy (2019), who explains that there are various benefits of consuming the green product for the environment since it contains less water, ingredients, and energy. It does not cause pollution since the packaging can

be recycled. And then consuming green cosmetics can preserve environmental conservation, reduce pollution, use recyclable resources responsibly, and preserve the fauna. If switching happens in the consumption of green cosmetics to conventional brands it will reduce the benefits. Moreover, we must know that conventional cosmetic brands contain ingredients that pollute the environment, such as preservatives (parabens and triclosan) and plastics (Juliano & Magrini, 2017). Cosmetics are products that have a large quantity of use (Kapoor et al., 2019), and they can have worse impacts on our health and the environment.

Based on the previous explanations, it can be concluded that the consumers' intention to switch from green brands to conventional cosmetic brands can harm the companies, consumers, and the environment. Therefore, cosmetic companies must identify factors that make consumers want to switch from green to conventional cosmetics. In addition, this can be an input for marketers to understand Indonesian consumers' behaviours. Thus, this study examined the factors that cause consumers to switch from green cosmetics to conventional cosmetic brands. In examining the consumers' behaviour, migration theory is applied using the push-pull-mooring framework. Each factor is explained by the explanatory variables. The push factors are explained by the dissatisfaction variable and the low trust variable. The pull factors are explained by the perception of low prices and product availability variables. In contrast, the mooring factors are explained by the low variation-seeking variable and the past switching experience variable. This study aims to describe the factors that significantly affect the consumers' intention to switch to conventional products from green cosmetics as a reference for the companies.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Migration Theory and Push-Pull-Mooring Framework. Migration is the movement between two places in a certain period (Bansal et al., 2005).

This theory was first stated in Ravenstein's article in 1885. In the field of Geography, migration is a good correspondence for examining the consumers' switching intentions in marketing science. One of the frameworks that can explain migration theory is push-pull with mooring variable act as intervention variable, it was proposed by Bogue (1977), Lee (1966), and Moon (1995). In the Push-Pull-Mooring framework, the factors that influence migration decisions consist of areas of origin; factors related to the destination area; intervention barriers; and personal factors (Lee, 1966). Wang et al. (2019) describe push factors as the stressors or powerful forces that push people away from the current products. At some time, pull factors are the positive factors that attract individuals to a destination (Zhang et al., 2014). The mooring factors is the factor that can hold potential migrants in order to remain at their place or facilitate potential migrants to move to other places (Bansal et al., 2005). Push-pull-mooring is a method to explain consumers' switching intention appropriately and helps marketers map the causes of consumers' switching behaviour (Chang et al., 2014).

Push Factor. This study used dissatisfaction and low trust to explain the push factors. Baek and Kim (2018) found a significant negative effect between satisfaction and the customers' intention to switch to a smartphone. Oliver (2010: 8-9), in his book entitled *Satisfaction: A Behavioral Perspective on Consumer*, explains that dissatisfaction is the opposite of satisfaction or negative statements of satisfaction. Dissatisfaction can affect interpretation as unpleasant satisfaction felt by consumers, which can happen if the satisfaction felt from the product is insufficient or excessive. In other words, dissatisfaction can affect the interpretation as an inappropriateness between product performance and consumers' expectations (Chang et al., 2014). In this study, dissatisfaction is defined as the inability of green cosmetic brands to meet consumers' expectations. This concept generally states that if someone is not satisfied, he will migrate (Wolpert, 1965).

Wang et al. (2019) stated that using eco-friendly

products could positively affect the environment since consumers believe that the environment can preserve through each individual's purchase of eco-friendly products. Trust has always been an important factor in consumers' behaviour (Liu et al., 2011; Pavlou & Chai, 2002). Trust can be as an individual's intention to accept vulnerability based on positive expectations of behaviour shown by others (Rousseau et al., 1998). In this study, 'green trust' is defined as the consumers' willingness to depend on green cosmetic brands based on the trust or expectations that result from their credibility, virtue, and environmental capability. Consumers who have high trust in green brands will be more interested in buying green products (Wang et al., 2019). In addition, various consumers' characteristics influence their decision to switch (Lai et al., 2012). Hence, consumers who have low trust in green brands tend to switch to conventional products. Based on the previous explanations, it can conclude that dissatisfaction and low trust, which explain the push factors, have a positive effect on customers' switching intentions. Therefore, it can illustrate that the higher the push factors consumers have on a product, the higher their intention to switch. Thus, the hypothesis can formulate as follows.

H1: The push factors positively affects the customers' switching intention to conventional cosmetic brands.

Pull Factor. The pull factors in this study is explained by the perception of low prices and high product availability. The price aims to inform the consumers about the value of goods or services (East, 1997). Price is defined as one of the critical non-product attributes of the brand associations since it can build the brand's perception. These associations are primarily related to values and intentions. In addition, price is a criterion that consumers often use to share their knowledge of a market or category (Batey, 2008). Additional verification procedures increase the prices of eco-friendly products, and consumers tend to reject paying higher prices for eco-friendly products (D'Souza et al., 2006; Gaviria,

1995). Previous research conducted by Sharaf and Perumal (2018) revealed that, in general, the price of green products influenced the consumers' buying behaviour on green products. Consumers who consider the high price of products will tend not to buy eco-friendly products since the price is higher than the conventional products (Sharaf & Perumal, 2018). In other words, the higher the consumers' price perception of green products, the higher the intention to switch to conventional products. In this study, price perception is defined as the consumer's perception of the monetary and non-monetary sacrifices to obtain conventional cosmetics.

Jusmaliani (2009) stated that product availability is an insight into the availability and possible choices of the products. Therefore, in this study, product availability is defined as consumers' understanding of the availability and possibilities of conventional cosmetic choices. Żakowska-Biemans (2011) stated that product availability is one of the obstacles for consumers to buy organic food. When consumers are motivated to buy eco-friendly products, the unavailability of the products becomes an obstacle to buying green products (Sharaf & Perumal, 2018). In a survey conducted by Żakowska-Biemans (2011), more than ten consumers do not buy organic food since it is unavailable at the store where they usually buy it. Furthermore, 5% of respondents said that organic food stores are too far away. Therefore, based on the previous explanation, the pull factors explained by the perception of low prices and high product availability influences the consumers' buying intentions. In other words, the higher the pull factors, the higher the consumers' intention to switch. Thus, the hypothesis formulated as follows.

H2: The pull factors positively affects the consumers' switching intention to conventional branded cosmetics.

Mooring Factor. TThis study's mooring factors is explained by variation-seeking and the past switching experience variables. Variety-seeking behaviour defines the tendency of consumers

to seek various choices of services or goods (Kahn, 1995). In this study, low variation-seeking is defined as the consumers' low motivation in diversifying their cosmetic choices, as indicated by a lack of curiosity and interest in conventional cosmetic brands. Lattin and McAlister (1985) explain that there is the potential for individuals to look for new variations when purchasing. Meanwhile, previous research conducted by Nimako and Ntim (2015) revealed that high variation-seeking could moderate the positive effect of low satisfaction and low signal quality on switching intentions. In other words, consumers who have low satisfaction and low quality of services will have a solid intention to switch to high variety-seeking buying behaviour.

It is in line with Hsieh et al. (2012) study on the factors influencing consumers' intention to switch from blogs to social networking sites, which revealed that mooring factors have a negative effect on consumers' switching intention and also moderate the relationship between push effects and switching intentions. Hsieh et al. (2012) describe previous switching experiences as the experiences felt by users when switching from one social media to another on the previous usage. In this study, switching experience is defined as the consumers' experience when they

switch from consuming one cosmetic brand to another brand. Users with no past experience tend to stick with their previous platforms and fear the uncertainty when switching to other platforms. Hence, consumers who have past switching experiences will tend to move again (Hsieh et al., 2012).

Moreover, the stronger the mooring factors, the weaker the influence of the push factors on the consumers' switching intention. As explained by Lee (1966), the mooring variable moderates the influence of the pull factors on migration decisions. Therefore, the following hypothesis is formulated.

- H3:** The mooring factors has the negative effect on the consumers' switching intention to conventional cosmetic brands.
- H4:** The mooring factors moderates the negative effect of push factors on the customers' switching intention to conventional cosmetic brands.
- H5:** The mooring factors moderates the negative effect of pull factors on the customers' switching intention to conventional cosmetic brands.

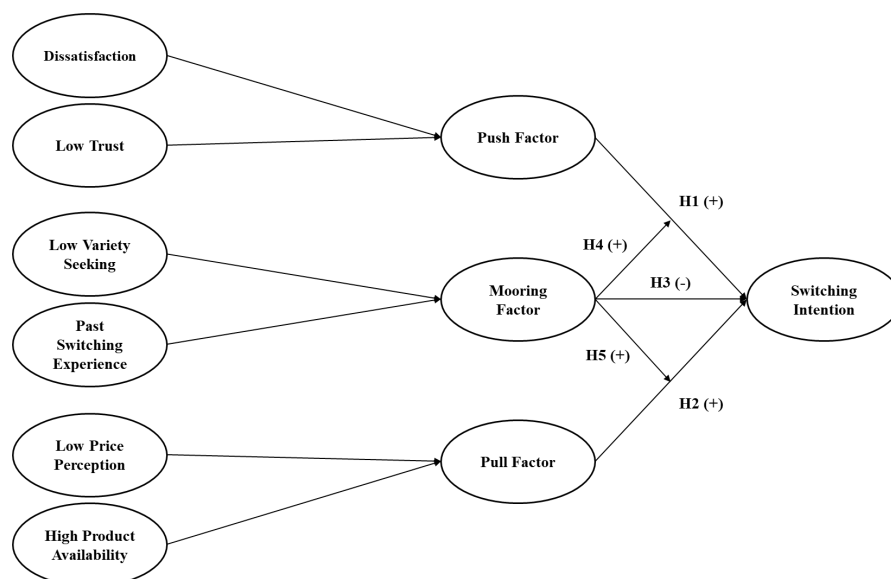


Figure 1. Research Model

METHODS

Data Collection and Sample. In this study, the data were collected by using self-administered questionnaires that were distributed using an online platform, namely Google Forms. The sampling technique applied in this study was nonprobability sampling, namely purposive sampling. The respondents in this study were consumers of green cosmetics. Green cosmetic brands used in this study were Innisfree, The Body Shop, Lush Fresh Handmade Cosmetics, Skin Dewi, L'Occitane en Provence, Sukin Australian Natural, Kiehl's, Sensatia Botanicals, Love Beauty and Planet, and Clarins since they have met the criteria of green cosmetics. In addition, the types of cosmetics referred to hair, face, body care products, body deodorizer, and make-up. 275 respondents participated in this study. However, 70 respondents did not meet the criteria. In addition, based on the outlier testing, three respondents had to be excluded from the study. Therefore, the total number of respondents in this study was 205 or 74,54 percent of the total respondents. The data was processed using PLS-SEM in WarpPLS 7.0 software. Before testing the hypothesis, the validity, reliability, and appropriateness of the model were tested in order to identify whether the research model was appropriate with the existing data.

Questionnaire Design. The questionnaire used in this study consisted of 2 (two) parts: the first part contained the personal data of the respondents (gender, age, domicile, occupation, income/month, and the average monthly purchase of cosmetics); and the second part contained the research statement. Before the respondents filled out the two sections, we screened the respondents so that those who filled out the questionnaires were those who fit the criteria. The items in this study were adapted from previous research and translated from English to Indonesian. The total number of items in this study was 25 items. The data are presented in Table 1, regarding the operational definition of the variables and the source of the items used.

RESULTS AND DISCUSSION

The Analysis on Respondents' Characteristics.

Based on the results of processing data on respondents' characteristics using the SPSS 21 application, mostly the respondents in this study were women, as many as 88.3 percent (181 people). In addition, the age category was dominated by 17-25 years old respondents or can be classified as generation Z (BPS, 2019), as many as 76.1 percent (156 people). Furthermore, based on their domicile and occupation, the respondents are mostly in Java (55.1% or 113 people) and work as students (48.3% or 99 people). The last characteristic of respondents is income, as presented in Table 2. It can be seen that respondents are dominated by <2.500.000 - 5.000.000, as many as 35.6 percent (73 people). It is also known that based on the results of additional surveys, the majority of respondents (40% or 82 people) spend Rp. 200.000 to Rp. 500.000 to buy cosmetics every month.

Validity and Reliability Tests. Convergent validity and discriminant validity tests were conducted by identifying the value of factor loading, ≥ 0.7 (a value between 0.4 to 0.7 is considered). The Average Variance Extracted (AVE) value is ≥ 0.5 . This value is the comparison of the square root AVE with latent variable correlation (Hair et al., 2014). After that, the reliability coefficient test was carried out using composite reliability, with a value is ≥ 0.7 (Hair et al., 2014). In testing the validity and reliability, it is divided into two parts, such as testing the first-order construct and testing the second-order construct. In table 3, the results of testing the convergent validity and composite reliability for the first-order construct are presented. Meanwhile, the results of discriminant validity in the first-order construct are presented in Table 4. Based on Table 3, all items in this study are valid, as indicated by the loading factor value. In addition, based on the AVE value, all variables in this study are also valid. The composite reliability value also shows high results since all variables have a value > 0.7 . In other words, all variables are reliable. Furthermore, when identifying the discriminant validity in Table 4, all variables in this study can be categorized as valid.

Table 1. Item Statement and Operational Definition

Variable	Operational Definition	Item Statement
Dissatisfaction (6 items from Lau & Lee (1999))	The inability of green branded cosmetics to meet consumer expectations.	<ol style="list-style-type: none"> 1. This brand has not worked out as well as I thought it would. 2. I am satisfied with my decision to buy this brand. 3. I have truly enjoyed this brand 4. I feel bad about my decision to buy this brand. 5. Using this brand has been a good experience. 6. I am sure it was the right thing to buy this brand.
Low Trust (5 items from Chen (2010))	Low consumer willingness to depend on green branded cosmetics based on the trust or expectations that result from their credibility, virtue and environmental performance capabilities.	<ol style="list-style-type: none"> 1. You feel that this brand's environmental commitments are generally reliable. 2. You feel that this brand's environmental performance is generally dependable. 3. You feel that this brand's environmental argument is generally trustworthy. 4. This brand's environmental concern meets your expectations. 5. This brand keeps promises and commitments for environmental protection.
Low Variety Seeking (4 items from Wu et al. (2017))	The low motivation of consumers to diversify their choice of cosmetics is shown by the lack of curiosity and interest in conventional branded cosmetics.	<ol style="list-style-type: none"> 1. I am often curious about new eco-friendly products at this green convention. 2. I want to try new eco-friendly products at this green convention. 3. I would rather stick with eco-friendly products I usually use than try something I am not very sure of. 4. I am very cautious in trying new or different eco-friendly products.
Past Switching Behavior (3 items from Hsieh (2013))	The behavior that consumers have towards the transition pattern of purchases from one brand to another.	<ol style="list-style-type: none"> 1. In the past, I used a small number social media. 2. In the past, I seldom switched social media. 3. I have few experiences switching between social media on the Internet.
Low Price Perception (4 items from Chang et al. (2017))	Consumers' perception of the monetary and non-monetary sacrifices that must be paid to obtain conventional cosmetics.	<ol style="list-style-type: none"> 1. The price of the product in the physical store is reasonable. 2. The price of the product in the physical store is inexpensive. 3. I would be pleased to pay the price for the product in the physical store. 4. I was satisfied paying the price of the product in the physical store.
High Product Availability (2 items from Jusmaliani & Nasution (2009))	Consumer understanding of the availability and possibilities of conventional cosmetic choices.	<ol style="list-style-type: none"> 1. Halal food (i.e. meat) is readily available. 2. There are a lot f choice possibilities in halal food.
Brand Switching Intention (3 items from Han et al. (2011))	It is likely that consumers claim to switch from green branded cosmetics to conventional branded cosmetics.	<p>Rate the probability that you would switch to another hotel the next time you travel to this location.</p> <ol style="list-style-type: none"> 1. Improbable. . . Probable 2. Unlikely. . . Likely 3. No chance. . . Certain

Table 2. The Respondents' Characteristics

		Frequency	Percentage (%)			Frequency	Percentage (%)	
Gender	Male	24	11.7	Occupation	Student	99	48.3	
	Female	181	88.3		Managerial	41	20	
Age	17-25	156	76.1		Professional	27	13.2	
	26-30	35	17.1		Entrepreneur	12	5.9	
	31-35	10	4.9		Unemployments	26	12.7	
	36-40	3	1.5		<1.000.000	15	7.3	
	>40	5	0.5		≥1.000.000 - 2.500.000	45	22.0	
Domicile	Java	113	55.1		Income / month (Rp)	>2.500.000 – 5.000.000	41	20.0
	Sumatera	18	8.8			>5.000.000 – 7.500.000	16	7.8
	Borneo	7	3.4			>7.500.000	11	5.4
	Sulawesi	60	29.3	Not yet income		77	37.6	
	Papua	1	0.5					
	Nusa Tenggara	2	1					
	Bali	3	1.5					

Table 3. Convergent Validity and Composite Reliability (First Order Construct)

Variable	Indicator	Convergent Validity		Composite Reliability
		Loading Factor	AVE	
Dissatisfaction	K1	0.652	0.661	0.920
	K2	0.808		
	K3	0.877		
	K4	0.887		
	K5	0.822		
	K6	0.810		
Low Trust	KR1	0.860	0.728	0.930
	KR2	0.862		
	KR3	0.873		
	KR4	0.848		
	KR5	0.820		
Low Variety Seeking	MV1	0.716	0.510	0.805
	MV2	0.819		
	MV3	0.687		
	MV4	0.620		
Past Switching Behavior	PB1	0.771	0.614	0.826
	PB2	0.860		
	PB3	0.712		
Price Perception	PH1	0.675	0.591	0.851
	PH2	0.657		
	PH3	0.894		
	PH4	0.824		
High Product Availability	KT1	0.927	0.859	0.924
	KT2	0.927		

Note: K= dissatisfaction; KR= low trust; MV= low variety seeking; PB= past switching behavior; PH= price perception; KT= high product availability

Table 4. Discriminant Validity (First Order Construct)

Variable	K	KR	MV	PB	PH	KT
K	0.813	0.549	-0.026	-0.037	0.105	-0.059
KR	0.549	0.853	-0.083	0.066	0.028	-0.004
MV	-0.026	-0.083	0.714	0.111	-0.323	-0.096
PB	-0.037	0.066	0.111	0.783	0.076	0.069
PH	0.105	0.028	-0.323	0.076	0.769	0.253
KT	-0.059	-0.004	-0.096	0.069	0.253	0.927

Note: K= dissatisfaction; KR= low trust; MV= low variety seeking; PB= past switching behavior; PH= price perception; KT= high product availability

After testing the validity and reliability of the first-order construct, the next step was testing the validity and reliability of the second-order construct. It should be concerned that the second-order construct in this study is formative, so it requires additional testing in its validity test by identifying the p and VIF values. The accepted p-value in the formative model is <0.05. Meanwhile, the VIF value received is <2.5 (Kock, 2018). Based on Table 5, all variables can be categorized as valid, as indicated by the AVE value. In addition, all indicators can also be categorized as valid, as indicated by the loading factor value. Furthermore, based on Table 5, it can be seen that all variables are reliable. Moreover, in Table 6, based on the results of the discriminant validity test for the second-order construct, all variables are categorized as valid. The results of the formative model test are presented in Table 7, and in the table, it can be seen that all p-value and VIF

values are accepted, or all second-order constructs can be categorized as valid.

Hypotesis Testing. Two of the five hypotheses were rejected based on the analysis of hypothesis testing using WarpPLS 0.7 software in Table 8. Hypothesis 1 states that there is a positive influence of push factors on the consumers' switching intention to conventional cosmetic brands. The results of the hypothesis show that the p-value <0.001 and the path coefficient is 0.259, or in other words, the hypothesis is supported. In Hypothesis 2, it is stated that there is a positive effect of pull factors on the consumers' switching intention to conventional cosmetics. The results of the hypothesis indicate that the value of p-value <0.001 and the direction of the path coefficient of 0.383 means that the hypothesis is supported. Based on the respondents' answers, the pull factors explained by the perception of low prices and high product

Table 5. Convergent Validity and Composite Reliability (Second Order Construct)

Variable	Indicator	Convergent Validity		Composite Reliability
		Loading Factor	AVE	
Push Factor	K	0.879	0.77	0.871
	KR	0.879		
Mooring Factor	MV	0.745	0.56	0.714
	PB	0.745		
Pull Factor	PH	0.791	0.63	0.77
	KT	0.791		
Switching Behavior	NB1	0.941	0.88	0.957
	NB2	0.941		
	NB3	0.934		

Note: K= dissatisfaction; KR= low trust; MV= low variety seeking; PB= past switching behavior; PH= price perception; KT= high product availability

Table 6. Discriminant Validity (Second Order Construct)

Variable	FD	FTB	FT	NB
FD	0.879	-0.022	0.002	0.216
FTB	-0.022	0.745	-0.102	-0.078
FT	0.002	-0.102	0.791	0.416
NB	0.216	-0.078	0.416	0.938

Note: FD= push factor; FTB= mooring factor; FT= pull factor; NB= switching behavior

Table 7. Formative Model Testing

Variable	Indicator	Formative Model Test	
		p Value	VIF
FD	K	<0.001	1.42
	KR	<0.001	1.42
FTB	MV	0.014	1.012
	PB	0.007	1.012
FT	PH	<0.001	1.068
	KT	<0.001	1.068

Note: K= dissatisfaction; KR= low trust; MV= low variety seeking; PB= past switching behavior; PH= price perception; KT= high product availability; FD= push factor; FTB= mooring factor; FT= pull factor; NB= switching behaviour.

availability show average results of 3.34 and 3.88. In other words, the respondents generally consider conventional cosmetics have low prices, and the availability of conventional cosmetics products tends to be higher than the green cosmetic brands. Meanwhile, in Hypothesis 3, it is stated that there is a negative effect of mooring factors on the consumers' switching intention to conventional cosmetic brands. The results of the hypothesis indicate that the value of p-value = 0.007 and the path coefficient is -0.167, so the hypothesis is supported. The average result of respondents from the mooring factors, which consists of low variation-seeking and past switching experience variables, indicates values of 3.18 and 3.65. Hence, most respondents have low variation-seeking and past switching experience. In Hypothesis 4, it is stated that the mooring factors moderating the negative influence of the push factors on the intention to switch is proven unsupported. The results of hypothesis testing show the p-value = 0.167, and the direction of the path coefficient is -0.067. Finally, hypothesis 5, which states that the

mooring factors moderates the negative effect of the pull factors on the consumers' switching intention, is proven unsupported. This finding is indicated by the results of hypothesis testing, where the p-value is 0.436, and the path coefficient is 0.011.

The influence of push factors on the consumers' switching intention to conventional cosmetic brands. The push factors consist of dissatisfaction and low trust. The results of the hypothesis 1 analysis state that the push factors has a positive effect on the consumers' switching intention to conventional branded cosmetics. In other words, the dissatisfaction and low trust that consumers have in green-branded cosmetics will encourage them to switch to conventional cosmetics. However, most of the respondents' answers indicate that they disagree with the statement that green cosmetics are of low quality and unsatisfactory. Dissatisfaction occurs when the performance of the selected product cannot meet customer expectations (Chang et al., 2014). Dissatisfaction has an influence on the consumers' switching intention from green

Table 8. The respondents's most answers

Item	Average	Total Average	Item	Average	Total Average
K1	2.39	1.99	PB1	3.80	3.65
K2	2.08		PB2	3.64	
K3	2.02		PB3	3.51	
K4	1.98		PH1	3.60	3.34
K5	1.65		PH2	3.27	
K6	1.82		PH3	3.26	
KR1	2.13	2.17	PH4	3.21	3.88
KR2	2.12		KT1	3.82	
KR3	2.16		KT2	3.94	
KR4	2.24		NB1	3.05	2.98
KR5	2.19		NB2	3.07	
MV1	2.61	NB3	2.83		
MV2	2.72	3.18	Note: K= dissatisfaction; KR= low trust; MV= low variety seeking; PB= past switching behavior; PH= price perception; KT= high product availability		
MV3	3.44				
MV4	3.94				

Table 9. Hypothesis testing

Hypothesis	P Value	Coefficient	Result	R-Square
Push Factor (H1)	<0.001	0.259	Supported	0.271
Pull Factor (H2)	<0.001	0.383	Supported	
Mooring Factor (H3)	0.007	-0.167	Supported	
Mooring Factor*Push Factor (H4)	0.167	-0.067	Not Supported	
Mooring Factor*Pull Factor (H5)	0.436	0.011	Not Supported	

cosmetics to conventional cosmetics. Based on the results of this study, it is unexpected since the consumers feel that the performance of green brand cosmetics products can meet their expectations and they feel satisfied with green cosmetic products. On the other hand, dissatisfaction still influences consumers to switch to conventional cosmetics. It is in line with previous research by Chang et al. (2014), who discussed the factors that influence consumers to switch away from social networking sites, and the results revealed that dissatisfaction could push social network users to switch.

Meanwhile, another variable that explains other push factors in this study is low trust. Consumers

who want to buy organic food must believe that the food has benefits. In addition, it is also important for the consumers to believe that the food they buy and consume is truly organic (Daugbjerg et al., 2014; Vieira et al., 2013; Yin et al., 2010), and it is the same as consuming cosmetics. Other findings in this study indicate that most respondents' answers revealed that they do not believe that green cosmetics have no benefits for the environment or the body, and they believe that green cosmetics are beneficial. However, it cannot be avoided when the consumers have low trust in green cosmetic products, it will push them to switch to conventional cosmetics. This is in line with the previous findings conducted by Wang (2019) and Ahmad and Zhang (2020) that

the consumers' low trust in the benefits of green products can push their switching intention.

The influence of pull factors on the consumer's switching intention to conventional cosmetic brands. The pull factors consist of low prices and high availability. The result of hypothesis 2 analysis indicated that the pull factors have a positive effect on the consumers' switching intention to conventional cosmetic brands. Despite having an awareness of the importance of preserving the environment and the benefits of using green cosmetics, consumers who use green brand cosmetics are still sensitive to the price (Sharaf & Perumal, 2018). Price is continuously mentioned as the main reason not to buy organic food since it is considered more expensive. It is in line with previous research, which revealed that prices influence consumers' decisions when buying eco-friendly products (Sharaf & Perumal, 2018; Chang et al., 2016). In this study, price is still an important consideration that can be a complex obstacle in the decision-making process to purchase organic products, as revealed by Padel et al. (2005). In other words, consumers have the perception that the price of conventional cosmetics is lower than the price of green cosmetics, and it becomes a reason for consumers to switch from green cosmetics to conventional cosmetics.

Meanwhile, the high availability of conventional cosmetic brands and the low availability of green products at retailers have an impact on the consumers' switching intention from green cosmetics to conventional brands since the consumers feel that it is difficult to find green brand products at the resellers. This finding is theoretically consistent with the previous research conducted by Jusmalian (2009), where product availability is the most significant factor that influences the consumers' intention to use the product. In addition, this reason also causes consumers to reject purchasing organic food since it is not available in the stores where they usually shop (Zakowska-Biemans, 2011). Thus, it can be concluded that the

pull factors has a positive influence on consumers' switching intention to conventional cosmetics.

The effect of mooring factors on the consumers' switching intention to conventional cosmetic brands. The mooring factors consists of low variation-seeking and past switching experience variables. Based on the result of hypothesis 3, the mooring factors has a negative effect on the customers' switching intention to conventional cosmetic brands. This result is in line with Bansal et al. (2005) research which revealed that the mooring factors are able to hold potential migrants in order to remain at their place or facilitate potential migrants to move to other places. Low variation-seeking and past switching experiences can directly influence the customers' switching intention.

It has been known that the consumers' past behaviour is able to influence their future behaviour since the consumers will remember their past experiences when making decisions (Ganesh et al., 2000; Ouellette & Wood, 1998). Consumers who have past switching experiences will tend to move again. (Hsieh et al., 2012). Hence, consumers who are currently using green brand cosmetics and have no past switching experience will have a low chance of switching to conventional cosmetics. The findings in this study are in line with Hsieh et al. (2012) since it is stated that consumers with successful past switching experiences tend to move again more than those who have no experience. On the other hand, the consumers who have experienced failure to switch can avoid the decision shifting.

The mooring factors moderates the negative effect of push factors on customers' switching intention to conventional cosmetic brands. Based on the results of hypothesis analyses, it can be concluded that the mooring factors did not moderate the effect of the push factors on the consumers' switching intention to conventional cosmetics. However, these results are not in line with Lee's (1966) study that the mooring variable moderates the influence of push

and pull factors on migration decisions. According to Lee (1966), variables that represent mooring factors are consumers' behaviour in low variation-seeking, subjective norms, and price. Meanwhile, in this study, the variables used to explain the mooring factors are low variation-seeking and past switching experience.

By identifying the consumers' low variation-seeking and past switching experiences, they have no influence on consumers' switching intentions even though they feel green cosmetics are unsatisfactory and untrustworthy. According to Kahn (1995), variety-seeking behaviour has become an important construct in marketing research related to consumers' choices. Meanwhile, according to Lee and Murphy (2005), past switching experience is a factor that causes loyal consumers to switch. However, based on the results of the research hypothesis, the mooring factors does not moderate the effect of push factors on consumers' switching intention, and the possibility of other variables that are not explained in this study, and there is no influence between these relationships.

The mooring factors moderates the negative effect of push factors on the customers' switching intention to conventional cosmetic brands. Based on the result of hypothesis 5, the mooring factors does not moderate the effect of the push factors on the consumers' switching intention to conventional cosmetic brands. Moreover, based on the research results on mooring factors as a moderator, it revealed that low variation-seeking and past switching experience variables do not strengthen or weaken the effect of push factors on consumers' switching intentions. Based on the research conducted by Lee and Murphy (2005) states that price is the most important factor that influences loyal consumers to switch to other product producers. Consumers who have high price perceptions about green products tend not to buy green brand products compared to conventional products since the price influences the consumers' decisions when purchasing eco-friendly products. Thus, it can be concluded that

price perceptions directly influence the consumers' switching intention without having to be moderated by the mooring factors.

The availability factor is also a pull factors that influences the consumers' switching intention to another product without having to be moderated by the low variation-seeking and past switching experience variables. Based on the previous research conducted by Sharaf and Perumal (2018), revealed that when consumers are motivated to buy products that are eco-friendly, the obstacle is the unavailability of green products. The unavailability of a moderating effect can be due to the mooring factors that have influenced the customers' switching intention. In addition, the unavailability of other variables that can explain the relationship between pull factors and mooring factors and consumers' switching intention can also be the factors.

MANAGERIAL IMPLICATION

This study discusses the factors that can influence consumers' switching intention from green cosmetics to conventional cosmetics. The findings of this study can be a consideration for green cosmetic companies when implementing a marketing strategy. First, the sellers can implement the best strategy to reduce the consumers' switching intention to conventional cosmetics in order to preserve the environment. In addition, consumers' switching intention to conventional cosmetics can not only have a negative impact on the environment but also harm green cosmetic companies. Second, the sellers can consider how the satisfaction and trust in the push factors and price perceptions and availability that are explained in pull factors can reduce the consumers' intention to switch to conventional cosmetics. Based on the discussion section, the consumers consider conventional cosmetics to have high availability and pull them to switch. Green cosmetics marketers can add their marketing channels so that consumers can easily find or buy green products. Third, the producers must provide good service by

maintaining the quality of the product so the consumers will always be satisfied. By providing good service and good quality, the customers' intention to look for other products is low, and green cosmetic producers can prioritize the quality of their products, emphasizing. The products are good for health and the environment, so the consumers will understand that their purchase is beneficial. In addition, promoting the quality of green cosmetics can also increase the consumers' confidence in the brands. These reasons can also reduce the consumers' switching intention to conventional cosmetic brands.

CONCLUSION

This study aims to identify the push, pull, and mooring factors of consumers when switching from green products to conventional products in a cosmetic context. By applying the migration theory using push-pull-mooring frameworks, this study can be a reference to explain the various factors that influence consumers' switching intention. Based on the results, there are positive effects of dissatisfaction and low trust as the push factors toward the consumers' switching intention to

conventional cosmetic brands. In addition, there are significant positive effects of the perception of low prices and high product availability as the pull factors toward the consumers' switching intention to conventional cosmetic brands. Meanwhile, low variation-seeking and past switching experience variables have a significant negative effect on the consumers' switching intention from green cosmetics. However, other factors make different results, such as low variation-seeking and past switching experience do not moderate the push and pull factors in the intention to switch to conventional cosmetics.

Even though this study only focuses on the factors that influence the consumers' switching intention from green cosmetic brands to conventional cosmetic brands, this study can still be a reference for the management teams and the resellers of green cosmetics to achieve a better understanding of the consumers' preferences. Many variations and complications perceived by the consumers in choosing cosmetics are a challenge to create suitability between what the consumers expect and what the marketers and resellers can provide. ■

REFERENCES

- Ahmad, W., & Zhang, Q. (2020). Green purchase intention: Effects of electronic service quality and customer green psychology. *Journal of Cleaner Production*, 267 (26), 1-17. <https://doi.org/10.1016/j.jclepro.2020.122053>
- Amberg, N., & Fogarassy, C. (2019). Green Consumer Behavior in the Cosmetic Market. *Resources*, 8 (3), 137-146. <https://doi.org/10.3390/resources8030137>
- Australian Trade and Investment Commission. 2018, 18 Juli. *Beauty Product Opportunities to Indonesia, Malaysia and Vietnam*. Webinars.
- Badan Pusat Statistik (BPS). 2019. Statistik Pemuda Indonesia 2019. Jakarta: Badan Pusat Statistik.
- Baek, H.S., & Kim, G. G. (2018). A Study on Intention of Customers to Switch Brands under the Brand Crisis of Smart Phone: from the PPM Perspective. *International Journal of Pure and Applied Mathematics*, 120 (6), 5853-5873. <http://www.acadpubl.eu/hub/>
- Bansal, H.S., Taylor, S.F. & James, Y.S. (2005). «Migrating» to New Services Providers: Toward a Unifying of Consumers; Switching Behavior. *Journal of the Academy of Marketing Science*, 33 (1), 96-115. <https://doi.org/10.1177/0092070304267928>
- Batey, C. E. (2008). Atlantic connections and adaptations: Economies, environments and subsistence in lands bordering the north atlantic. *Scottish Archaeological Journal*, 30 (1-2), 211-12. <https://doi.org/10.3366/e1471576709000448>
- Bogue, D. J. (1977). *A Migrant's-Eye View of the Costs and Benefits of Migration to a Metropolis in Internal Migration: a Comparative Perspective*, 167-182. New York: Academic Press, Inc.
- Chairy. (2012). Spirituality, Self-Transcendence, and Green Purchase Intention in College Students. *Procedia Social and Behavioral Sciences*, 57 (4), 243-246. <https://doi.org/10.1016/j.sbspro.2012.09.1181>
- Chang, H.H., Wang, K.H., Li, S.Y. (2017). Applying Push-Pull-Mooring to Investigate Channel Switching Behaviors: M-shopping Self-Efficacy and Switching Costs as Moderators, Electronic Commerce. *Research and Applications*, 24 (18), 50-67. <https://doi.org/10.1016/j.elerap.2017.06.002>
- Chang, I.C., Liu, C.C., & Chen, K. (2014). The Push, Pull, and Mooring Effects in Virtual Migration for Social Networking Sites. *Information System Journal*, 24 (4), 323-346. <https://doi.org/10.1111/isj.12030>
- Chen, Y. S. (2010). The Drivers of Green Brand Equity: Green Brand Image, Green Satisfaction, and Green Trust. *Journal of Business Ethics*, 93 (2), 307-319. <https://doi.org/10.1007/s10551-009-0223-9>
- Dahlstrom, R. (2011). *Green Marketing Management*. Canada: Cengage Learning.
- Daugbjerg, C., Smed, S., Andersen, L. M., & Schwartzman, Y. (2014). Improving eco-labelling as an environmental policy instrument: Knowledge, trust and organic consumption. *Journal of Environmental Policy & Planning*, 16 (4), 1-17. <https://doi.org/10.1080/1523908x.2013.879038>
- D'Souza, C., Taghian, M., Lamb, P., & Peretiatkos, R. (2006). Green products and corporate strategy: an empirical investigation. *Society and Business Review*, 1 (2), 144-157. <https://doi.org/10.1108/17465680610669825>
- East, R. (1997). *Consumer behaviour: Advances and applications in marketing*. Prentice Hall.
- European-Indonesia Business Network. 2019. *EIBN Sector Reports Cosmetics*. Indonesia French Chamber of Commerce and Industry.
- Ganesh, J., Arnold, M. J., & Reynolds, K. E. (2000). Understanding the customer base of service providers: An examination of the differences between switchers and stayers. *Journal of Marketing*, 64 (3), 65-87. <https://doi.org/10.1509/jmkg.64.3.65.18028>
- Graviria, D. (1995). Introducing the ecolabelling concept: experience of Colombia. *International Trade Forum*, 395 (3), 8-11.
- Hair, J.F., Hult, G.T., Ringle, C.M., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Los Angeles: SAGE Publication.
- Hsieh, J. H., Su, C. H., & Chien, L. J. (2012). Accumulation of lipid production in *Chlorella minutissima* by triacylglycerol biosynthesis-related genes cloned from *Saccharomyces cerevisiae* and *Yarrowia lipolytica*. *Journal of Microbiology*, 50 (3), 526-534. <https://doi.org/10.1007/s12275-012-2041-5>
- Juliano, C., & Magrini, G. A. (2017). Cosmetics Ingredients as Emerging Pollutants of Environmental and Health Concern: A Mini-Review. *Cosmetics*, 4 (2), 11-29. <https://doi.org/10.3390/cosmetics4020011>
- Jusmaliani., & Nasution, H. (2009). Religiosity Aspect in Consumer Behaviour: Determinants of Halal Meat Consumption. *ASEAN Marketing Journal*, 1 (2), 1-12. <https://doi.org/10.21002/amj.v1i1.1977>
- Kahn, B.E. (1995). Consumer Variety-Seeking Among Goods and Services: An Integrative Review. *Journal of Retailing and Consumer Service*, 2 (3), 139-148. [https://doi.org/10.1016/0969-6989\(95\)00038-0](https://doi.org/10.1016/0969-6989(95)00038-0)
- Kapoor, R., Singh, A. B., & Misra, R. (2019). Green Cosmetics – Changing Young Consumer Preference and Reforming Cosmetic Industry. *International Journal of Recent Technology and Engineering*, 8 (4), 12932-12939. <https://doi.org/10.35940/ijrte.D6927.118419>
- Karya, S. (2014). Pasar Global Produk Ramah Lingkungan. kemenperin.go.id, 19 Maret. Diakses pada 29 Mei 2020. <https://kemenperin.go.id/artikel/8810/PasarGlobal-Produk-Ramah-Lingkungan>

- Kock, N. 2019. *WarpPLS User Manual: Version 6.0*. Texas: ScriptWarp Systems.
- Kumar, B. Manrai, A. K., & Manrai, L.A. (2017). Purchasing Behavior for Environmentally Sustainable Products: A Conceptual Framework and Empirical Study. *Journal of Retailing and Consumer Service*, 34 (1), 1-9. <http://dx.doi.org/10.1016/j.jretconser.2016.09.004>
- Lai, J.Y., Debbarma, S., & Ulhas, K. R. (2012). An empirical study of consumer switching behaviour towards mobile shopping: a Push-Pull-Mooring model. *International Journal of Mobile Communications*, 10 (4), 386-404. <https://doi.org/10.1504/ijmc.2012.048137>
- Lattin, J. M. & McAlister, L. (1985). Using a Variety-Seeking Model to Identify Substitute and Complementary Relationships Among Competing Models. *Journal of Marketing Research*, 22 (3), 330-339. <https://doi.org/10.1177/002224378502200308>
- Lee, M.S. (1966). A Theory of Migration. *Demography*, 3 (1), 47-57. <https://doi.org/10.2307/2060063>
- Lee, R.Y.M., & Murphy, J. (2005). From loyalty to switching: Exploring the determinants in the transition. *ANZMAC 2005 Conference Proceedings*, N/A, 196-203.
- Liu, C.T., You, Y. M., & Lee, C. H. (2011). The effects of relationship quality and switching barriers on customer loyalty. *International Journal of Information Management*, 31 (1), 71-79. <https://doi.org/10.1016/j.ijinfomgt.2010.05.008>
- Moon, B. (1995). Paradigms in Migration Research: Exploring «Mooring» as a Schema. *Progress in Human Geography*, 19 (4), 504-524. <https://doi.org/10.1177/030913259501900404>
- Nimako, S.G., & Ntim, B.A. (2015). Modelling the antecedents and consequence of consumer switching behavior in Ghanaian mobile telecommunication industry. *International Journal of Business and Emerging Markets*, 7 (1), 37-75. <https://doi.org/10.1504/ijbem.2015.066093>
- Oliver, R.L. (2010). *Satisfaction: A behavioral perspective on the consumer*, 2nd ed. New York: Routledge.
- Ouellette, J. A., & Wood, W. (1998). Habit and intention in everyday life: The multiple processes by which past behavior predicts future behavior. *Psychological Bulletin*, 124 (1), 54-74. <https://doi.org/10.1037/0033-2909.124.1.54>
- Padel, K., & Foster, C. (2005). Exploring the gap between attitudes and behavior. *British Food Journal*. 107 (8), 606-625. <https://doi.org/10.1108/00070700510611002>
- Pavlou, P. A., & Chai, L. 2002. What Drives Electronic Commerce Across cultures? A Cross-Cultural Empirical Investigation of The Theory of Planned Behavior. *Journal of Electronic Commerce Research*, 3 (4), 240-253. <https://doi.org/10.1.1.144.1549>
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. Not So Different After All: A Cross Discipline View of Trust. *Academy of Management Review*, 23 (3), 393-404. <https://doi.org/10.5465/amr.1998.926617>
- Sharaf, M. A., & Perumal, S. (2018). How Does Green Products' Price and Availability Impact Malaysians' Green Purchasing Behavior?. *The Journal of Social Sciences Research*, 4 (3), 28-34. <http://argpweb.com/?ic=journal&journal=7&info=aims>
- The International Trade Administration; the U.S. Commercial and Industry and Analysis (I&A). (2016). *Asia Personal Care & Cosmetics Market Guide*. Unites State: United States Department of Commerce.
- Ursery, B., Palihawadana, D., Saridakis, C., & Theotokis, A. (2020). How Downplaying Product Greenness Affects Performance Evaluations: Examining the Effects of Implicit and Explicit Green Signals in Advertising. *Journal of Advertising*, 49 (2), 125-140. <https://doi.org/10.1080/00913367.2020.1712274>
- Vieira, L. M., De Barcellos, M. D., Hoppe, A., & da Silva, S. B. (2013). An analysis of value in an organic food supply chain. *British Food Journal*, 115 (10), 1454-1472. <https://doi.org/10.1108/bfj-06-2011-0160>
- Wang, L., Luo, X., Yang, X., & Qiao, Z. (2019). Easy Come or Easy Go? Empirical Evidence on Switching Behaviors in Mobile Payment Applications. *Information and Management*, 56 (7), 103-150. <https://doi.org/10.1016/j.im.2019.02.005>
- Wolpert, J. (1965). Behavioral Aspects of the Decision to Migrate. *Papers of the Regional Science Association*, 15 (1), 159-169. <https://doi.org/10.1007/bf01947871>
- Wu, H.C., Cheng, C. C., & Hong, W. (2017). An empirical analysis of green convention attendees' switching intentions. *Journal of Conventional & Event Tourism*, 18 (3), 159-190. <https://doi.org/10.1080/15470148.2017.1296393>
- Yin, S., Wu, L. D. L., & Chen, M. (2010). Consumers' purchase intention of organic food in China. *Journal of the Science of Food and Agriculture*, 90 (8), 1361-1367. <https://doi.org/10.1002/jsfa.3936>
- Zhang, H., Lu, Y. G. S., Zhao, L., Chen, A., & Huang, H. (2014). Understanding the antecedents of customer loyalty in the Chinese mobile service industry: a push-pull-mooring framework. *International Journal of Mobile Communications*, 12 (6), 551-577. <https://doi.org/10.1504/ijmc.2014.064901>
- Żakowska-Biemans, S. (2011). Polish consumer food choices and beliefs about organic food. *British Food Journal*, 113 (1), 122-137. <https://doi.org/10.1108/00070701111097385>