Understanding purchase intention of university students towards skin care products

Jia En Lee and Mei Ling Goh

Faculty of Business, Multimedia University, Malacca, Malaysia, and

Mohd Nazri Bin Mohd Noor

Cluster of Business and Management, Open University Malaysia, Kuala Lumpur, Malaysia

Abstract

Purpose – The purpose of this paper is to examine the factors which will contribute to consumers' purchase intention on skin care products. Four factors, namely, brand awareness, brand association, perceived quality and brand loyalty, were included in this study.

Design/methodology/approach – In total, 150 sets of self-administered questionnaires were distributed to students in a local private university in Melaka. Convenience sampling was used and data collected were analysed using SmartPLS to perform the measurement model and structural model.

Findings – Findings have showed that there are positive relationships between brand awareness, brand association, perceived quality and brand loyalty and consumers' purchase intention towards skin care products. Furthermore, it is concluded that perceived quality is the most significant factor in influencing consumers' purchase intention.

Originality/value – Firms are able to benefit from this study by formulating their brand management tactics referring to the findings to have competitive advantage over their competitors.

Keywords Brand awareness, Purchase intention, Brand loyalty, Brand association, Perceived quality, Skincare products

Paper type Research paper

Introduction

The cosmetic industry is one of the world's leading multi-billion-dollar businesses which encompasses a wide array of products, such as cleansers, toners, serum, moisturisers, foundations, compact powders, lipsticks, eyeliners, eyeshadows, blushers and mascaras (Chin and Harizan, 2017). This list continues to become longer as cosmetic companies aggressively launch more up-to-date and enhanced products in the market. The global cosmetics and toiletries industry has grown rapidly thus far. According to Euromonitor International (2016), the total global value for the overall beauty industry in 2016 amounted to $444bn where skincare products dominated the market with market size of

approximately US$120bn. Allied Market Research (2017) further reported that the global skincare market is expected to reach $179 billion by 2022 with a CAGR of 4.7 per cent from 2016 to 2022. It should also be emphasised that the cosmetics and toiletries industry in Malaysia is currently experiencing rapid growth. According to the Cosmetics and Toiletries Market Overviews 2015 compiled by US Commercial Service Hong Kong, an approximate total of US$407m is spent on Malaysia's cosmetics and toiletries industry alone. Meanwhile, the total trade volume for personal care and cosmetic products in 2015 was approximately US$2.24bn. It was also found that skincare products had the highest demand among other cosmetic and toiletries products which was worth US$292m for the total import value.

Skincare products are the most popular cosmetics, and they have also become mainstream in the global cosmetic industry. Despite their popularity in the market, previous literature has chiefly focused on cosmetics rather than the skincare products. Accordingly, this research intends to bring light to skincare products. Moreover, due to the rapid expansion and growth of the market in the skincare industry, marketers are confronted with the question of how to boost the sales of skincare products by using brand equity to drive customers' purchase intention. Thus, it is pivotal for marketers to comprehend the extent to which brand equity dimension will generate the intention to purchase so that relevant strategies can be formulated to improve their performance accordingly. Despite empirical evidences which suggested a positive correlation between brand equity and purchase intention in different contexts (Ashill and Sinha, 2004; Chang and Liu, 2009), the effect of Aaker's brand equity dimensions on purchase intention is still not widely addressed (Jalilvand *et al.*, 2011).

In sum, this study aims to investigate the effect of Aaker's brand equity dimensions, namely, brand awareness, brand association, perceived quality and brand loyalty on consumers' purchase intention towards skincare products.

Literature review
Purchase intention
Purchase intention refers to an individual's likeliness to acquire a certain product, and it is also a crucial aspect in measuring consumer behaviour (Fishbein and Ajzen, 1977). Blackwell *et al.* (2001) have defined purchase intention as "what we think we will buy". Accordingly, purchase intention can be used to quantify the tendency of a consumer to buy a product, and the relationship between these two components is such that the stronger the purchase intention, the greater a consumer's desire to purchase a product (Dodds *et al.*, 1991; Schiffman and Kanuk, 2000).

Engel *et al.* (1995) outlined that there are three types of purchase intention, namely, unintended purchase, partially intended purchase and fully intended purchase. Unplanned or unintended purchase is considered as an impulse purchase where it involves the instantaneous decision made in a store to purchase a product category or a brand. In partially planned purchase, consumers would choose a product category and the basis prior to purchasing a product and only decide on the brands and types later in the store. Contrastingly, fully planned purchase implies that consumers make a decision on the products and brands to purchase even before entering the store. It should be noted that these three types of purchasing behaviour may be affected by the level of awareness and the strength of the brand image. Additionally, Kotler (2003) suggested that purchase intention can also be influenced by an individual's feelings and impulsive situation. While an individual's feelings involve personal preference, impulsive situations refer to the circumstances that alter the purchase intention.

According to Kimery and McCord (2002), measuring consumers' buying behaviour is not fairly straightforward; hence, their buying behaviour is typically assessed using purchase intention. Zeithaml (1988) applied the options of "possible to buy", "intended to buy", and "considered to buy" to measure purchase intention. Meanwhile, four items have been outlined by Mathur (1999) for the purpose of evaluating purchase intention. These items were "I would purchase from this brand", "I would completely consider purchasing from this brand", "I would hope to purchase from this brand", and "I would totally plan to purchase from this brand".

Brand awareness

As per Aaker (1991), brand awareness is defined as the likelihood that a potential buyer can recognise the brand as a member of a certain product category. Aaker (1991) also suggested that brand awareness encompasses several levels extending from mere brand recognition to brand dominance which would result in the ultimate situation where the brand included is the main brand recalled by a consumer. Furthermore, brand awareness is identified as people's perception about a brand which incorporates all prescriptive and descriptive elements pertaining to it (Li, 2004). Brand awareness has also be considered as the source of value creation for consumers (Aaker, 1992a, 1992b) is Moreover, a brand with a strong level of brand awareness denotes that it possesses a good reputation in the market and is simply acceptable to consumers (Gustafson and Chabot, 2007). It is also significant to highlight that brand awareness is associated with the strength of brands in consumers' minds such that brand awareness can be enhanced by firms in promoting their products to consumers (Kim and Kim, 2005). Additionally, continuous visibility alongside reinforcement of familiarity and impressive associations with related offerings and buying experiences can further generate brand awareness (Keller, 1998).

Keller (1993) has conceptualised brand awareness into brand recognition and brand recall. Brand recognition characterises the extent to which consumers are able to recognise the brand as having been seen or heard previously when the brand is cued. Meanwhile, brand recall pertains to the degree in which the brand is generated from memory when clues such as product category or needs fulfilled by the category are presented as a cue. It should be emphasised that the significance of brand recognition and brand recall relies on whether product decisions are made inside or outside the store. Keller (1993) further contended that brand recognition is more crucial than brand recall when making product choices in the store. Alternatively, Hoeffler and Keller (2002) classified brand awareness into two dimensions, namely, depth and breadth. While the depth of brand awareness signifies the tendency of consumers recalling or recognising the brand when need arises, breadth refers to the consumers' likeliness to think of the various settings where the consumption and buying situations can occur. Hoeffler and Keller (2002) also asserted that both the depth and breadth of brand awareness are equally crucial.

In their research, MacDonald and Sharp (2000) suggested that brand awareness affects consumer decision in three ways. First, brand awareness raises the chance for the brand to be included in the consideration set. Second, brand awareness can be employed as a heuristics to make a purchase decision. It has been discovered that consumers typically use heuristics such as purchasing the brand they have heard of, choosing the brand they know, and buying only the brands that are popular and familiar to them (Keller, 1993). Third, brand awareness controls customers' decision-making by influencing the perception of quality (MacDonald and Sharp, 2000). According to Keller (2003), brand awareness offers three advantages to the consumer decision-making process, namely, learning advantages, consideration advantages and choice advantages. It was also found that consumers rely on

brand awareness rather than brand reputation when choosing a brand among other products of the same reputation (Brewer and Zhao, 2010).

In earlier research, Hoyer and Brown (1990) have discovered the connection between purchase decision and brand awareness. Brand awareness can function as an indication of quality and commitment, providing customers with a chance to familiarise with a brand and subsequently assist them in considering the brand at the moment of purchase (Aaker, 1991). A popular brand is more likely to be recognised and distinguished from other competitors and will have higher purchase intention compared to another brand with lower awareness (Aaker, 1991; Dodds *et al.*, 1991; Percy and Rossiter, 1992). Brand awareness is also critical in affecting consumer perceived risk and consumers' level of assurance about their own buying decision. Besides, more recent studies have suggested a similarly significant relationship between brand awareness and purchase intention (Hakala *et al.*, 2012; Malik *et al.*, 2013). Based on the discussion above, the first hypothesis is derived as follows:

H1. Brand awareness has a positive influence on consumers' purchase intention towards skincare products.

Brand association
Brand association represents any element that is identified with the preference of a brand (Aaker, 1991; Keller, 1993). Alternatively, Emari *et al.* (2012) defined brand association as positive or negative information pertaining a brand that is in consumers' mind, i.e. a part that is connected to the node of the brain memory. It has also been contended that brand associations encompass all brand-related thoughts, feelings, perceptions, smells, colours, music, pictures, experiences, beliefs and attitudes (Kotler and Keller, 2006, p. 188). According to Keller (1998), brand association can be made through the association with attitudes, attributes and benefits.

Furthermore, free association can be used to profile brand association by asking subjects what comes to mind when they think of a brand without offering them any cues except for the associated product category. Biel (1991) asserted that these elements in brand association help to establish a brand image, i.e. the perception or emotion that consumers attach to a brand (Dobni and Zinkhan, 1990). Evans *et al.* (2006) claimed that brand image comprises of the functional and symbolic brand. This classification was produced according to the notion that customers purchase not only the products but also the image associated with the items, such as power, wealth, sophistication and, most importantly, identification and connection with other users of the brand.

Additionally, Aaker (1991) discovered that brand associations do offer some benefits to consumers by assisting them to process or retrieve information, differentiating the brand, creating positive attitudes or feelings among consumers, and generating reasons to purchase the brand. Brand association also creates values for a brand by providing a basis for extensions. It was also suggested that brand association is one of the brand equity dimensions (Aaker, 1991), and it can offer a differential advantage to a brand (Rio *et al.*, 2001). Also, Van Osselaer and Janiszewski (2001) asserted that brand association serves as an information collecting tool in performing brand differentiation and brand extension (Aaker, 1996). It was argued that highly effective association facilitates the enhancement of brand and equity (James, 2005). Likewise, brand association assists firms in differentiating and positioning their products as well as creating positive attitudes and beliefs towards the brands (Hal Dean, 2004).

Rio *et al.* (2001) suggested that brand associations are a crucial component in the formation and management of brand equity. This argument is supported by Bridges *et al.* (2000) who have contended that solid, positive associations assist in strengthening brand

and the equity. These claims signify that a strong brand association will produce higher brand equity. It was also found that brand association acts as the foundation for purchase decision and brand loyalty (Aaker, 1991) and similarly, brand association has been declared as a crucial element that influences purchase intention (O'Cass and Lim, 2002). Moreover, O'Cass and Grace (2003) discovered that brand association has a meaningful effect on attitude and purchase intention. Thus, it is further hypothesised that:

H2. Brand association has a positive influence on consumers' purchase intention towards skincare products.

Perceived quality
Zeithaml (1988) described that perceived quality is not the real quality of products or services. Alternatively, it is identified as the customers' general viewpoint towards the products or services of a brand. This argument is supported by Bhuian's (1997) definition of perceived quality as the consumer's judgement on the added values of a product. According to Aaker (1991), positive perceived quality can impact customers' choices, drive consumer purchase decision, facilitate differentiation of brand, enable the execution of brand extension and allow firms to set premium price. Perceived quality is also associated with corporate profitability (Aaker, 1991).

Furthermore, Aaker (1991) expressed that perceived quality is not simply brand association; it is significantly linked to the brand's status, rendering it as another dimension to measure brand equity. Many studies have also justified that perceived quality is measured as an essential dimension for brand equity across various frameworks (Dyson *et al.*, 1996; Farquhar, 1989; Keller, 1993; Erdem *et al.*, 2004). Moreover, Yoo *et al.* (2000) reported that positive perceived quality will boost brand equity considering that it can improve the brand's competitive advantage.

In addition, Jones *et al.* (2002) contended that perceived quality is positively correlated with purchase intention, and this view is supported by more recent research on the influence of brand equity on consumer choice on branded bottled water (Njuguna, 2014). It was found that perceived quality is positively related to consumer decision. Hence, the following hypothesis is proposed:

H3. Perceived quality has a positive influence on consumers' purchase intention towards skincare products.

Brand loyalty
Brand loyalty is defined by Aaker (1991) as a circumstance which displays the tendency of consumers to switch to another brand, particularly when the brand makes a change in price or product features. Oliver (1997) characterised brand loyalty as a sense of commitment to constantly repurchase or repatronise a favoured product or service in the future, regardless of any marketing tactics or situational influences that may act upon switching behaviour. Brand loyalty also implies a situation where consumers with the same past and future purchase recommend others to purchase or they themselves have the intention to purchase more (Aaker, 1992a, 1992b; Keller, 2003). Moreover, brand loyalty represents the attitude of brand preference towards a product (Deighton *et al.*, 1994). Meanwhile, Keller (2003) illustrated brand loyalty in terms of the relationship and relatedness between consumers and a brand; consumers with stronger brand loyalty are claimed to have higher "brand resonance". Assael (1998) described brand loyalty as consumers fulfilling their past

experiences with the same brand which further leads to repeat purchase. Thus, brand loyalty simply denotes that consumers will stick to one brand and not consider other brands when making a purchase (Baldinger and Rubinson, 1996; Cavero and Cebollada, 1998).

Brand loyalty can be understood according to three perspectives, namely behavioural, attitudinal, and choice perspectives (Javalgi and Moberg, 1997). Behavioural perspective pertains to the number of purchases for a certain brand; attitudinal perspective is associated with consumer preference and dispositions towards a brand; choice perspective emphasises on the reasons of certain purchases or choices are made. Contrastingly, Oliver (1997) focused chiefly on the behavioural dimension of brand loyalty, whereas Rossiter and Percy (1987) contended that brand loyalty is frequently represented by a positive attitude towards a brand as well as the constant repeat purchase of the same brand. According to the behavioural perspective, Schoell *et al.* (1990) claimed that brand loyalty refers to the tendency of a buying unit, such as a household to purchase the same brand in a product category over a prescribed period. It is also crucial to discuss brand loyalty based on the attitudinal outlook where it is conceptualised as the extent of deeply held commitment regarding some unique values that are related to the brand (Chaudhuri and Holbrook, 2001). Similarly, Oliver (1997) regarded brand loyalty as the ability for consumers to remain loyal to the main brand. This behaviour can be reflected by consumers' intention to purchase the brand as their first choice despite the marketing efforts of other brands. It was further suggested by Baldinger and Rubinson (1996) that real brand loyalty can only occur when both behavioural and attitudinal elements are present. If consumers are only motivated by either one of these factors, it is considered as false brand loyalty.

Travis (2000) claimed that brand loyalty is "the ultimate objective and meaning of brand equity"; hence, it is considered to be equal to brand equity. Empirical evidence from Solomon and Stuart's (2009) research supported this claim as it was discovered that purchase decision that is based on loyalty might become a habit which results in brand equity. In addition, Aaker (1991) described brand loyalty as consumers' mentality toward a brand that drives them to consistently purchase the same brand. Yoo *et al.* (2000) also claimed that brand loyalty has the ability to influence consumer choice to buy the same product or brand and cease to switch to other brands. Moreover, without making any evaluation, the brand-loyal consumers will simply purchase the brand unquestionably based on prior experiences (Yee and Sidek, 2008), implying that brand loyalty can consequently increase consumers' purchase intention (Malik *et al.*, 2013). This finding was supported by the empirical research conducted by Khan *et al.* (2015) in investigating the relationship between brand equity dimensions and the effect of each dimension on Malaysian consumers' purchase intention in the fashion industry. The outcomes of this study revealed that brand loyalty is the most prominent dimension that influences purchase intention. Therefore, the fourth hypothesis is formulated as follows:

H4. Brand loyalty has a positive influence on consumers' purchase intention towards skincare products.

Research methodology
It is generally acknowledged that the younger generation is image-driven, and they emphasise more on materialistic values, such as money, self-image, and fame (Healy, 2012) (Figure 1). This connotation is perhaps the key reason why the skincare industry is on the rise globally. With regard to the methodology, a total of 150 university students in Melaka, Malaysia, was recruited to examine young consumers' behaviour towards skincare products in this country. The current study has also employed non-probability convenience sampling

Figure 1.
Research framework
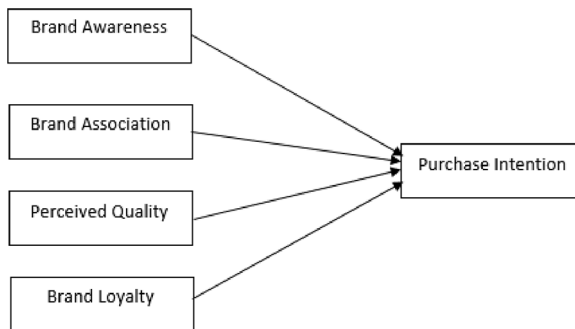
and data was collected using questionnaires that comprised of close-ended questions. Convenience sampling was especially selected because they are easily accessible to researchers (Sekaran and Bougie, 2013). This approach is typically used in exploratory studies as it is not time-consuming nor is it costly in the selection process of a random research sample. More importantly, this sampling technique was chosen because it has been used extensively in many of the similar literature (Ahmad and Sherwani, 2015; Mahfooz, 2015; Khan *et al.*, 2015; Malik *et al.*, 2013). Additionally, the questionnaire was designed to address the data ranging from respondents' demographic information to all independent and dependent variables of this study. Measurement for all the variables was designed in five-point Likert scale with 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree and 5 = strongly agree. The data were further analysed using SmartPLS to perform the measurement model and the structural model.

Results and discussion
Respondents' profile
Table I illustrates that most of the respondents were mainly female (74.7 per cent) within the age group of 18 to 21 years old (61.3 per cent) and the majority of the participants were Chinese participants (86.7 per cent). It was also discovered that in the span of one year, the respondents mostly spend RM51 to RM100 (30.7 per cent) on skincare products in addition to purchasing them three to four times (34 per cent).

Measurement model
The measurement model was evaluated through convergent validity and discriminant validity. The convergent validity was verified by the factor loadings, average variance extracted (AVE), and construct reliability (CR), with a minimum value of 0.7, 0.5 and 0.7 respectively (Hair *et al.*, 2017). It is presented in Table II that the standardised loading factor was greater than 0.7 except for awareness with a standardised factor loading of less than 0.5 which was then deleted. It was also recorded that the AVE obtained were in between 0.691 and 0.879. Similarly, the CR items were within the range of 0.930 to 0.956 (Hair *et al.*, 2017). The convergent validity of these constructs is thus deemed adequate.

Fornell and Larcker (1981) criterion and Heterotrait-monotrait (HTMT) criterion (Henseler *et al.*, 2015) were used to assess discriminant validity. Fornell and Larcker (1981) criterion was examined by comparing the square root of the AVE with the correlations between the constructs. As displayed in Table III, all square roots of AVE (diagonal values) are more than the correlation coefficients between the constructs (off-diagonal values),

Variables	Frequency	(%)
Gender		
Male	38	25.0
Female	112	75.0
Age group		
18-21	95	61.3
22-25	52	34.7
Above 25	6	4.0
Ethnicity		
Malay	10	6.0
Chinese	130	87.0
Indian	10	6.0
Yearly expenditure on skin care product		
RM0-RM50	34	22.7
RM51-RM100	46	30.7
RM101-RM150	26	17.3
RM151-RM200	14	9.3
Above RM200	30	20.0
Yearly purchase frequency of skin care product		
1-2 times	42	28.0
3-4 times	51	34.0
5-6 times	32	21.3
More than 6 times	25	16.7

Table I.
Respondents' profile

suggesting that discriminant validity is adequate. In contrast, HTMT can be assessed by comparing the values obtained with the required threshold of HTMT$_{.85}$ (Kline, 2011) or HTMT$_{.90}$ (Gold *et al.*, 2001) and HTMT$_{inference}$ did not contain value 1. Table IV illustrated that all values passed HTMT$_{.90}$ and the HTMT$_{inference}$ criterion indicating that discriminant validity is established. It was further discovered that the collinearity problem did not exist with all the VIF values for independent variables were less than 5 as shown in Table V (Hair *et al.*, 2017).

Structural model
Figure 2 demonstrates the structural model that was performed using a bootstrapping procedure with a resample of 5,000 based on the suggestion made by Hair *et al.* (2017). The results revealed that the R^2 value for purchase intention was 0.697where it correlated with Chin's (1998) guideline where a model is classified as being substantial (0.67), moderate (0.33), and weak (0.19). All paths tested in the structural model were significant with the *t-values* of *H1* and *H2* greater than the critical value of 1.6649, while the *t-values* for *H3* and *H4* were greater than 2.3263. Furthermore, the standardised beta obtained were 0.224 (brand association), 0.208 (brand awareness), 0.178 (brand loyalty) and 0.295 (perceived quality). It was further discovered that all variables tested have a positive effect on purchase intention.

Additionally, all effect sizes (f^2) were greater than 0.02 in this study (Cohen, 1988). A blindfolding procedure was used to assess the predictive relevance with Q^2 value of 0.573. It should also be noted that a model is said to have predictive relevance for a particular endogenous construct when Q^2 is greater than 0 (Hair *et al.*, 2017).

Construct	Items	Loadings	CR	AVE
Brand association	association1	0.878	0.950	0.732
	association2	0.832		
	association3	0.883		
	association4	0.879		
	association5	0.870		
	association6	0.820		
	association7	0.824		
Brand awareness	awareness1	0.862		
	awareness2	0.874	0.930	0.691
	awareness4	0.694		
	awareness5	0.870		
	awareness6	0.850		
	awareness7	0.823		
Brand loyalty	loyalty1	0.770	0.947	0.721
	loyalty2	0.895		
	loyalty3	0.893		
	loyalty4	0.861		
	loyalty5	0.811		
	loyalty6	0.861		
	loyalty7	0.844		
Perceived quality	perceived1	0.897	0.946	0.815
	perceived2	0.944		
	perceived3	0.925		
	perceived4	0.842		
Purchase intention	purchase1	0.928	0.956	0.879
	purchase2	0.957		
	purchase3	0.927		

Table II.
Measurement model

Construct	1	2	3	4	5
1. Brand association	*0.856*				
2. Brand awareness	0.789	*0.831*			
3. Brand loyalty	0.778	0.773	*0.849*		
4. Perceived quality	0.822	0.822	0.780	*0.903*	
5. Purchase intention	0.770	0.765	0.744	0.789	*0.938*

Note: Values on the diagonal (italic) represent the square root of the AVE, while the off-diagonals represent correlations

Table III.
Discriminant validity
using Fornell–
Larcker criterion

Construct	1	2	3	4	5
1. Brand association					
2. Brand awareness	0.849				
	$CI_{0.90}$ (0.758, 0.911)				
3. Brand loyalty	0.823	0.83			
	$CI_{0.90}$ (0.743, 0.883)	$CI_{0.90}$ (0.747, 0.887)			
4. Perceived quality	0.882	0.894	0.833		
	$CI_{0.90}$ (0.829, 0.924)	$CI_{0.90}$ (0.851, 0.927)	$CI_{0.90}$ (0.739, 0.898)		
5. Purchase intention	0.822	0.826	0.789	0.851	
	$CI_{0.90}$ (0.710, 0.896)	$CI_{0.90}$ (0.745, 0.884)	$CI_{0.90}$ (0.700, 0.858)	$CI_{0.90}$ (0.768, 0.909)	

Table IV.
Discriminant validity
using HTMT
criterion

170

Hypothesis	Relationship	Std. beta	Std. error	*t*-value	Decision	R^2	Q^2	f^2	VIF
H1	Brand association → Purchase intention	0.224	0.125	1.798*	Supported	0.697	0.573	0.043	3.838
H2	Brand awareness → Purchase intention	0.208	0.121	1.714*	Supported			0.038	3.792
H3	Brand loyalty → Purchase intention	0.178	0.076	2.343**	Supported			0.032	3.238
H4	Perceived quality → Purchase intention	0.295	0.103	2.869**	Supported			0.067	4.331

Notes: **$p < 0.01$, *$p < 0.05$

Table V.
Results of partial
least square
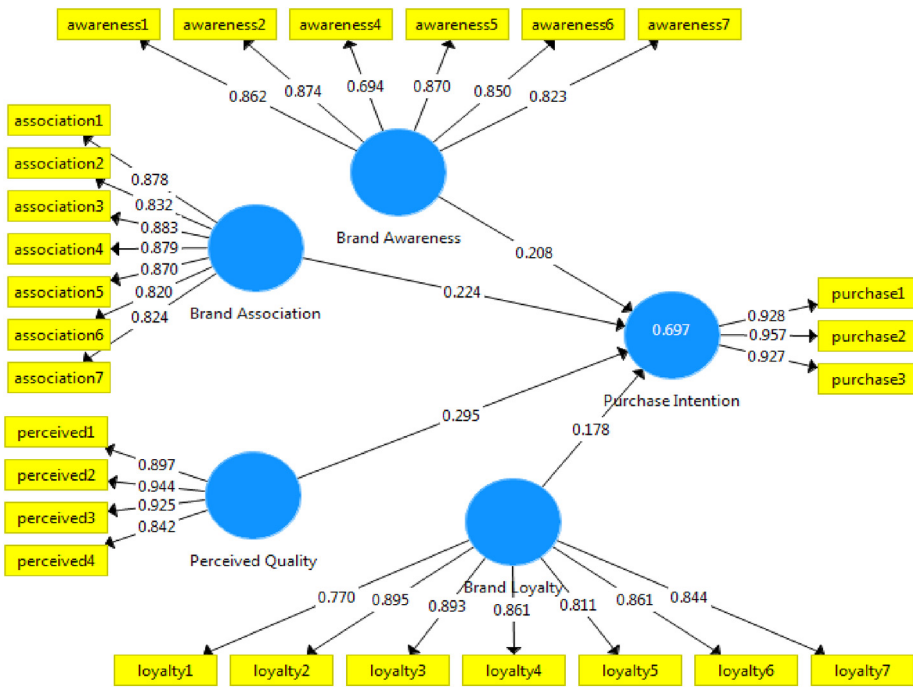
Figure 2.
Structural model for
this study

The results revealed that brand awareness has a positive influence on consumers' purchase intention and this particular finding is consistent with other research which previously confirmed the association between brand awareness and purchase intention (Njuguna, 2014; Hakala *et al.*, 2012; Malik *et al.*, 2013). According to Rossiter and Percy (1987), both communication and transaction will not occur if there is no brand awareness. It has also been reported that brand awareness will influence purchase intention as it raises the chance for the brand to be included in the consideration set (Keller, 1993). When consumers have awareness about a brand, they can easily recall some of the characteristics of the brand. Accordingly, during the decision-making process on purchasing certain product category, the ability to recall the brand as the member of the product category will increase the probability for it to be included in the consideration set. Brand awareness can also be used as a heuristic in making a purchase decision; a popular brand is more likely to be recognised and distinguished from competitors and will have higher purchase intention compared to the brand with low awareness (Aaker, 1991; Dodds *et al.*, 1991; Percy and Rossiter, 1992). Furthermore, brand awareness impacts customer decision making by affecting the perception of quality (MacDonald and Sharp, 2000). Marketing communication tools can generate brand awareness effectively as they provide assurance of product quality and credibility which subsequently helps diminish product evaluation and selection risks when purchasing a product (Aaker, 1996; Buil *et al.*, 2013; Keller and Lehmann, 2003; Rubio *et al.*, 2014). Hence, it can be deduced that brand awareness is a factor that has a significant influence on consumers' purchase intention.

Brand association has also been proven to have a positive relationship with consumers' purchase intention (Perera and Dissanayake, 2013; Roozy *et al.*, 2014). Brand association

consists of all brand-related elements which function to help consumers establish either positive or negative brand image. It is argued that when buying a product, consumers are simultaneously purchasing the image associated with it (Evans *et al.*, 2006). Meanwhile, Aaker (1991) stated that brand association offers some benefits to consumers by assisting them to process or retrieve information, differentiating the brand, creating positive attitudes or feelings among consumers, and generating reasons to purchase the brand. Brand association will generate either a positive or negative brand image which affects the relationship consumers establish with the brand in terms of emotional and perceptible attachment, consequently influencing consumers' purchase intention. Therefore, it is crucial for firms to formulate relevant strategies in ensuring that their customers will have a positive brand association.

The current study has also discovered that perceived quality has a positive relationship with consumers' purchase intention and this result correlates with that of previous research, i.e. perceived quality has a significant effect on consumers' purchase intention (Saleem *et al.*, 2015; Asshidin *et al.*, 2016; Eze *et al.*, 2012). Positive perceived quality can impact customers' choices, drive consumer purchase decision, allow firms to set premium price, and enable the differentiation of brand as well as the execution of brand extension. Aaker's (1991) study found that quality is the most critical criterion when making choices. Previous literature also justified that perceived quality is considered as an essential dimension for brand equity across various frameworks (Dyson *et al.*, 1996; Farquhar, 1989; Keller, 1993) as perceived quality strategically affects brand equity by diminishing the perceived risk (Aaker, 1991; Erdem *et al.*, 2004; Keller, 1993). Moreover, Yoo (2000) noted that positive perceived quality will boost brand equity considering that perceived quality is part of the brand equity which causes consumers to choose the particular brand over the competitors' brand. Hence, firms must be able to establish the perceived quality attributes that are significant to both the industry and the consumers. It is also vital for firms to determine the cues and signals that are available for perceived quality as product quality is often judged according to the wide range of information cues that are retrieved from the product.

The present study further discovered that brand loyalty has a positive relationship with consumers' purchase intention, correlating with previous research which has suggested that brand loyalty has a significant influence on purchase intention (Malik *et al.*, 2013; Roozy *et al.*, 2014; Khan *et al.*, 2015). As per Yoo *et al.* (2000), brand-loyal consumers will choose to buy the same product or brand and cease to switch to other brands. Despite the marketing tactics or situational influences that may act upon switching behaviour, brand-loyal consumers have a sense of commitment to constantly repurchase or repatronise a favoured brand, product or service in the future (Oliver, 1997). These consumers will not assess the brand; instead, they will purchase it unquestionably based on past experiences with the brand (Yee and Sidek, 2008). It was also found that loyal customers will purchase more frequently compared to their non-loyal counterparts (Bowen and Shoemaker, 1998). In short, loyal consumers will choose to buy the same brand persistently and cease to switch to other brands. Consequently, the consumers would agree to pay a premium price for the brand in addition to making brand recommendations to new consumers. Thus, firms should retain consumers' brand loyalty by constantly improving their brand management strategy.

Implications

This research provides several benefits for future studies. First, this study is one of the academic works that discovers a positive correlation between brand awareness, brand association, perceived quality, brand loyalty and purchase intention. Although there have been similar papers that discussed the impact of brand equity components on consumers'

purchase intention, the investigation on the skincare industry is still sparse. Therefore, the current study specifically aims to provide a better understanding of the effect of these brand equity components on consumers' purchase intention in the skincare industry.

The overview of the current situation in the skincare industry was also addressed in this study, making it a useful reference or data guideline for the forthcoming research. Besides, the present paper has also elaborated on the relevant information pertaining to the current market trends and market size as well as consumers' purchase intention in the skincare industry.

Furthermore, this research has presented comprehensive charts and statistics that enable researches to compare and contrast the market trends and economic situation of different countries and generations. Disparities in consumer behaviour and preferences of different generations can also be evaluated in further details.

As no study is totally perfect such that some missing elements or unresolved problems may be present in existing literature, the gaps in academic research should be addressed by more up-to-date papers. Hence, this study contributes to the field of knowledge on consumers' purchase intention in the skincare industry by adding insightful input and providing a deeper understanding of the existing studies.

It should be emphasised that in the current highly competitive skincare industry, strong brand management becomes a vital step in securing a huge market share. Thus, based on the outcomes of this study, firms are able to recognise the significance of the four brand equity components on consumers' purchase intention. The present research further provides firms with an understanding of the market trend and consumer preferences. In this fast-paced competitive skincare industry, it is important for firms to move along with the current trend and consumer preferences in constructing effective and efficient marketing mixes that fulfil the consumers' needs and wants. Accordingly, the paper is able to facilitate firms in increasing their sales and market share by offering the right brand features that stimulate consumers' purchasing behaviour.

The findings above may also provide insights to those who are interested in investing in the skincare industry. Marketers will be able to formulate a proper marketing strategy to delve into the highly competitive yet profitable skincare industry.

Limitations and future recommendations

Several limitations of this study are outlined as follows. First, the adoption of non-probability convenience sampling may result in the under-representation of the population being studied. This method also limits the generalisability and representativeness of the sample as a whole population.

As this research mainly focuses on skincare industry *per se*, the findings are limited only to explaining the nature of this industry. The results cannot be generalised to other industries as each industry has differing consumers' trends and preferences.

There is also a lack of diversity in the background of respondents. Of the majority of the respondents in this study were Chinese and female respondents were more than their male counterparts. Thus, this lack of diversity in ethnicity and gender may affect the results considering that respondents of different ethnicity and gender may have different purchasing behaviour based on their preferences, needs, and attention when making a purchase decision.

Several recommendations are presented for upcoming research related to this topic. First, future studies are advised to employ a probability sampling method in evaluating the consumers' purchase intention towards skincare products. This sampling method provides

equal and known chances to all elements in the intended population to be chosen as a sample, generating a more accurate representation of the population.

Furthermore, as this research only focuses on skincare industry, similar empirical investigation can be carried out to explore other industries, such as clothing, services, food and beverages, and fast moving consumer goods. This further exploration will contribute to a deeper understanding of the significance of brand equity elements on consumers' purchase intention towards different industries.

The present research only focused on the response of university students within the age range of 18 to above 25 years old. Hence, forthcoming research can delve into a wider age group so that the effect of age groups on the purchase intention of skincare products can be evaluated.

Lastly, as this research comprised of more Chinese females, future studies should consider to include more respondents of other ethnicity and also recruit more male respondents. These factors will contribute to producing a more convincing outcome that can generalise the whole university students' population.

Conclusion

It has been revealed that all four variables tested in this study have a positive influence on university students' purchase intention. Specifically, perceived quality was discovered to be the most significant element in affecting consumers' purchase intention towards skincare products. Hence, it is evident that firms must establish the perceived quality attributes that are essential to both the industry and the consumers so that competitive advantage can be obtained over the competitors. Nevertheless, the important roles played by the rest of the factors should not be ignored. Brand association helps consumers to produce a positive or negative brand image which subsequently affects the relationship consumers have established with the brand, further influencing consumers' purchase intention. Brand awareness is equally crucial because any communication and transaction will not happen if there is no brand awareness. Firms should also preserve consumers' brand loyalty as loyal customers will constantly repurchase the same brand and will not switch to another brand. Loyal customers are also more willing to pay a premium price for the brand and may further recommend the brand to new consumers, producing a significant impact on purchase intention towards the brand. In conclusion, with the increasingly intense competition in the skincare industry, consumers' behaviour, preference, and needs must be identified and understood to design products that will constantly satisfy consumers. Building a strong brand undoubtedly becomes a pivotal step to combat the competitions and to stand out from the crowd.

References

Aaker, D.A. (1991), *Managing Brand Equity. Capitalizing on the Value of Brand Name*, The Free Press, New York, NY.

Aaker, D.A. (1992a), "The value of brand equity", *Journal of Business Strategy*, Vol. 13 No. 4, pp. 27-32.

Aaker, D.A. (1992b), "Managing the most important assets: brand equity", *Planning Review*, Vol. 20 No. 5, pp. 56-58.

Aaker, D.A. (1996), "Measuring brand equity across products and markets", *California Management Review*, Vol. 38 No. 3.

Ahmad, F. and Sherwani, N.U. (2015), "An empirical study on the effect of brand equity of mobile phones on customer satisfaction", *International Journal of Marketing Studies*, Vol. 7 No. 2, p. 59.

Allied Market Research (2017), "Skin care products market: by type (face cream, and body lotion) and geography – global opportunity analysis and industry forecast, 2014-2022", available at: www. alliedmarketresearch.com/skin-care-products-market

Ashill, N.J. and Sinha, A. (2004), "An Exploratory study into the impact of components of brand equity and country of origin effects on purchase intention", *Journal of Asia – Pacific Business*, Vol. 5 No. 3, p. 27.

Assael, H. (1998), *Consumer Behavior and Marketing Action*, 6th ed., South Western College Publishing, Cincinatti, Ohio.

Asshidin, N.H.N., Abidin, N. and Borhan, H.B. (2016), "Perceived quality and emotional value that influence consumer's purchase intention towards American and local products", *Procedia Economics and Finance*, Vol. 35, pp. 639-643.

Baldinger, A.L. and Rubinson, J. (1996), "Brand loyalty: the link between attitude and behavior", *Journal of Advertising Research*, Vol. 36 No. 6, pp. 22-35.

Bhuian, S.N. (1997), "Marketing cues and perceived quality: perceptions of Saudi consumers toward products of the US, Japan, Germany, Italy, U.K. and France", *Journal of Quality Management*, Vol. 2 No. 2, pp. 217-235.

Biel, A.L. (1991), "The brandscape: converting brand image into equity", *Journal: ADMAP*, Vol. 26 No. 10.

Blackwell, R.D., Miniard, P.W. and Engel, J.F. (2001), *Consumer Behavior 9th*, South-Western Thomas Learning, Mason, OH.

Bowen, J. and Shoemaker, S. (1998), "The antecedents and consequences of customer loyalty", *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 39 No. 1, pp. 12-25.

Brewer, A. and Zhao, J. (2010), "The impact of a pathway college on reputation and brand awareness for its affiliated university in Sydney", *International Journal of Educational Management*, Vol. 24 No. 1, pp. 34-47.

Bridges, S., Keller, K.L. and Sood, S. (2000), "Communication strategies for brand extensions: enhancing perceived fit by establishing explanatory links", *Journal of Advertising*, Vol. 29 No. 4, pp. 1-11.

Buil, I., De Chernatony, L. and Martinez, E. (2013), "Examining the role of advertising and sales promotions in brand equity creation", *Journal of Business Research*, Vol. 66 No. 1, pp. 115-122.

Cavero, S. and Cebollada, J. (1998), "Brand choice and marketing strategy: an application to the market", *Journal of International Consumer Marketing*, Vol. 10 Nos 1/2, pp. 57-71.

Chang, H.H. and Liu, Y.M. (2009), "The impact of brand equity on brand preference and purchase intentions in the service industries", *The Service Industries Journal*, Vol. 29 No. 12, p. 1687.

Chaudhuri, A. and Holbrook, M.B. (2001), "The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty", *Journal of Marketing*, Vol. 65 No. 2, pp. 81-93.

Chin, T.K. and Harizan, S.H.M. (2017), "Factors influencing consumers' purchase intention of cosmetic products in Malaysia", *International Journal of Business and Innovation*, Vol. 3 No. 1, pp. 1-15.

Cohen, J. (1988), *Statistical Power Analysis for the Behaviors Science*, 2nd ed., Laurence Erlbaum Associates, Hillsdale, NJ.

Deighton, J., Henderson, C.M. and Neslin, S.A. (1994), "The effects of advertising on brand switching and repeat purchasing", *Journal of Marketing Research*, Vol. 31 No. 1, pp. 28-43.

Dobni, D. and Zinkhan, G.M. (1990), *In Search of Brand Image: A Foundation Analysis*, ACR North American Advances.

Dodds, W.B., Monroe, K.B. and Grewal, D. (1991), "Effects of price, brand, and store information on buyers' product evaluations", *Journal of Marketing Research*, Vol. 28 No. 3, pp. 307-319.

Dyson, P., Farr, A. and Hollis, N.S. (1996), "Understanding, measuring, and using brand equity", *Journal of Advertising Research*, Vol. 36 No. 6, pp. 9-22.

Emari, H., Jafari, A. and Mogaddam, M. (2012), "The mediatory impact of brand loyalty and brand image on brand equity", *African Journal of Business Management*, Vol. 6 No. 17, pp. 5692-5701.

Engel, J.F., Blackwell, R.D. and Miniard, P.W. (1995), *Consumer Behavior*, 8th ed., The Dryden Press, New York, NY. Evanschitzky, H. and Wunderlich, M. (2006). An examination of moderator effects in the four-stage loyalty model, *Journal of Service Research*, Vol. 8 No. 4, pp. 330-345.

Erdem, T., Zhao, Y. and Valenzuela, A. (2004), "Performance of store brands: a cross-country analysis of consumer store-brand preferences, perceptions, and risk", *Journal of Marketing Research*, Vol. 41 No. 1, pp. 86-100.

Euromonitor International (2016), *The Beauty and Personal Care Market: Global and Regional Overview*, Euromonitor International, available at: www.euromonitor.com

Evans, M., Jamal, A. and Foxall, G. (2006), *Consumer Behaviour*, John Wiley and Sons, UK.

Eze, U., Tan, C. and Yeo, A. (2012), "Purchasing cosmetic products: a preliminary perspective of Gen-Y", *Contemporary Management Research*, Vol. 8 No. 1, pp. 51-60.

Farquhar, P.H. (1989), "Managing brand equity", *Marketing Research*, Vol. 1 No. 3.

Fishbein, M. and Ajzen, I. (1977), "Belief, attitude, intention, and behavior: an introduction to theory and research", *Journal of Business Venturing*, Vol. 5, pp. 177-189.

Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.

Gold, A.H., Malhotra, A. and Segars, A.H. (2001), "Knowledge management: an organizational capabilities perspective", *Journal of Management Information Systems*, Vol. 18 No. 1, pp. 185-214.

Gustafson, T. and Chabot, B. (2007), "Brand awareness", *Cornell Maple Bulletin*, Vol. 105, pp. 1-5.

Hair, J.F., Jr, Hult, G.T.M., Ringle, C. and Sarstedt, M. (2017), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Sage Publications, Thousand Oaks, CA.

Hakala, U., Svensson, J. and Vincze, Z. (2012), "Consumer-based brand equity and top-of- mind awareness: a cross-country analysis", *Journal of Product and Brand Management*, Vol. 21 No. 6, pp. 439-451.

Hal Dean, D. (2004), "Evaluating potential brand associations through conjoint analysis and market simulation", *Journal of Product & Brand Management*, Vol. 13 No. 7, pp. 506-513.

Healy, M. (2012), "Millennials might not be so special after all, study finds", 49 USATODAY.COM, available at: http://usatoday30.usatoday.com/news/health/wellness/story/2012-03-15/Millennials-51might-not-be-so-special-after-all-study-finds/5

Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.

Hoeffler, S. and Keller, K.L. (2002), "Building brand equity through corporate societal marketing", *Journal of Public Policy and Marketing*, Vol. 21 No. 1, pp. 78-89.

Hoyer, W.D. and Brown, S.P. (1990), "Effects of brand awareness on choice for a common repeat-purchase product", *Journal of Consumer Research*, Vol. 17 No. 2, pp. 141-148.

Jalilvand, M.R., Samiei, N., Mahdavinia, S.H. and Hamza, V.K. (2011), "The effect of brand equity components on purchase intention: an application of Aaker's model in the automobile industry", *International Business and Management*, Vol. 2 No. 2, pp. 149-158.

James, D. (2005), "Guilty through association: brand association transfer to brand alliances", *Journal of Consumer Marketing*, Vol. 22 No. 1, pp. 14-24.

Javalgi, R.G. and Moberg, C.R. (1997), "Service loyalty: implications for service providers", *Journal of Services Marketing*, Vol. 11 No. 3, pp. 165-179.

Jones, M.A., Mothersbaugh, D.L. and Beatty, S.E. (2002), "Why customers stay: measuring the underlying dimensions of services switching costs and managing their differential strategic outcomes", *Journal of Business Research*, Vol. 55 No. 6, pp. 441-450.

Keller, K.L. (1993), "Conceptualizing, measuring, and managing customer-based brand equity", *Journal of Marketing*, Vol. 57 No. 1, pp. 1-22.

Keller, K.L. (1998), *Strategic Brand Management: Building, Measuring and Managing Brand Equity*, Prentice Hall International, London.

Keller, K.L. and Lehmann, D.R. (2003), "How do brands create value?", *Marketing Management*, Vol. 12 No. 3, p. 26.

Khan, N., Rahmani, S.H.R., Hoe, H.Y. and Chen, T.B. (2015), "Causal relationships among dimensions of consumer-based brand equity and purchase intention: fashion industry", *International Journal of Business and Management*, Vol. 10 No. 1, pp. 172-181.

Kim, H.B. and Kim, W.G. (2005), "The relationship between brand equity and firms' performance in luxury hotels and chain restaurants", *Tourism Management*, Vol. 26 No. 4, pp. 549-560.

Kimery, K.M. and McCord, M. (2002), "Third-party assurances: the road to trust in online retailing", *Proceedings of the 35th Annual HI International Conference on System Sciences, IEEE*, p. 10.

Kline, R.B. (2011), "Convergence of structural equation modeling and multilevel modeling".

Kotler, P. (2003), *Marketing Management*, 11th ed., Prentice Hall, NJ.

Kotler, P. and Keller, K.L. (2006), *Marketing Management*, 12th ed., Prentice-Hall of India, New Delhi.

Li, X. (2004), "How brand knowledge influences consumers' purchase intentions", Doctoral dissertation, Auburn University.

MacDonald, E.K. and Sharp, B.M. (2000), "Brand awareness effects on consumer decision making for a common, repeat purchase product: a replication", *Journal of Business Research*, Vol. 48 No. 1, pp. 5-15.

Mahfooz, Y. (2015), "Brand equity-consequence relationship: evidence from automobile industry", *International Journal of Business and Management*, Vol. 10 No. 3, p. 81.

Malik, M.E., Ghafoor, M.M., Hafiz, K.I., Riaz, U., Hassan, N.U., Mustafa, M. and Shahbaz, S. (2013), "Importance of brand awareness and brand loyalty in assessing purchase intentions of consumer", *International Journal of Business and Social Science*, Vol. 4 No. 5.

Mathur, A. (1999), "Incorporating choice into an attitudinal framework: cross-cultural extension and additional findings", *Journal of International Consumer Marketing*, Vol. 10 No. 4, pp. 93-110.

Njuguna, R.K. (2014), "The influence of brand equity on consumer choice in branded bottled water among supermarket customers in Nairobi Central business district", Kenya (Doctoral dissertation), Kenyatta University.

O'Cass, A. and Grace, D. (2003), "An exploratory perspective of service brand associations", *Journal of Services Marketing*, Vol. 17 No. 5, pp. 452-475.

O'Cass, A. and Lim, K. (2002), "The influence of brand associations on brand preference and purchase intention", *Journal of International Consumer Marketing*, Vol. 14 Nos 2/3, pp. 41-71.

Oliver, R.L. (1997), *Satisfaction: A Behavioral Perspective on the Consumer*, McGraw-Hill, New York, NY.

Percy, L. and Rossiter, J.R. (1992), "A model of brand awareness and brand attitude advertising strategies", *Psychology and Marketing*, Vol. 9, pp. 263-274.

Perera, W.L.M.V. and Dissanayake, D.M.R. (2013), "The impact of brand awareness, brand association and brand perceived quality on female consumers' purchase decisions of foreign makeup products (a study of youth segment)", *Conference Proceedings of 4th International Conference on Business and Information (ICBI)*, University of Kelaniya, Sri Lanka.

Rio, A., Vazquez, R. and Iglesias, V. (2001), "The role of the brand name in obtaining differential advantages", *Journal of Product and Brand Management*, Vol. 10 No. 7, pp. 452-465.

Roozy, E., Arastoo, M.A. and Vazifehdust, H. (2014), "Effect of brand equity on consumer purchase intention", *Indian Journal of Scientific Research*, Vol. 6 No. 1, pp. 212-217.

Rossiter, J.R. and Percy, L. (1987), *Advertising and Promotion Management*, McGraw-Hill Book Company, US.

Rubio, N., Oubina, J. and Villasenor, N. (2014), "Brand awareness–brand quality inference and consumer's risk perception in store brands of food products", *Food Quality and Preference*, Vol. 32, pp. 289-298.

Saleem, A., Ghafar, A., Ibrahim, M., Yousuf, M. and Ahmed, N. (2015), "Product perceived quality and purchase intention with consumer satisfaction", *Global Journal of Management and Business Research: E Marketing*, Vol. 15 No. 1, pp. 21-28.

Schiffman, L.G. and Kanuk, L.L. (2000), *Consumer Behavior*, 7th ed., *Prentice Hall*, *New York, NY*, pp. 15-36.

Schoell, W.F., Guiltinan, J.P. and Pritchett, B.M. (1990), *Marketing: Contemporary Concepts and Practices*, Allyn and Bacon.

Sekaran, U. and Bougie, R. (2013), *Research Methods for Business: A Skill-Building Approach*, 6th ed., Wiley, New York.

Solomon, M.R. and Stuart, E.W. (2002), *Marketing: Real People, Real Choice*, 2nd ed., Prentice-Hall, Englewood Cliffs, NJ.

Travis, D. (2000), *Emotional Branding: How Successful Brands Gain the Irrational Edge*, Prima Pub.

Van Osselaer, S.M. and Janiszewski, C. (2001), "Two ways of learning brand associations", *Journal of Consumer Research*, Vol. 28 No. 2, pp. 202-223.

Yee, A.F. and Sidek, B. (2008), "Influence of brand loyalty on consumer sportswear", *International Journal of Economics and Management*, Vol. 2 No. 2, pp. 221-236.

Yoo, B., Donthu, N. and Lee, S. (2000), "An examination of selected marketing mix elements and brand equity", *Journal of the Academy of Marketing Science*, Vol. 28 No. 2, pp. 195-211.

Zeithaml, V.A. (1988), "Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence", *Journal of Marketing*, Vol. 52 No. 3, pp. 2-22.

Further reading

Assael, H. (1984), *Consumer Behavior and Marketing Action*, Kent Pub. Co.

Dosm.gov.my (2019), "Department of statistics Malaysia official portal", available at: www.dosm.gov. my/v1/

Sekaran, U. and Bougie, R. (2010), *Research Methods for Business: A Skill-Building Approach*, 5th ed., John Wiley and Sons, Haddington.

U.S Department of Commerce (2015), "Cosmetics and toiletries market overviews 2015", U.S Department of Commerce, pp. 51-60.

Corresponding author
Jia En Lee can be contacted at: jiaenlee14@gmail.com