



ISSN: 0976-3376

Available Online at <http://www.journalajst.com>

ASIAN JOURNAL OF
SCIENCE AND TECHNOLOGY

Asian Journal of Science and Technology
Vol. 11, Issue, 09, pp.11221-11228, September, 2020

RESEARCH ARTICLE

INFLUENCING FACTORS FOR WILLINGNESS TO PAY OF CHINESE CONSUMERS FOR ORGANIC SKIN CARE PRODUCTS FROM PRODUCT QUALITY IN WUHAN CITY

Yue Huang¹ and Suo Lu²

¹Stamford International University

²Lecturer in Doctoral Program of Stamford International University

ARTICLE INFO

Article History:

Received 07th June, 2020
Received in revised form
19th July, 2020
Accepted 24th August, 2020
Published online 30th September, 2020

Key words:

Chinese, Organic Skin Care Products,
Perceived Quality, Quality Cues,
Willingness to Pay.

ABSTRACT

This research study aims to investigate how quality cues (price premium, packaging, natural ingredient, and sensory appeal) affect perceived quality and customer purchase intention toward organic skin care products in Chinese context based on a customer perspective. This research used a quantitative design by developing questionnaires to collect data through the snowball sampling approach from 410 respondents who had bought organic skin care products within the past six months in Wuhan City. Multiple regression is employed to identify the variables from the influence of the products aspects affecting the customer's willingness to pay for the organic skin care products. The results indicate that sensory appeals and natural ingredient are two prominent quality cues that affect the customers' perceived quality of organic skin care products. Different from previous studies, the results of this study show that these two intrinsic quality cues are more important in influencing consumers' organic purchasing decisions, but price premium and packaging these two factors have no influence on consumers' organic skin care purchasing decisions. The results provide valuable insights for organic marketers and manufacturers to develop effective communication and product development strategies.

Citation: Yue Huang and Suo Lu. 2020. "Influencing factors for willingness to pay of chinese consumers for organic skin care products from product quality in wuhan city", *Asian Journal of Science and Technology*, 11, (08), 11221-11228.

Copyright © 2020, Yue Huang and Suo Lu. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Due to rising concerns in the last decades with health and food safety and the steady development of a 'go green' consciousness among consumers worldwide, organic products have become the fastest growing segment in the global skin care industry (PR Newswire, 2013). Organic skin care is generally defined as skin care products which contain organically grown ingredients that are free from pesticides. Organic products are deemed to be more beneficial for the skin, as it is presumed there are little to no harsh chemical ingredients. (Ghazali, Soon, Mutum, & Nguyen, 2017). Because of technical difficulties inherent in organic farming, the production costs of organically-grown products generally are higher than those of conventional products and the yield lower (Bonti-Ankomah & Yiridoe, 2006), which means that organic products are sold at a price premium over and above the "fair" price. (Van Doorn & Verhoef, 2015). This is justified by the "true" value of the product (Rao & Bergen, 1992). Given this price differential, how to persuade consumers to buy organic skin care products at a price premium has become a key challenge for marketers.

*Corresponding author: Yue Huang,
Stamford International University.

Prior research, however, indicates that when consumers perceive significant differences between the quality of two brands, they are willing to pay a price premium for the one which they perceive to be a better-quality product (Steenkamp, 1990; Steenkamp, Van Heerde, & Geyskens, 2010). This conclusion has been confirmed by the findings of a meta-analysis of 150 papers conducted from 1991 to 2016 (Massey, O'Cass, & Otahal, 2018). They determined that consumers are quite willing to substitute conventional foods for organic alternatives when there are significant differences between them. In spite of the growing body of literature on organic products, a review of the existing studies reveals that several research gaps remain in our understanding of this market. They have yet to be addressed. First, there is a dearth of research on organic skin care products (Kim & Chung, 2011; Schleenbecker & Hamm, 2013; Ghazali *et al.*, 2017; Hus, Chang, & Yansritakul, 2017). Extant research has mainly focused on food products (e.g., Gonçalves, Lourenço, & Silva, 2016; Singh & Verma, 2017; Wheeler, Gregg, & Singh, 2019). Second, a large portion of the research studies on organic product purchasing behavior relies on the Theory of Planned Behavior or the Theory of Consumption Values and examines the factors at play from a consumer side (Lin & Huang, 2012; Gonçalves *et al.*, 2016; Yadav & Pathak, 2016; Ghazali *et al.*, 2017; Hus *et al.*, 2017).

Therefore, these studies may therefore provide limited perspective on our understanding of consumers' organic buying behavior as they ignore the influence of the products. On the other hand, research based on a product perspective is likely to broaden our understanding of consumers' organic purchasing behavior with additional insights and to help marketers and manufacturers tailor products that are most preferred by consumers. Third, there are some conflicting results found in the existing literature. According to some researchers, this may be due to isolation in examining the effects of consumer characteristics and product attributes on purchase behavior (Steenkamp & Gielens, 2003; Van Doorn & Verhoef, 2015). Moreover, while there is a wide body of current literature explaining consumers' purchasing behavior in countries in which organic markets are already well developed (e.g., Gleim, Smith, Andrews, & Cronin, 2013; Lee & Yun, 2015; Van Doorn & Verhoef, 2015; Wheeler *et al.*, 2019), some developing countries such as China have less organic history about consumer behavior.

Research Objectives

- To identify underlying quality cues that contribute to consumers' willingness to pay for the organic skin care products in Wuhan City, China;
- To investigate how consumers process various product cues to form perceptions of product quality;
- To develop and empirically test a conceptual model based on the Chinese context.

LITERATURE REVIEW AND HYPOTHESIS

Perceived Quality

Perceived quality can be defined as "quality judgments that are dependent on the perceptions, needs, and goals of the consumer" (Steenkamp, 1990, p. 310). Perceived quality is generally considered to be an overall, global concept that is hard to evaluate directly and one that needs to be inferred from a number of surrogates or indicators (Steenkamp, 1990; Ophuis & Van Trijp, 1995). In other words, consumers cannot develop quality impressions of a product merely based on direct observation. This may be especially true of organic products. Given their credence nature, their true quality is difficult to verify not only before but also after the consumption (Ford, Smith, & Swasy, 1988; Anderson & Philipsen, 1998). Consumers may not be able to judge whether a product is truly organic, even after they consume it. The Cue Utilization Theory views products as an array of informational cues that serve as surrogate indicators of quality to consumers (Cox, 1967; Olson, 1972). Thus, in order to cope with uncertainty or with the asymmetry of information associated with the consumption of such products, consumers may rely on these cues to predict a product's performance (Cox, 1967). Consumers tend to rely on the predictive and confidence values of the product cues to determine whether a cue will be used. The Predictive Value (PV) of a cue is similar to the diagnosticity of the cue. It is the degree to which consumers associate a given cue with product quality. It indicates the reliability of a cue and the potential that using it would lead to a successful task (Dick, Chakravarti, & Biehal 1990). As to the confidence value (CV) of a cue, it is the degree to which consumers have confidence in their ability to use and judge that cue accurately (Cox 1967; Olson 1972).

It is therefore assumed that cues characterized by high CV and high PV have the greatest weight in the quality assessment process.

Willingness to Pay (WTP): Willingness to pay (WTP) is an important factor that depends on whether a person is satisfied with a specific product or service at a certain pricing level. A person's WTP is determined by personal perspective toward the worthiness of the product that the person will purchase (Rödiger, Plaßmann, & Hamm, 2016). This technique originally was employed to measure environmental values in terms of monetary value. It was then applied in many fields, including tariffs, alternative policies, and cost-benefit analysis to support the decision-making process (Rödiger *et al.*, 2016) and support pricing strategy development (Anselmsson, Bondesson, & Johansson, 2014). The identification of the WTP can support the price that was set up for optimizing the profit by increasing the sales volume and adapting to the right price (Anselmsson *et al.*, 2014).

Perceived Quality and Willingness to Pay

There is ample empirical evidence on the positive effect of perceived quality on purchase intentions (e.g., Zeithaml, Berry, & Parasuraman, 1996; Sweeney, Soutar, & Johnson, 1999; Bonti-Ankomah & Yiridoe, 2006; Tsotsou, 2005). In their recent study, Roselli *et al.* (2018) found that consumers who have formed a positive perception toward the quality of innovative traditional food products (e.g. extra-virgin olive oil extracted by ultrasound) are the most willing to buy the products. Additional support comes from Wang, Tao, and Chu (2020), who used the Theory of Planned Behavior to examine Chinese consumers' purchase intention toward certified bio food products. They concluded that adding perceived quality to the model enhances the overall predictive power of the theory. In light of all the studies that have confirmed the existence of a positive link between perceived quality and consumers' willingness to pay a product, the following hypothesis has been developed:

H1: Consumers' perceived quality will exert an influence on their willingness to pay for organic skin care products.

Quality Cues: Quality cues are drivers of perceived quality. Steenkamp (1990) defines quality cues as "informational stimuli that are, according to the consumer, related to the quality of the product, and can be ascertained by the consumer through the senses prior to consumption" (p. 312). While a wide array of quality cues is available to consumers, the latter cannot process all of them simultaneously. As a result, given their limited cognitive capacity, consumers tend to selectively process the cues that provide diagnostic value in order to save time and cognitive efforts (Petty & Caccioppo, 1986). According to the Cue Diagnosticity Theory, the relative importance of a product cue depends on its diagnosticity in differentiating between product alternatives (Skowronski & Carlston, 1987; Purohit & Srivastava, 2001). Cues with higher diagnosticity are viewed as more important and used more frequently in determining the purchase decision than less-diagnostic cues (Purohit & Srivastava, 2001).

Accordingly, this study focuses on four quality cues that have relatively high confidence and predictive value and are relevant to the organic skin care product setting. They include (i) price,

(ii) packaging, (iii) natural ingredient, and (iv) sensory appeals (Steenkamp *et al.*, 2010; Gleim *et al.*, 2013; van Doorn & Verhoef, 2015; Lee & Yun, 2015). Since price premium and packaging are related to the product but are not physically part of it, the relevant literature categorizes them as extrinsic cues. On the other hand, since natural ingredient and sensory appeals are part of the physical product and cannot be changed without also changing the product itself, they have been categorized as intrinsic cues (Olson, 1972; Olson & Jacoby, 1972).

Price Premium

Price is one of the most important indicators of product quality (Rao & Monroe, 1989; Dodds, Monroe, & Grewal, 1991). In this study, as one of the components of the marketing mix, price is labeled as a marketer side factor. A price premium, defined by Rao and Bergen (1992) as “the excess price paid, over and above the ‘fair’ price that is justified by the ‘true’ value of the product” (p. 412), can signal differences in product attributes (Bonti-Ankomah & Yiridoe, 2006). The notion that high-priced products are often perceived to be of higher quality has been well established (Blattberg & Winniewski, 1989; Rao & Monroe, 1989; Dodds *et al.*, 1991; Kamakura & Russell, 1993; Yoo, Donthu, & Lee, 2000). Price not only signal quality but also reflects the value of inputs used in the production of the items sold (Rosen, 1974). A widely accepted notion is that in general, organic products are more expensive than their conventional counterparts. Thus, consumers are likely to rely on price to judge if a product is truly organic or not. Accordingly, the following hypothesis has been developed:

H2: The price premium of organic skin care product will exert an influence on consumers’ perceived quality on organic skin care products.

Packaging

Another important extrinsic cue used by consumers to evaluate a product is packaging. In this study, the focus is on the holistic packaging design rather than on individual elements such as the shape or the color of the packaging. Since, same as price, it is a product cue that can be easily controlled by marketers, it is also labelled as a marketer side factor in the present study. The significant impact of packaging on influencing consumer behavior has been well documented (Kotler & Rath, 1984; Berkowitz, 1987; Nussbaum & Port, 1988; Bloch, 1995). For instance, when given the choice between two products with the same price and functions, consumers tend to choose the one with a more attractive packaging (Kotler & Rath, 1984). As is the case with price, packaging can help consumers form initial impressions of the product quality and also can be used as an indicator of other product attributes (Berkowitz, 1987). Packaging design is especially important for organic products, as they are relatively new in the market (Underwood & Klein 2002). A distinctive packaging that distinguishes organic products from their conventional alternatives is generally expected to make organic products successfully stand out and evoke favorable quality impressions (Steenkamp *et al.*, 2010). The perception and usage of products with an attractive packaging may result in sensory pleasure and stimulation (Bloch, 1995). Prior studies indicate that in

helping them differentiate organic from conventional products, consumers consider a distinctive packaging important (Latacz-Lohmann & Foster, 1997; Hill & Lynchhaun, 2002). A common way to pack organic products is to use sustainable/green designs that will signal naturalness, health and sustainability (Hoogland, de Boer, & Boersema, 2007; Magnier & Schoormans, 2015; Lindh, Williams, Olsson, & Wikström, 2016; Pancer, McShane, & Noseworthy, 2017). Sustainable packaging has been found to link positively with naturalness, healthiness and environmental friendliness of the products (Magnier & Crié, 2015; Magnier, Schoormans, & Mugge, 2016; Van Rompay, Deterink, & Fenko, 2016; Binnering, 2017). Since organic consumers are more likely than conventional consumers to value healthiness, environmental friendliness and the naturalness of the product, firms should find distinctive packaging designs that convey these values and increase the perceived quality gap between organic personal care products and conventionally produced alternatives. This can be hypothesized that:

H3: The packaging of organic skin care products will exert an influence on consumers’ perceived quality of these products.

Natural Ingredient: In this study, natural ingredient refers to the ingredients found in organic products that are totally natural-based and free from any chemical substance (Lee & Yun, 2015). This makes this cue a manufacturer side factor since it is fully under control of the manufacturers. Natural ingredient has been determined to be one of the key factors driving consumers to buy natural skin care products (Johri & Sahasakmontri, 1998). Despite inconclusive findings regarding whether organic products are in general healthier and safer than their conventional counterparts (Bonti-Ankomah & Yiridoe, 2006), consumers still believe in the health and safety benefits derived from organic products. This is evidenced by the fact that a great number of consumers were willing to pay more for organic food products (e.g. Krystallis *et al.*, 2006; Urena *et al.*, 2008; Langen, 2011). Likewise, empirical evidence suggests that products with natural and/or organic claims (e.g. “all natural”, “100% natural”) tend to have a strong and positive influence on consumers’ perceived product healthfulness, hedonism, environmental friendliness, and safety (Bauer, Heinrich, & Shafer, 2013; Apaolaza, *et al.*, 2014; Chrysochou & Grunert, 2014; Berry, Burton, & Howlett, 2017). Since natural ingredient can be expected to have a positive effect on consumers’ perception toward the quality of organic skin care products, it can be hypothesized as:

H4: The natural content of organic personal care products will exert an influence on consumers’ perceived quality of these products.

Sensory Appeals

In the present study, sensory appeals refer to the appearance, smell, and texture of organic skin care products (Lee & Yun, 2015). This is another manufacturer side factor as it is one of the features of the products manufactured. Sensory appeals induce consumers to buy organic skin care products (Johri & Sahasakmontri, 1998). Given the credence nature of organic products, their true product quality can be difficult to evaluate, which may cause consumers to rely on sensory experience to infer product quality. In a recent study, Helmeålk and Hultén (2017) found that multiple-sensory cues (i.e., visual, auditory,

and of factory sensory cues), which are congruent with store design, product categories, and store image have a positive effect on consumers' emotions and purchase behavior in retail stores. Similar evidence has also been found in organic food settings and indicates that the sensory attributes of organic food link positively with pleasure, hedonism, enjoyment, and happiness (Zanoli & Naspetti, 2002; Fotopoulos, Krystallis, & Ness, 2003; Padel & Foster, 2005). Following this logic, this study takes the view that sensory cues, in congruence with the greenness of organic skin care products, should help consumers form a positive perception toward the quality of these products, which can hypothesize as follows:

H5: The sensory appeals of organic personal care products will exert an influence on consumers' perceived quality of these products.

Figure 1 shows the conceptual framework developed for this study. The expectation is that consumers will rely on underlying quality cues (i.e., price premium, packaging, natural content, and sensory appeal) to form their perception toward the quality of organic skin care products, which in turn, will lead to a willingness to pay for the products.

RESEARCH METHODOLOGY

Population & Sample

The population comprises consumers in Wuhan City, Hubei province, China, who has a shopping experience with organic skin care products within the past six months. The sample size was calculated using Cochran's formula at a confidence level and error term of 95% and 5 %, respectively (Cochran, 1977). The sample size was 385 after calculating.

Data collection: A web-based online survey was used to collect the data. The questionnaire was developed based on the comprehensive literature review. To ensure current or recent usage of the products, the study includes only respondents with a shopping experience with organic skin care products within the past six months. All the measurement items used in this study are adopted from previous research studies. Table 1 summarizes statistics for all measures. The reliability of all variables is close to or above the cutoff value of .70 recommended by Voss *et al.* (2003). Since the target respondents in this study belong to relatively hard-to-reach populations in Wuhan, after a pilot test with 30 respondents, the snowball sampling technique was used to collect the data. The link of the online survey was sent to a group of residents who have purchased organic skin care products within the past six months. After completing the survey, they were asked to share the link with family members or with friends who met the requirements. At last, 442 questionnaires were returned. After removing all the responses with invalid answers, 410 questionnaires are considered acceptable.

RESULTS

Descriptive Analysis: Consistent with previous studies (e.g. Yiridoe *et al.*, 2005; Winterich, Mittal, & Ross, 2009; Ghazali *et al.*, 2017), a majority of the respondents was females. This is most likely due to the fact that generally women care more about their appearance than men (or at least in different ways)

and therefore tend to be the main users of skin care products. The majority of the respondents is single, relatively young and has low levels of income.

Multiple Regression Analysis: Tables 2 and 3 show the results of the multiple regression analysis that investigates the effects of the independent variables on the dependent variable. As Table 2 shows, consumers' perceived quality gap had a significant positive effect on their willingness to pay for organic skin care products ($\beta = .67, p < .001$), which means that H1 is fully supported. As Table 3 shows, the price premium had no effect on perceived quality of organic skin care products ($\beta = .04, p > .05$), which means that H2 was rejected. With regard to H3, packaging did not have any significant effect on consumers' perception toward product quality ($\beta = .02, p > .05$). Therefore, H3 failed to be supported. Concerning H4, the impact of natural ingredient had a positive effect on consumers' perceived quality ($\beta = .33, p < .001$), which means that H4 was fully supported. In support of H5, we find that Sensory Appeal has a positive influence on perceived quality of organic personal care products ($\beta = .056, p < .001$). Thus, H5 were supported. All the result is summarized in Table 4.

DISCUSSION AND CONCLUSION

This study is an early attempt to investigate how Chinese consumers make purchase decisions in respect of organic skin care products from a quality standpoint. A number of prior studies determined that there is a positive relationship between price and product quality (Blattberg & Winniewski, 1989; Rao & Monroe, 1989; Dodds *et al.*, 1991; Kamakura & Russell, 1993; Yoo, *et al.*, 2000). These findings, however, contradict the result of the present study on this issue, which indicates that there is no such strong relationship between price and quality of organic skin care product purchasing. Since all these previous studies are premised on different product categories and general price, they may not be relied upon to cast light on Chinese consumers' organic buying behavior. Prior research proposes that packaging can be used to broaden the quality gap between two brands (Latacz-Lohmann & Foster, 1997; Hill & Lynchhaun, 2002, Steenkamp *et al.*, 2010), which implies that there is a positive relationship between the distinctive packaging cue and perceived quality. Unexpectedly, such relationship was not found in this study. A plausible explanation may be that Chinese consumers perceive the distinctive/green packaging of organic skin care products as merely a way for marketers to differentiate organic products from conventional alternatives. A link between the green image and the quality of organic skin care products has yet to established. In addition, packaging is an easy-to-process cue, which tends to be used to infer product quality with low involvement (Mueller, Lockshin, & Louviere, 2010; Rao, 2005). A number of prior researchers argue that for credence goods, such as organic products, consumers should rely more on extrinsic cues as quality indicators as they are simpler to access and evaluate (Zeithaml, 1988, Bonti-Ankomah & Yiridoe, 2006). Contrary to this prior determination, though, the findings in this study reveal that Chinese consumers actually place significantly more importance on intrinsic cues, such as sensory appeals and natural content, to arrive at a conclusion with regard to product quality. More specifically, in the surveys, sensory appeal is regarded as the most important factor used by consumers to infer quality.

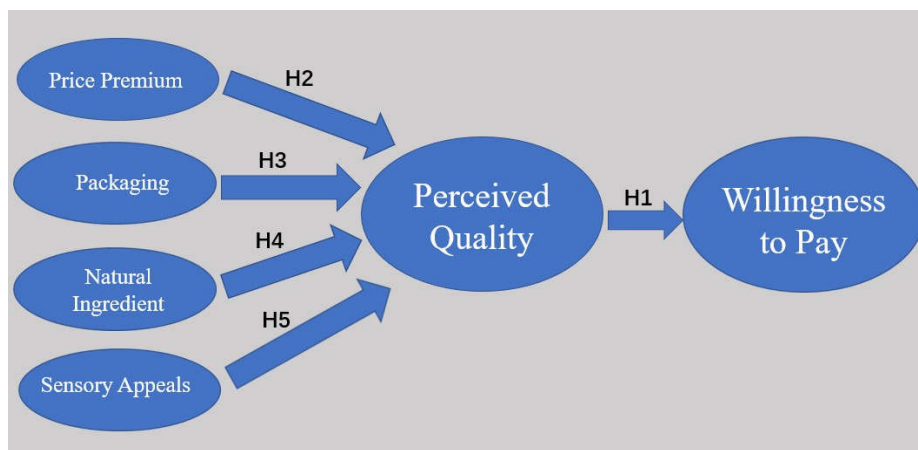


Figure 1. Conceptual Framework

Table 1. Correlations and Measurement Information

VARIABLE	Mean	SD	PP	P	NI	SA	PQ	WTP
PP	5.21	0.91	1					
P	3.80	1.25	-0.10	1				
NI	4.80	1.20	-0.16*	-0.16*	1			
SA	5.36	0.80	-0.02	0.09	0.24**	1		
PQ	3.97	1.08	-0.14*	0.16	0.35**	0.41**	1	
WTP	5.22	1.00	-0.16*	0.08	0.30**	0.53**	0.46**	1

Note: PP indicates Price Premium; P indicates Packaging; NI indicates Natural Ingredient; SA indicates Sensory Appeal; PQ indicates Perceived Quality; WTP indicates Willingness to Pay. *Correlation is significant at the .05 level (two-tailed). **Correlation is significant at the .01 level (two-tailed)

Table 2: Multiple Regression Analysis of Perceived Quality and Willingness to Pay

Variable	Unstandardized Coefficients B	Standardized Coefficients Beta	t	Sig.	VIF
(Constant)	1.325		8.161	0.000	
Perceived Quality	0.633	0.67	14.666	0.000***	1.000

Note: Dependent Variable: Willingness to Pay, *P< 0.05; **P<0.01; ***P<0.001.

Table 3: Multiple Regression Analysis of the Four Quality Cues and Perceived Quality

Variable	Unstandardized coefficients B	Standardized Coefficients Beta	t	Sig.	VIF
(Constant)	0.793		4.290	0.000	
Price Premium	0.163	0.04	3.531	0.295	1.960
Packaging	0.150	0.02	2.713	0.141	1.809
Natural Ingredient	0.145	0.33	3.136	0.000***	1.550
Sensory Appeal	0.221	0.56	4.984	0.000***	1.565

Note: Dependent Variable: Perceived Quality, *P< 0.05; **P<0.01; ***P<0.001.

Table 4 Hypothesis Result

Hypothesis	Statement	Results
H1	Consumers' perceived quality will exert an influence on their willingness to pay for organic skin care products.	Supported
H2	The price premium of organic skin care product will exert an influence on consumers' perceived quality on organic skin care products.	Rejected
H3	The packaging of organic skin care products will exert an influence on consumers' perceived quality of these products.	Rejected
H4	The natural content of organic personal care products will exert an influence on consumers' perceived quality of these products.	Supported
H5	The sensory appeals of organic personal care products will exert an influence on consumers' perceived quality of these products.	Supported

A possible reason may be that consumers can get first-hand physical experience through seeing, smelling, touching and testing the product. This direct experience with the product may enhance their confidence with the quality of the product. Interestingly enough, in this study, natural content was ranked as the second most important factor helping consumers to make quality evaluation.

Yet, no such result was found in previous studies on its impact on consumers' attitude toward organic food products (e.g. Lee & Yun, 2015).

Implications

The results in this study carry several important theoretical and practical implications.

In terms of theoretical contribution, as an early attempt to articulate a conceptual framework that explains consumers' organic buying behavior from both a product and customer perspective in a non-food setting, it adds to the body of literature on organic products. The framework conceptualized for this study is a reliable tool for determining how and to which extent underlying product cues influence Chinese consumers' willingness to buy organic skin care products. It also provides a fresh angle from which to explore how product cues and consumer characteristics work jointly to better predict consumers' purchase decisions. In addition to this significant theoretical contribution, this study also offers valuable practical insights.

First, by showing that perceived quality can be a powerful predictor of novice consumers' willingness to buy organic skin care products, it enables marketers to position these products in a more effective way consistent with this finding when targeting novice consumers. This can be achieved by placing an even higher emphasis on quality in a reader friendly manner when differentiating organic skin care products from their conventional alternatives. Rather than seeking to create a high-end image to match the unavoidably high price of organic skin care products (due to more expensive raw materials) and trying to convince consumers that a price premium equates high quality ("high price therefore high quality"), it might be more effective to position the product as "high quality therefore high price" product. Marketers should also notice that for all the reasons aforementioned, product quality is not a powerful predictor of expert consumers' purchase decision. Second, knowledge of the product cues utilization and evaluation can provide organic marketers valuable insights into how to adjust product quality to the wants and needs of consumers (Ophuis & Van Trijp, 1995). For example, given that sensory appeals appear to be the most important extrinsic quality cues, in order to help consumers to gain better personal experience with the product, marketers should provide more opportunities for consumers to try out the products through free trial and/or product demonstration. The feedback will enable manufacturers to make products that are more attractive to consumers by concentrating on the most potent cues and omitting the weakest ones. For instance, marketers and manufacturers can better allocate their limited resources by avoiding investing on product packaging in the Chinese market. Meanwhile, the importance of natural content may imply that consumers still fail to trust organic claims. Marketers should provide organic certification verified by various important indicators of quality, including international certifications.

Limitations and Recommendation

As with any other research, this study has several limitations. First, the data are limited to skin care product purchases. Additional research should thus consider the possible drivers of organic purchases in different categories of products. Second, in terms of demographics, the sample is somewhat skewed toward female respondents of a relatively young age as more young female respondents accepted the author's invitation to the online survey. Therefore, caution should be exercised when generalizing the findings of this study to male consumers. In addition, a number of researchers have already found that consumer response to organic product marketing varies from one consumer segment to another (e.g., Pino,

Peluso, & Guido, 2012; Bezawada & Pauwels, 2013). It would therefore be worthwhile for further studies to test the moderating effect of consumer characteristics.

REFERENCES

- Andersen, E. S., & Philipsen, K. 1998. The evolution of credence goods in customer markets: Exchanging "pigs in pokes". In DRUID Winter Seminar, Middelfart (Vol. 10).
- Apaolaza, V., Hartmann, P., López, C., Barrutia, J. M., & Echebarria, C. 2014. Natural ingredients claim's halo effect on hedonic sensory experiences of perfumes. *Food Quality and Preference*, 36, 81-86.
- Bagozzi, R. P., & Yi, Y. 1998. On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Bauer, H. H., Heinrich, D., & Schäfer, D.B. 2013. The effects of organic labels on global, local, and private brands: More hype than substance? *Journal of Business Research*, 66(8), 1035-1043.
- Behind the label: Chinese consumers' trust in food certification and the effect of perceived quality on purchase intention. *Food Control*, 108(2), 106825.
- Berkowitz, M. 1987. Product shape as a design innovation strategy. *Journal of Product Innovation Management*, 4(4), 274-283.
- Berry, C., Burton, S., & Howlett, E. 2017. It's only natural: The mediating impact of consumers' attribute inferences on the relationships between product claims, perceived product healthfulness, and purchase intentions. *Journal of the Academy of Marketing Science*, 45(5), 698-719.
- Bezawada, R., & Pauwels, K. 2013. What is special about marketing organic products? How organic assortment, price, and promotions drive retailer performance. *Journal of Marketing*, 77(1), 31-51.
- Binnering, A. S. 2017. Perception of naturalness of food packaging and its role in consumer product evaluation. *Journal of Food Products Marketing*, 23(3), 251-266.
- Blattberg, R. C., & Wisniewski, K. J. 1989. Price-induced patterns of competition. *Marketing Science*, 8(4), 291-309.
- Bloch, P.H. 1995. Seeking the ideal form: Product design and consumer response. *Journal of Marketing*, 59(3), 16-29.
- Bonti-Ankomah, S., & Yiridoe, E. K. 2006. Organic and conventional food: A literature review of the economics of consumer perceptions and preferences. *Organic Agriculture Centre of Canada*, 59, 1-40.
- Brucks, M. 1985. The effects of product class knowledge on search behavior. *Journal of Consumer Research*, 12(1), 1-16.
- Chiou, J., & Droge, C. 2006. Service quality, trust, specific asset investment, and expertise: direct and indirect effects in a satisfaction-loyalty framework. *Journal of the Academy of Marketing Science*, 34(4), 613-627.
- Chrysochou, P., & Grunert, K. G. 2014. Health-related information and health motivation effects on product evaluations. *Journal of Business Research*, 67(6), 1209-1217.
- Consumer purchase intention for organic personal care products. *Journal of Consumer Marketing*, 28(1), 40-47.
- Consumers' perceptions of organic food attributes and cognitive and affective attitudes as determinants of their purchase intentions toward organic food. *Food Quality and Preference*, 39(1), 259-267.
- consumption patterns. *British Food Journal*, 104(7), 526-542.

- Cox, D. F. 1967. The sorting rule model of the consumer product evaluation process. In *Risk Taking and Information Handling in Consumer Behavior* (pp. 324-369). Boston, MA: Graduate School of Business Administration. Harvard University.
- D. 1991. Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, 28(3), 307-319.
- Dick, A., Chakravarti, D., & Biehal, G. 1990. Memory based inferences during consumer choice. *Journal of Consumer Research*, 17(June), 82-93. Dodds, W.B., Monroe, K. B., & Grewal,
- Douglas, S.P., & Craig, C.S., 1983. Examining performance of US multinationals in foreign markets. *Journal of International Business Studies*, 14(3), 51-63.
- Evanschitzky, H., & Wunderlich, M. 2006. An examination of moderator effects in the four-stage loyalty model. *Journal of Service Research*, 8(4), 330-45.
- FMI 2015. Malaysia Organic Cosmetics Market: Franchise Outlets and Beauty Salons Account for 53% of Sales. Retrieved from <https://www.futuremarketinsights.com/press-release/malaysia-organic-cosmetics-market>
- Ford, G. T., Smith, D. B., & Swasy, J. L. 1988. An empirical test of the search, experience and credence attributes framework. *ACR North American Advances*.
- Fotopoulos, C., Krystallis, A., & Ness, M. 2003. Wine produced by organic grapes in Greece: using means—end chains analysis to reveal organic buyers' purchasing motives in comparison to the non-buyers. *Food Quality and Preference*, 14(7), 549-566.
- Ghazali, E., Soon, P. C., Mutum, D. S., & Nguyen, B. 2017. Health and cosmetics: Investigating consumers' values for buying organic personal care products. *Journal of Retailing and Consumer Services*, 39, 154–163.
- Gleim, M. R., Smith, J. S., Andrews, D., & Cronin, J. J. 2013. Against the green: A multimethod examination of the barriers to green consumption. *Journal of Retailing*, 89(1), 44-61.
- Gonçalves, H. M., Lourenço, T. F., & Silva, G. M. 2016. Green buying behavior and the theory of consumption values: A fuzzy-set approach. *Journal of Business Research*, 69(4), 1484-1491.
- Helme Falk, M., & Hultén, B. 2017. Multi-sensory congruent cues in designing retail store atmosphere: Effects on shoppers' emotions and purchase behavior. *Journal of Retailing and Consumer Services*, 38, 1-11.
- Hill, H., & Lynchehaun, F. 2002. Organic milk: attitudes and Hoogland, C. T., de Boer, J., & Boersema,
- Hui, C.H., & Triandis, H.C. 1985. Measurement in cross-cultural psychology: a review and comparison of strategies. *Journal of Cross-Cultural Psychology*, 16 (6), 131–152.
- Hus, C., Chang, C., & Yansritakul, C. 2017. Exploring purchase intention of green skincare products using the theory of planned behavior: Testing the moderating effects of country of origin and price sensitivity. *Journal of Retailing and Consumer Services*, 34(1), 145-152.
- J. J. 2007. Food and sustainability: Do consumers recognize, understand and value on-package information on production standards? *Appetite*, 49(1), 47-57.
- J. Y., & Podsakoff, N. P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879.
- Jamal, A., & Anastasiadou, K. 2009. Investigating the effects of service quality dimensions and expertise on loyalty. *European Journal of Marketing*, 43(3/4), 398-420.
- Johri, L. M., & Sahasakmontri, K. 1998. Green marketing of cosmetics and toiletries in Thailand. *Journal of Consumer Marketing*, 15(3), 265-281. Kamakura, W. A., & Russell, G. J. 1993. Measuring brand value with scanner data. *International Journal of Research in Marketing*, 10(1), 9-22. Kim, H.Y., & Chung, J. E. 2011.
- Kotler, P., & Rath, G. A. 1984. Design: A powerful but neglected strategic tool. *Journal of Business Strategy*, 5(2), 16-21.
- Krystallis, A., Fotopoulos, C., & Zotos, Y. (2006). Organic consumers' profile and their willingness to pay (WTP) for selected organic food products in Greece. *Journal of International Consumer Marketing*, 19, 81-106. Langen, N. (2011). Are ethical consumption and charitable giving substitutes or not? Insights into consumers' coffee choice. *Food Quality and Preference*, 22, 412-421. Latacz-Lohmann, U., & Foster, C. (1997). From “niche” to “mainstream”- strategies for marketing organic food in Germany and the UK. *British Food Journal*, 99(8), 275-282. Lee, H. J., & Yun, Z. S. (2015).
- Lichtenstein, D.R., & Burton, S. 1989. The relationship between perceived and objective price–quality. *Journal of Marketing Research*, 26 (11), 429–43.
- Lin, Y. C., & Chang, C. C. A. 2012. Double standard: the role of environmental consciousness in green product usage. *Journal of Marketing*, 76(5), 125-134.
- Lindh, H., Williams, H, Olsson, A., & Wikström, F. 2016. Elucidating the indirect contributions of packaging to sustainable development: A terminology of packaging functions and features. *Packaging Technology and Science*, 29(4-5), 225-246.
- Magnier, L., & Crié, D. 2015. Communicating packaging eco-friendliness: An exploration of consumers' perceptions of eco- designed packaging. *International Journal of Retail & Distribution Management*, 43(4/5), 350-366.
- Magnier, L., & Schoormans, J. 2015. Consumer reactions to sustainable packaging: The interplay of visual appearance, verbal claim and environmental concern. *Journal of Environmental Psychology*, 44(12), 53-62
- Magnier, L., Schoormans, J., & Mugge, R. 2016. Judging a product by its cover: Packaging sustainability and perceptions of quality in food products. *Food Quality and Preference*, 53, 132-142.
- Massey, M., O'Casey, A., & O'tahal, P. 2018. A meta-analytic study of the factors driving the purchase of organic food. *Appetite*, 125(1), 418-427.
- Mueller, S., Lockshin, L., & Louviere, J.J. 2010. What you see may not be what you get: Asking consumers what matters may not reflect what they choose. *Marketing Letters*, 21(4), 335-350.
- Nelson, P. 1970. Information and consumer behavior. *Journal of Political Economy*, 78(2), 311-329.
- Nussbaum, B., & Port, O. 1988. Smart design. *Business Week* (1).
- Olsen, J. C. 1972. Cue utilization in the quality perception process: A cognitive model and an empirical test. Unpublished Ph. D. thesis. Purdue University. Lafayette, IN.
- Olson, J. C., & Jacoby, J. 1972. Cue utilization in the quality perception process. *ACR Special Volumes*.

- Ophuis, P. A. O., & Van Trijp, H. C. 1995. Perceived quality: A market driven and consumer-oriented approach. *Food quality and Preference*, 6(3), 177-183.
- Padel, S., & Foster, C. 2005. Exploring the gap between attitudes and behaviour: Understanding why consumers buy or do not buy organic food. *British Food Journal*, 107(8), 606-625.
- Pancer, E., McShane, L., & Noseworthy, T. J. 2017. Isolated environmental cues and product efficacy penalties: The color green and eco-labels. *Journal of Business Ethics*, 143(1), 159-177.
- Parasuraman, A. 1996. The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31-46.
- Park, W.C., & Lessig, V.P. 1981. Familiarity and its impact on consumer biases and heuristics. *Journal of Consumer Research*, 8(2), 223-30.
- Peterson, R. A., & Wilson, W.R. 1985. Perceived risk and price-reliance scheme in perceived quality. Jacob, Jacoby and Jerry C. Olson, eds. Lexington, MA: Heath, 247-68.
- Petty, R. E., & Cacioppo, J. T. 1986. Message elaboration versus peripheral cues. In *Communication and Persuasion*. New York: Springer. Pino, G., Peluso, A. M., & Guido, G. 2012. Determinants of regular and occasional consumers' intentions to buy organic food. *Journal of Consumer Affairs*, 46(1), 157-169. Podsakoff, P. M., MacKenzie, S. B., Lee, B., & Srivastava, J. 2001. Effect of manufacturer reputation, retailer reputation, and product warranty on consumer judgments of product quality: A cue diagnosticity framework. *Journal of Consumer Psychology*, 10(3), 123-134.
- Rao, A. R. 2005. The quality of price as a quality cue. *Journal of Marketing Research*, 42(4), 401-405.
- Rao, A. R., & Bergen, M. E. 1992. Price premium variations as a consequence of buyers' lack of information. *Journal of Consumer Research*, 19(3), 412-423.
- Rao, A. R., & Monroe, K. B. 1989. The effect of price, brand name, and store name on buyers' perceptions of product quality: An integrative review. *Journal of Marketing Research*, 26(3), 351-357.
- Roselli, L., Cicia, G., Cavallo, C., Giudice, T.D., Carlucci, D., Clodoveo, M.L., & De Gennaro, B.C. 2018. Consumers' willingness to buy innovative traditional food products: The case of extra-virgin olive oil extracted by ultrasound. *Food Research International*, 108 (6), 482-490.
- Rosen, S. 1974. Hedonic prices and implicit markets: Product differentiation in pure competition. *Journal of Political Economy*, 82(1), 34-55.
- Schleenbecker, R., & Hamm, U. 2013. Consumers' perception of organic product characteristics. A review. *Appetite*, 71, 420-429.
- Singh, A., & Verma, P. 2017. Factors influencing Indian consumers' actual buying behaviour towards organic food products. *Journal of Cleaner Production*, 167(11), 473-483.
- Skowronski, J. J., & Carlston, D. E. 1987. Social judgment and social memory: The role of cue diagnosticity in negativity, positivity, and extremity biases. *Journal of Personality and Social Psychology*, 52(4), 689.
- Steenkamp, J. B. E. M. 1990. Conceptual model of the quality perception process. *Journal of Business Research*, 21(4), 309-333.
- Steenkamp, J. B. E. M., Van Heerde, H. J., & Geyskens, I. 2010. What makes consumers willing to pay a price premium for national brands over private labels? *Journal of Marketing Research*, 47(6), 1011-1024.
- Tsiotsou, R. 2005. Perceived quality levels and their relation to involvement, satisfaction, and purchase intentions. *Marketing Bulletin*, 16(4), 1-10.
- Underwood, R. L., & Klein, N. M. 2002. Packaging as brand communication: Effects of product pictures on consumer responses to the package and brand. *Journal of Marketing Theory and Practice*, 10(4), 58-68.
- Urena, F., Bernabeu, R., & Olmeda, M. 2008. Women, men and organic food: differences in their attitudes and willingness to pay. A Spanish case study. *International Journal of Consumer Studies*, 32, 18-26.
- Van Doorn, J., & Verhoef, P. C. 2015. Drivers of and barriers to organic purchase behavior. *Journal of Retailing*, 91(3), 436-450.
- Van Rompay, T. J., Deterink, F., & Fenko, A. 2016. Healthy package, healthy product? Effects of packaging design as a function of purchase setting. *Food Quality and Preference*, 53(10), 84-89.
- Voss, K. E., Spangenberg, E. R., & Grohmann, B. 2003. Measuring the hedonic and utilitarian dimensions of consumer attitude. *Journal of Marketing Research*, 40(3), 310-320. Wang, J., Tao J., & Chu, M. (2020).
- Wheeler, S., Gregg, D., & Singh, M. 2019. Understanding the role of social desirability bias and environmental attitudes and behavior on South Australians' stated purchase of organic foods. *Food Quality and Preference*, 74(6), 125-134.
- Winterich, K. P., Mittal, V., & Ross Jr, W. T. 2009. Donation behavior toward in-groups and out-groups: The role of gender and moral identity. *Journal of Consumer Research*, 36(2), 199-214. Wirtz, J., & Mattila, S.A. (2003). The effects of consumer expertise on evoked set size and service loyalty. *Journal of Services Marketing*, 17(7), 649-65.
- Yadav, R., & Pathak, G. S. 2016. Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behavior. *Journal of Cleaner Production*, 135(1), 732-739.
- Yiridoe, E. K., Bonti-Ankomah, S., & Martin, R. C. 2005. Comparison of consumer perceptions and preference toward organic versus conventionally produced foods: A review and update of the literature. *Renewable Agriculture and Food Systems*, 20(4), 193-205.
- Yoo, B., Donthu, N., & Lee, S. 2000. An examination of selected marketing mix elements and brand equity. *Journal of the Academy of Marketing Science*, 28(2), 195-211.
- Zanoli, R., & Naspetti, S. 2002. Consumer motivations in the purchase of organic food: A means-end approach. *British Food Journal*, 104(8), 643-653.
- Zeithaml, V. A. 1988. Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2-22. Zeithaml, V. A., Berry, L. L., &