Cross-cultural differences in consumers' attention to food labels.

Journal:	*British Food Journal*
Manuscript ID	BFJ-07-2021-0751.R1
Manuscript Type:	Research Paper
Keywords:	Labelling, Consumer behavior, Culture, Food packaging

To access the final edited and published work see Ho, K.F.X., Liu, F., Tarabashkina, L. and Volery, T. (2022), "Cross-cultural differences in consumers' attention to food labels", British Food Journal, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/BFJ-07-2021-0751

Abstract

Purpose-Extended from Hofstede's cultural framework, this study investigated differences between Australian (representing the Western culture) and Chinese (representing the Eastern Culture) consumers regarding their attention paid to food product label cues, and the degree of such attention, controlling for an individual level moderator of product involvement.

Design/methodology approach-Data were collected using face-to-face interviews with semi-structured questionnaires for both Australian and Chinese samples. Data were analysed using factorial between-groups analysis of variance (ANOVA) to investigate the influence of culture and product involvement on attention and degree of attention paid to product nature-related (e.g., brand name), product assurance-related (e.g., country-of-origin) and health-related attribute (e.g., nutritional panel) cues.

Findings-The findings revealed that Chinese consumers, as compared to Australian consumers, paid attention to more product-assurance cues (e.g., country of origin) and health-related cues (e.g., bioactivity indicators). The degree of attention to these cues was also greater among Chinese consumers than Australian consumers. Product involvement moderated the relationship between culture and attention towards product nature- and product assurance-related cues.

Practical implications-Results from this study enable exporters to customize their labelling designs by strategically including label cues that are more salient to certain export markets.

Originality/value-This study offers novel insights into the impact of culture on consumers' attention to food product label cues, and the effect of product involvement on these relationships, which were previously underexplored.

1. Introduction

Making purchase decisions is a complex process, as consumers are required to compare, evaluate, and find the product that they want from a wide range of available products (Simmonds and Spence, 2017). In most purchasing situations, detailed product information is not always available to consumers at the time of exposure (Dean, 1999). Consumers also do not often have an opportunity to try product samples, especially when it comes to food and beverages. As a result, they have to make judgements about product quality based on attribute cues presented on packaging labels before making a purchase decision (Simmonds and Spence, 2017).

Product labels consist of various cues that can generate expectations about product attributes (Piqueras-Fiszman and Spence, 2015) and influence consumers' satisfaction with products and subsequent purchase behaviours (Liem et al., 2012; Oliver, 1980). However, the effectiveness of labels, as direct shopping aids, depends largely on consumers' attention. Most products have an overwhelming amount of information on their labels. Due to time constraints and limited cognitive capacity, consumers may not be able to pay attention to all attribute cues presented on labels (Fenko et al., 2018; Milosavljevic and Cerf, 2008) and may exhibit selective attention towards certain label cues that are relevant to them, such as Country-of-Origin (COO) (Berry et al., 2015) or health-related information (Grunert et al., 2010). Therefore, examining consumer attention is crucial for a better understanding of the relative salience of product attributes in purchase decision-making process.

Additionally, consumers may not be able to alter their culturally conditioned responses to certain aspects of a product and its packaging when purchasing food products (Liu et al., 2006). A few studies have reported that consumers differ in their responses to food product label cues, such as ingredients (Grunert et al., 2018); health-related (nutritional) information

(Carrillo et al., 2014) and regulatory information (e.g., expiry dates) (Harcar and Karakaya, 2005). These studies overall provide some evidence that there may be cross-cultural differences in consumers' responses to product label cues. However, cross-cultural research on food products is limited.

The current study contributes to the existing literature by addressing three important research gaps. First, studies on consumer attention to packaging labelling has been limited. Attention is a poorly defined phenomenon, and the actual attention process is difficult to measure (Bialkova and van Trijp, 2010). Most studies have examined consumer perceptions of product labels (Arcia et al., 2012; Imm et al., 2012; Wansink et al., 2000) overlooking consumer attention to labels after an initial exposure. To address this gap, this study allowed consumers to view a product in their hands (a free viewing condition) to provide a more realistic assessment of consumer attention. It also examined two forms of consumers' attention to product label cues:1) attention paid to the type of label cues and 2) the degree of attention given to those label cues, which have not been previously considered.

Second, previous studies (Becker et al., 2015; Prendergast et al., 2010) have predominantly examined consumers' responses to one or two label cues, which could have exaggerated the effect of a particular attribute. To address this gap, this study systematically examined consumers' attention to three major categories of product label cues commonly found on food products, namely product nature-related (e.g., brand name), product assurance-related (e.g., bioactivity certification) and health-related (e.g., bioactivity rating).

Third, as noted earlier, a handful of empirical studies reported national differences in consumers' responses to product labels such as label usage (Grunert et al., 2018) and perception towards labels (Harcar and Karakaya, 2005). However, they have not taken into consideration cultural values of the studied countries. To overcome this limitation, this study will employ

Hofstede's (2001) cultural values framework to examine the extent to which consumers from Western cultures (Australia) and Eastern cultures (China) differ in their attention to product label cues.

2. Conceptual Development

2.1 Types of product label cues

Attributes represent features or characteristics of a product. According to the Means-End Chain Theory, consumers purchase products with attributes that offer desired benefits and minimize undesired consequences (Gutman, 1982). During product evaluation process, consumers typically relate specific attributes of a product to either positive or negative consequences associated with its consumption (Audenaert and Steenkamp, 1997). The overall quality of food products is often evaluated based on various attributes, such as its brand (Anselmsson et al., 2014), safety (Barbarossa et al., 2016), and nutritional benefits (Batt and Liu, 2012). Product labels play a critical role in communicating these attributes to consumers (Blanc et al., 2021). Specifically, product labels consist of three main types of cues that influence consumers' product evaluation: 1) product nature-related, 2) product assurance-related, and 3) health-related.

Product nature-related cues contain label information that is directly related to the products. These labels aim to communicate general product characteristics, ranging from product/brand name to serving size. Product assurance-related cues refer to the information that has been certified by regulating authorities. For example, COO is an important product-assurance cue that designates the place where a product is produced (Li and Wyer Jr, 1994). COO aims to activate consumers' beliefs and knowledge about a particular country, which subsequently affect the interpretation and evaluation of product attributes (its quality or safety) (Liu and Murphy, 2007). The third label category is health-related cues, which include

nutritional and health claims (see Bialkova and van Trijp, 2010; Turner et al., 2014). These cues are frequently embedded into food labels and represent a popular method to convey information about food healthiness related to food content (i.e., low sugar) and health benefits (i.e., provides a heart-healthy diet) to consumers (Van Trijp and Van der Lans, 2007). The quality of health-related attributes that food products possess cannot be evaluated even after consumption. Hence, health-related cues help consumers make well-informed food purchases.

2.2 Attention to label cues

In a decision-making process, the number and type of product attributes determine consumers' attention to certain types of label cues that serve as a basis for product evaluation (Aday and Yener, 2014). Attention represents a vital way to acquire information and product labels play a crucial role in attracting consumers' attention that could potentially influence purchase decisions (Ares et al., 2013). McGuire (1976)'s Information Processing Model (IPM) is one of the most widely adopted models to examine consumers' processing of commercial information. According to this model, consumers go through sequential stages when processing information, such as exposure, attention, comprehension, acceptance of the comprehended information and retention and retrieval of information (McGuire, 1976). Although marketing communication efforts (e.g., labelling) affect all stages of information processing, attention represents the key step preceding any purchase decision (Milosavljevic and Cerf, 2008).

Attention is typically defined as the amount of cognitive effort and/or capacity that an individual directs to a particular stimulus (Kahneman, 1973). Attention occurs only when people allocate processing capacity to the stimulus. There are two forms of attention. The first one is involuntary (or bottom-up) and represents a stimulus-driven form of attentional capture, which is dependent on the design characteristics of the stimulus (shape, size, colour and

contrast) (Wolfe, 1998). This form of attention is rapid, automatic and occurs when consumers do not specifically search for this stimulus. Voluntary (or top-down) attention occurs when consumers voluntarily search for specific information that is meaningful or relevant to them (Pieters and Wedel, 2004). This type of attention depends on consumers' interests and goals when evaluating the stimulus (Koch, 2004). Essentially, consumers will pay attention to information that they are looking for disregarding information that seems to be irrelevant, unless it catches their attention automatically (bottom-up process).

2.3 Cross-cultural differences in attention to product label cues

Numerous studies provide evidence on cross-national differences in food product attribute preferences (e.g., Wright et al., 2001; Nielse et al., 1998; Prescott et al., 2002). For example, it has been found that Malaysian consumers regard product quality, medical benefits, brand reputation and pricing to be important when purchasing honey (Yeow et al., 2013). In contrast, American consumers were willing to pay premiums for honey products based on attributes such as floral sources and brand (Unnevehr and Gouzou, 1998). These studies provide some evidence to suggest that there could be cultural differences in consumers' responses to product attribute cues (De Mooij, 2000). However, it appears that no specific cultural framework (or cultural values) has been taken into consideration in past studies.

Hofstede's (2001) cultural values framework is one of the most widely adopted frameworks in marketing (Steenkamp, 2001). The framework has five basic dimensions: 'power distance' (PD), 'uncertainty avoidance' (UA), 'individualism/collectivism' 'masculinity'/femininity' and 'long/short-term orientation' (Hofstede, 2001). This study focused on four dimensions (individualism/collectivism, UA, PD and long/short term

orientations) as they have been identified by prior studies to be directly applicable to food communications (e.g., Tai and Chan, 2001; Cheong et al., 2010).

Past literature has indicated that Western cultures (e.g., U.S. and Australia) are more individualistic, whereas Eastern cultures (e.g., China and Japan) are more collectivistic (Triandis, 1990). People from an individualistic culture value independence, freedom, stimulation, and high-level competition. In contrast, people from a collectivistic culture tend to value interdependence, harmony, conformity, and a low level of competition (Hofstede, 2001). Past studies have reported that people from an individualistic culture prefer an explicit and direct form of information. Conversely, people from a collectivistic culture prefer to receive an implicit and indirect form of information (Liu et al., 2009; Liu et al., 2019). The reason for this is that in a collectivist society, people perceive explicit information as 'aggressive' and 'pushy,' while people from individualistic culture think of this form of information as persuasive and informative (Choi et al., 2008; Liu et al., 2019). Product nature-related attribute cues are regarded as explicit information that communicates functional benefits to consumers. Due to this difference, a few studies have suggested that consumers from a collectivistic culture may place less importance on functional benefits compared to consumers from an individualistic culture (Liu et al., 2019; Zakour, 2004).

Besides the collectivism/individualism dimension, the UA dimension may also influence consumers' responses to product nature-related information. UA refers to the extent to which people feel threatened by uncertainty and ambiguity and would try to avoid these situations (Hofstede, 2001). Cultures that are characterized by high UA may react more favourably to explicit and direct information, as it would reduce perceived uncertainty (Tai and Chan, 2001). Within high UA societies, such as China, people have a greater a tendency to seek orderliness, consistency, and structure than people in low UA societies, such as Australia (Shi and Wang, 2011).

The collectivism/individualism and UA dimension seem to suggest opposite directions for the Australian-Chinese comparison. Therefore, it is postulated that:

H1a: *Australian and Chinese consumers will be significantly different in their attention to product nature- related cues.*

H1b: *Australian and Chinese consumers will be significantly different in their degree of attention to product nature- related cues*.

PD refers to the extent to which members of a culture accept inequality of power distribution in society (Hofstede, 2001). People from cultures with high PD (e.g., China) tend to maintain greater social distance and have respect for hierarchy and authority, while people from low PD cultures (e.g., Australia) tend to value equality (Liu et al., 2019). Past marketing literature has also found that authority appeal is more accepted in cultures with greater power distance compared to that with less power distance (Albers-Miller and Gelb, 1996; Cheong et al., 2010). Due to the respect given to power and authority, it can be inferred that consumers from high PD societies (e.g., China) would prefer label cues that are regulated by accredited authorities (e.g., government) than consumers from low PD societies. In addition, Chinese consumers have been reported to have a high level of trust in certifications issued by authorities, such as the government and medical doctors (Liu et al., 2014).

The UA dimension may also influence consumers' responses to product-assurance information. People from cultures with high UA (e.g., China) are less open to change and innovation than people from cultures of low UA (e.g., Australia) (De Mooij and Hofstede, 2011). Therefore, compared to Australian consumers, Chinese consumers may be less comfortable with uncertain situations and would be more cautious about purchasing products that they have not consumed before. Furthermore, Chinese consumers have been reported to have a high level of concern over food safety due to frequent food contamination scandals that

had occurred in China (Maitiniyazi and Canavari, 2021; Liu et al., 2014). Hence, in comparison to Australian consumers, Chinese consumers may be more likely to place more importance on credibility information and to rely more strongly on authority-certified attributes when making purchase decisions. Thus, it is postulated that:

H2a: *Chinese consumers will pay attention to more product assurance-related cues as compared to Australian consumers.*

H2b: *Chinese consumers will pay a higher degree of attention to product assurance-related cues as compared to Australian consumers.*

Long-term orientation is defined as the ability to foster and display a future-orientated perspective with respect to past (Hofstede, 2001). People from cultures with long-term orientation place more importance on perseverance and sustained efforts towards slow results. In contrast, people in cultures with short-term orientation expect immediate results for any given effort (Hofstede et al., 2005). It has been well established that Eastern cultures (e.g., China) are long-term orientated compared to Western cultures (i.e., Australia) (Hofstede et al., 2005). Past advertising studies have reported that health-related appeals tap in the long-term orientation dimension as it emphasises consumption of nutritious food products to attain health benefits as opposed to instant benefits (Cheong et al., 2010). Considering that sustaining a healthy lifestyle is a long-term goal that requires life-long commitment (Kelly, 2008), consumers in societies that are long-term orientated (e.g., China) would place more importance on product information pertaining to health attributes than cultures with short-term orientation (e.g., Australia).

Apart from short/long term orientation dimension, the UA dimension may also influence consumers' responses to health-related information. Past research has indicated that consumers in a high UA culture (e.g., China) are influenced more by healthy and nutrition advertising

appeals than those in a low UA culture (e.g., Australia) (De Mooij and Hofstede, 2010; Cheong et al., 2010). Based on the preceding discussion, it is postulated that:

H3a: *Chinese consumers will pay attention to more health-related cues as compared to Australian consumers.*

H3b: *Chinese consumers will pay a higher degree of attention to health-related cues as compared to Australian consumers.*

2.4 Interaction effect of cross-cultural differences and product involvement in attention to product label cues

Besides cross-cultural differences, consumers from different markets would differ in their attention towards food label information due to differences in product involvement. Product involvement has been defined as a motivational, self-directed emotional state that determines the personal relevance of a specific product to a particular consumer (Zaichkowsky, 1985). According to elaboration likelihood theory (ELM) (Petty and Cacioppo, 1986), the extent to which a consumer attend to information would always depend on their level of product involvement and purchase decision (Celsi and Olson, 1988). Current research indicates that high-involved consumers process information in more detail and use more criteria in buying decision making, such as taking more brands/product attributes into consideration compared to low-involved consumers (Behe et al., 2015; Breugelmans and Campo, 2011; Hollebeek et al., 2007).

A few studies (i.e., Cochrane and Quester, 2005; Sharma, 2011) have also indicated that depending on the level of involvement towards certain product categories, consumers from different markets will differ in their attention towards product label attributes. For example, when comparing consumers from China, India, UK and US, Sharma (2011) reported that consumers from societies with high UA tend to rely more on COO cue for low involvement

products, whereas those from low UA societies tend to rely on this cue for high involvement products.

In the context of food, past research has shown that Asian consumers primarily regard honey as a health product, as compared to Anglo-Saxon consumers (Batt and Liu, 2012; Yeow et al., 2013). In this aspect, Chinese consumers may be characterised as having a higher level of UA and would be more involved in food product purchase as they have greater considerations for health implications of honey consumption compared to Australian consumers. Hence, high (low) involved Chinese consumers would likely attend to more product attribute cues that are available in comparison to their Australian counterparts. Hence, it is postulated that:

H4a: *High (low) involved Chinese consumers will pay attention to more 1) product nature-related cues 2) product assurance-related cues 3) health-related cues than high (low) involved Australian consumers.*

H4b: *High (low) involved Chinese consumers will pay a higher degree of attention to 1) product nature-related cues 2) product assurance-related cues 3) health-related cues than high (low) involved Australian consumers.*

Insert Figure 1

3. Methods

3.1 Product Selection

Honey was chosen as the context for this study for several reasons. The Australian honeybee industry has a significant contribution to the success of Australian agriculture. The gross value of production of the honeybee industry in Australia was estimated to be 125 million

Australian dollars (van Dijk et al., 2016) with approximately 4,500 tonnes of honey exported annually (Austrade, n.d.). China is the top export market for Australian honey that is valued at 6,965,739 Australian dollars (Australian Bureau of Statistics, 2019). Honey is also consumed for a variety of reasons. Apart from being a savoury product, it is widely regarded as a health product in different parts of the world (Ismaiel et., 2014; Yeow et al., 2013). Therefore, it is imperative to understand if consumers from different countries may attend and respond differently to honey product label cues.

3.2 Stimuli and measures

The stimuli used in this study were native Australian honey, Jarrah and Wildflower (see appendix 1). The products were sourced from a relatively new to the market Australian brand (One Flower). The use of an unfamiliar brand was critical to eliminate any influence of brand familiarity. In addition, the overall label designs were standardized across both honey products. Past research has shown that types of label cues (Oliveira et al., 2016), and label designs (i.e., location of label information) (Antúnez et al., 2013; Bialkova and van Trijp, 2010) affect consumers' attention towards product labels. Hence, the use of unknown brands and standardization of label content/placements helped eliminate any confounding effects which could potentially bias the results.

The survey instrument was a four-page questionnaire consisting of three sections. The questionnaire was developed in English and subsequently translated into 'Simplified Chinese' using the back-to-back translation method. The first section consisted of questions relating to consumers' attention to the types of label information and the degree of attention given to it. To assess consumers' attention to the types of product label cues, respondents were asked 'Did you pay attention to this label?' Respondents answered either 'yes' or 'no' for the product attribute cues which were grouped into 'product nature-related', 'product assurance-related' and 'health-related cues (see figure 1). To assess the degree of attention given to the product

cues, participants were asked to specify how much attention they paid to the attended cues ('How much attention did you pay to this label information?') on a 7-point response scale ranging from 1-paid a little attention to 7-paid a lot of attention.

The second section consisted of questions relating to product involvement. Product involvement was measured using the three items *adapted from* Liu et al., (2007) (e.g., 'I definitely have a wanting for honey products'). Involvement items had good internal consistency reliability ($\alpha = 0.85$). The third section collected demographic information, such as age, gender, education level, household size and nationality.

The questionnaire was pre-tested on a representative sample of store shoppers (n=30). Minor adaptations were made to the wording, structure and presentation of the questionnaire based on the pre-test feedback and opinions of two marketing experts.

3.3 Sampling procedure

A mall-intercept technique approach was used to recruit participants and collect data. The Australian participants were recruited at a local shopping centre where its patrons consisted of typical shoppers of all ages. The recruitment of Chinese participants was conducted at an Australian merchandise store which was popular among Chinese tourists. Both data collection venues were based in Perth, Western Australia.

A quota sampling approach was employed to ensure that recruited participants for both samples (Australian and Chinese) were approximately equivalent (Moser and Stuart, 1953). The used quota consisted of nationality, gender, age, honey-type conditions (Jarrah and Wildflower).

3.4 Data Collection

Data were collected during the stores' opening hours (10 pm to 6 pm, Monday to Sunday). The selection of the time frame enhanced the representation of the sample and minimised potential sampling biases (i.e., length-bias – frequent shoppers/shoppers who shop longer are more likely to be selected for the study) (Nowell and Stanley, 1991).

Participants were instructed to view one of the two honey products (Jarrah or Wildflower honey) as if they were to purchase them in a supermarket. Subsequently, surveys were administered to the participants based on the types of honey that they have viewed. Participants took approximately 20 to 30 minutes to complete the survey and the total time taken for the entire data collection amounted to more than 60 hours.

3.5 Data analysis

Data were imported into IBM® SPSS® Statistics 24, where it was re-coded for analysis. Any invalid or incomplete responses were eliminated (Tabachnick and Fidell, 2007). Initial descriptive statistical analysis of the sample was conducted to gain an understanding of consumer profiles. The means of attention counts and degree of attention for each product attribute cues were aggregated based on the three product label cues. Factorial between-groups analysis of variance (ANOVA) was used to investigate the influence of culture and product involvement on the attention/degree of attention paid to product nature-related, product assurance-related and health-related cues.

4. Results

4.1. Sample

A total of 121 participants were recruited with a 40% response rate. Of all participants recruited, 54 participants were Australians and 67 were Chinese consumers. There was an even split between males and females in the Australian (male: 50% and female: 50%) and Chinese samples (male: 41.8% and female: 58.2%). Within the Australian samples, the age range was

relatively equal (18 to 35 years old: 55.6% and 35 years old and above: 44.4%). Whereas, in the Chinese sample, there were a slight over-representation of younger participants (18 to 35 years: 74.6% and 36 years and above: 25.4%). In both samples, most participants had a bachelor's degree (46.3%). Based on the equivalence of characteristic profile, both samples were suitable to be subjected to subsequent cross-comparison analysis.

4.2. Hypotheses testing

As shown in Table 1, there were significant differences in the attention given to product assurance and health-related cues by Australian and Chinese consumers. Chinese consumers reported they paid attention to more assurance- and health-related label cues and with a greater degree of attention) than Australian consumers, supporting H1a to H3b.

Insert Table 1

As shown in Table 2, the moderating effects of product involvement on the relationship between culture and consumers' attention towards these label cues were also significant. Low-involved Chinese consumers paid attention to more product nature-related and assurance-related cues (and with a higher degree of attention) than low-involved Australian consumers, supporting H4a-1, H4a2, H4b-1 and H4b-2. The attention given (and degree of attention paid) to health-related cues were not significant, providing no support for H4a-3 and H4b-3.

Insert Table 2

5. Discussion

5.1 General Discussion

The purpose of this study was to examine cultural differences in consumers' attention to product label cues. Specifically, we have employed Hofstede's (2001) cultural dimension framework to investigate the extent to which Australian consumers and Chinese consumers differ regarding their attention to label cues presented on honey product packaging.

First, results indicate that Chinese consumers paid attention to product assurance-related cues as well as with a greater degree of attention, than their Australian counterparts did. This suggests that the influence of cross-cultural differences in the degree of PD and UA significantly influenced consumers' attention to product assurance-related cues. The Eastern cultures (i.e., China) are characterized by a high level of PD and UA. Thus, in comparison to Australian consumers, Chinese consumers would value authority-certified product label cues (i.e., COO) and perceive such cues to be more credible than other forms of marketing claims.

Due to the food contamination scandals in China and recent negative publicity around adulterated honey produced (Strayer et al., 2014; Wu et al., 2015), Chinese consumers are more likely to express concern over food scares, which would heighten their level of uncertainty avoidance. Thus, Chinese consumers may actively seek product assurance-related cues, such as the COO logo of Australia, which could serve as a mark of quality for them. The beekeeping industry in Australia is widely recognised for its commitment to quality assurance by ensuring that produced products are clean, safe and free from chemical contamination. Furthermore, members of the Australian beekeeping industry, such as in Western Australia, have access to

the country's most pristine forests and coastal wildflowers that enable beekeepers to produce unique floral honey products that are not found elsewhere in the world (Batt and Liu, 2012).

Chinese consumers also paid attention to more health-related cues as well as with a higher level of attention in comparison to their Australian counterparts. These findings are consistent with the proposition that maintaining a healthy lifestyle takes a long-life commitment (Cheong et al., 2010; Kelly, 2008). Thus, consumers from an Eastern culture (i.e., China) (characterized by long-term orientation) would place more importance on health-related cues than those from a Western culture (characterized by short-term orientation). Compared to Australian consumers, Chinese consumers may be more likely to take into consideration future health implications of consuming certain food products. These findings are consistent with previous cross-cultural studies (i.e., Cheong et al., 2010) that have reported that health-related appeals were more influential in high UA society (i.e., China) than low UA society (i.e., Australia).

Past research (e.g., Yeow et al., 2013) also suggests that functional foods, such as honey, is highly regarded as a health product in Asian cultures than in Western cultures. For example, Batt and Liu (2012) reported that Asian consumers were more likely to consume honey for its medicinal benefits, as compared to Anglo-Saxon consumers. Hence, Chinese consumers would rely more on health-related cues, such as bioactivity indicators, when purchasing honey than their Australian counterparts. Bioactivity indicators represent the potency of honey, and consumers might develop perceptions that honey products with higher bioactivity levels may be more beneficial for their health. Consumers from both cultures do not differ in their attention towards product nature-related cues. A plausible explanation for this result is that product nature-related cues (e.g., brand name/logo and product description) provide general information about product characteristic. Hence, most consumers would seek for such information to learn about the product, regardless of their cultural background.

This study also indicates that cultural differences in product involvement do influence consumers' attention towards label cues. Specifically, low-involved Chinese consumers paid attention to more product nature-related cues and with a greater degree of attention than low involved Australian consumers. For low-involved consumers, product purchases (especially food) are often based on intuitive judgement, heuristic decision-making or habits (Thøgersen et al., 2021). Moreover, as previously mentioned, Chinese consumers possessed a high level of uncertainty avoidance. Thus, low-involved Chinese consumers would pay attention to more explicit functional product nature-related cues, such as brand name and product name (honey type specification), to make purchase decisions than their Australian counterparts.

Similarly, low-involved Chinese consumers paid more attention to product assurance-related cues and a greater degree of attention than their Australian counterparts. This finding is consistent with some prior studies which found that low-involved consumers would base their quality evaluations on product assurance-related cues, such as COO, as these cues are more accessible and easier to process (Sáenz-Navajas et al., 2014). Also, compared to Australians, Chinese consumers are generally more risk-averse and would regard authority regulated certification as more trustworthy. Therefore, when evaluating a product, low-involved Chinese consumers would base their purchase decision on reliable and accessible cues, such as the COO.

Contrary to our prediction, the interaction effect of culture and involvement on consumers' attention to health-related cues was insignificant. Specifically, high (low) involved Chinese consumers do not differ from high (low) involved Australian consumers in their attention towards health-related cues. With reference to the findings of cross-cultural comparison, it suggests that the differences in attention towards health-related cues are solely attributed to cross-cultural differences, regardless of consumers' level of product involvement.

It is interesting to note that high-involved consumers from both countries do not differ in their attention towards any of the product label cues. One of the plausible explanations is that expertise is generally associated with the level of involvement a consumer has with a specific product category (Bruwe et al., 2017), where high-involved consumers would considerably be more knowledgeable about honey. Hence, these consumers may adopt a similar way of evaluating the quality of a product (i.e., paying attention to certain types of product label cues), regardless of their cultural backgrounds.

6. Conclusion

This study is the first to employ Hofstede's (2001) cultural framework to examine consumers' attention towards three major types of food label cues. Specifically, this study has demonstrated that cultural differences in attention to product labels can be explained by cultural values such as power distance, uncertainty avoidance and short/long term orientation. One of the most important implications is that consumers from Eastern cultures (characterized by high PD, high UA and long-term oriented) would pay more attention to product assurance-related and health-related cues when purchasing food products, as compared to consumers from Western cultures (who are characterised by low PD, low UA and short-term oriented).

Product involvement was also found to be crucial when examining cross-cultural differences in the context of food labelling. Low-involved Chinese consumers appear to pay more attention to product nature-related and product assurance-related cues than their Australian counterparts. As such, having a good understanding of the potential influence culture may have on consumers' attention to food product labels would have important implications not only for food labelling design, but also communication strategies, such as traditional and digital advertising to target international markets.

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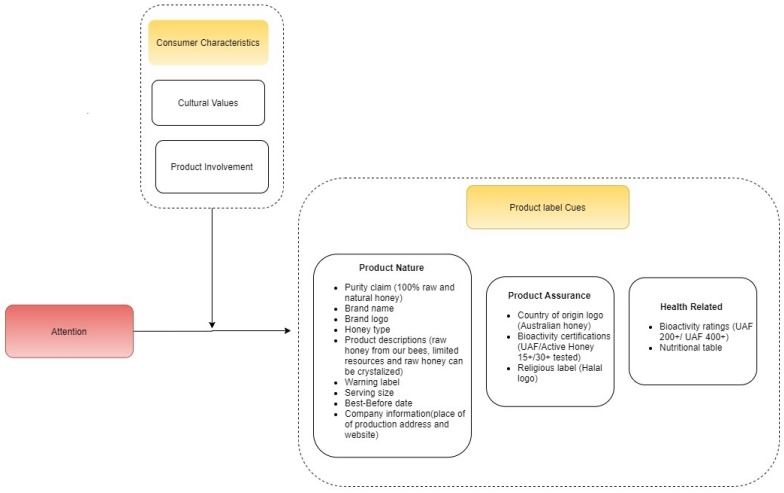
Table 1: Results of hypothesis testing

Hypotheses	Australian		Chinese		*F* (1,117)	P
	M	SD	M	SD		
H1a: Australian and Chinese consumers will be significantly different in their attention to product nature-related cues.	6.70	2.07	7.39	2.01	5.28	0.20
H1b: Australian and Chinese consumers will be significantly different in their degree of attention to product nature-related cues.	3.13	1.05	3.40	1.05	4.19	0.04
H2a: Chinese consumers will pay attention to more product assurance-related cues as compared to Australian consumers.	1.57	1.21	1.99	0.91	5.80	0.02
H2b: Chinese consumers will pay a higher degree of attention to product assurance-related cues as compared to Australian consumers.	2.12	1.68	2.87	1.39	10.01	P < 0.001
H3a: Chinese consumers will pay attention to more health-related cues as compared to Australian consumers.	1.30	0.69	1.55	0.53	4.62	0.03
H3b: Chinese consumers will pay a higher degree of attention to health-related cues as compared to Australian consumers.	3.53	1.87	4.49	1.74	2.74	0.01

Table 2: Moderating effect

	Australian (low-involved)		Chinese (low-involved)		*P*	Australian (high-involved)		Chinese (high-involved)		*P*	*F* (2,117)
	M	SD	M	SD		M	SD	M	SD		
H4a-1: High (low) involved Chinese consumers will pay attention to more product nature-related cues.	5.90	1.90	7.02	1.90	0.02	7.64	1.87	8.19	2.04	0.35	8.18
H4a-2: High (low) involved Chinese consumers will pay attention to more product assurance-related cues.	1.14	1.16	1.85	0.89	< 0.001	2.08	1.08	2.29	0.90	0.49	7.31
H4a-3: High (low) involved Chinese consumers will pay attention to more health-related cues.	1.31	0.71	1.57	0.54	0.08	1.28	0.68	1.52	0.51	0.18	0.05

H4b-1: High (low) involved Chinese consumers will pay a higher degree of attention to product nature-related cues than high (low) involved Australian consumers.	2.67	0.96	3.15	0.91	< 0.001	7.64	1.87	8.19	2.04	0.35	11.71
H4b-2: High (low) involved Chinese consumers will pay a higher degree of attention to product assurance-related cues than high (low) involved Australian consumers.	1.46	1.47	2.61	1.43	< 0.001	2.88	1.60	3.44	1.15	0.19	9.03
H4b-3: High (low) involved Chinese consumers will pay a higher degree of attention to health-related cues than high (low) involved Australian consumers.	3.62	1.74	4.42	1.74	0.06	3.54	2.05	4.62	1.75	0.06	0.27



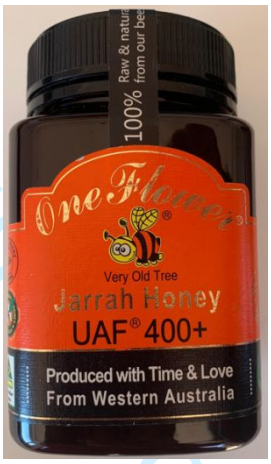
Conceptual model

469x256mm (72 x 72 DPI)

Appendix. 1

Stimuli 1: Jarrah Honey Packaging

Left side | Front side | Right side



Stimuli 2: Wildflower Honey Packaging

Left side | Front side | Right side