THE COUNTRY-OF-ORIGIN EFFECTS IN THE CHINESE DAIRY MARKET

BY

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ABSTRACT

Dairy is one of the most produced and valuable agricultural products in the world. China is a key importer of dairy products. This thesis aims to explore the country-of-origin effects in the Chinese dairy market after the food safety scandal in 2008. Despite the fact that previous marketing studies have discussed the different driving factors for country-of-origin effects and their impact on brand equity of various products in various markets, the research on country-of-origin effects in the Chinese dairy market is still absent. In order to fill the research gap, the current study focuses on the following two aspects:

1. What drives the country-of-origin effects in the Chinese dairy market?

2. How can the country-of-origin effects impact on brand equity in the Chinese dairy market?

Both qualitative (in-depth interviews) and quantitative (online questionnaire survey) techniques were employed as the methodological approaches in this research. Regression analysis, Hayes' PROCESS analysis and structural equation modelling were used for examining the theoretical models and hypotheses testing.

The key findings of this thesis were:

1. The driving factors for country-of-origin effects in the Chinese dairy market included: country image, product involvement, risk avoidance, product experiences and face consciousness.

2. Consumer ethnocentrism and consumer animosity can also drive the country-of-origin effects in the Chinese dairy market under the moderating effects of purchase frequency.

3. Country-of-origin effects have an indirect impact on brand equity. This impact is mediated by brand loyalty and brand awareness.

This study develops a more comprehensive theoretical framework with the integration of various constructs, which includes the driving factors and impacts of the country-of-origin effects. This new theoretical framework is supported by empirical evidence. The research findings contribute to the marketing literature on country-of-origin effects, and provide marketing practitioners with practical business strategies to improve their marketing performance in the Chinese dairy market.

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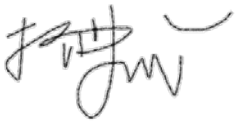
Signed: 

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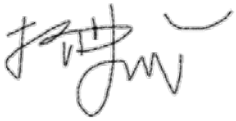
Signed: 

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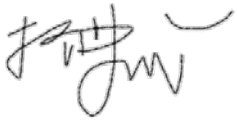
Signed: 

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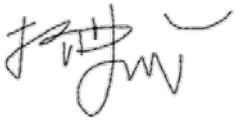
Signed: 

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National Rural News. (2016). *New Research Suggests Country-of-Origin labeling is Helping to Sell Australian Dairy Products*. [Radio programme]. Australia: ABC Radio.

The Australian Dairy Farmer (2016). *Why Chinese Consumers want Aust Dairy*. Retrieved 1 January, 2018, from http://adf.farmonline.com.au/news/magazine/industry-news/general/why-chinese-consumers-want-aust-dairy/2752861.aspx

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ADDITIONAL PUBLICATIONS BY THE CANDIDATE

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1. conceptualising, initiating, and conducting this journal paper;

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Nature of all Co-Authors' Contributions, including percentage of total

Dr. Roshnee Ramsaran contributed 20% of total work, which included editing and providing comments on the manuscript;

Dr. Santoso Wibowo contributed 10% of total work, which included editing and providing comments on the manuscript;

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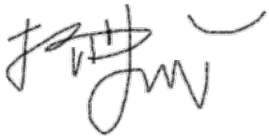

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CHAPTER 1. INTRODUCTION

1.1 Introduction

The concept of globalisation of markets was initially introduced by the work of researchers such as Levitt (1983), who claimed that the world has become an integrated marketplace. The development of globalisation has promoted world trade, and has influenced businesses in a few key aspects including the change of governments' policies on adoption of foreign investments, increases of imports/exports of commodities, advances in technologies, and expansion in international tourism. These trends have been influencing consumer markets in terms of the globalisation of consumer products, for example cars, electronic devices, clothing and foods. In other words, the national and cultural boundaries for international marketing have been overcome in many product categories (Howes, 1996; Kaynak & Hassan, 2014). Accordingly, marketers have been at the face of the challenge of developing marketing strategies to meet consumers' universal needs for products. Another challenge for businesses is the competition in the international marketing environment that is aggravated by globalisation. As a result, the international market has become increasingly competitive, which requires companies to market their products to consumers regardless of national boundaries. Nowadays, similar consumer segments in the international markets have been beyond national boundaries (Hofstede et al., 1999; Kaynak & Hassan, 2014). Therefore, the globalisation of marketing makes it more critical for business practitioners and researchers to understand consumer behaviour.

From the perspective of consumers, globalisation has complicated the purchase decision process for them, as they need to choose between domestic commodities and imported

alternatives (Dmitrovic et al., 2009; Schnettler et al., 2011). International or multinational products may be favoured due to the novelty, advantage in quality and superior status (Batra et al., 2000; Schnettler et al., 2011). They also intensify competition in the domestic market (Shankarmahesh, 2006). In an attempt to understand consumers' choice behaviour of choosing between domestic and international/ multinational brands, the vast literature review on 'country-of-origin effect' (COO effect) provides the theoretical basis for investigation. The COO effect suggests that consumers utilise the origin of the product as a reference to its quality independently or associated with other product attributes (Orth & Firbasova, 2003; Schnettler et al., 2011; Verlegh et al., 2005). This quality association derived from indicators of COO influences consumers' perceptions of the product's value and their confidence levels and this reduces associated purchase risks (Ozretic-Dosen et al., 2007).

Many studies discussed the significance of the COO of food products in consumers' purchase decisions (Alfnes, 2004; Chambers et al., 2007; Chung et al., 2009; Orth & Firbasova, 2003; Schnettler et al., 2008; Verlegh et al., 2005). Some studies have demonstrated that consumers in developing countries tend to identify their own domestic food products as being of lower quality than imported alternatives (Batra et al., 2000; Schnettler et al., 2011) while the reverse applies for consumers in developed countries (Herche, 1992; Schnettler et al., 2011).

In this study, COO is considered as an indicator of brand equity, which is a crucial asset to any business organisation in a competitive context. The accurate application of COO effect can provide more opportunities and insights into marketing management of dairy products to develop and promote stronger brands.

This chapter provides an overview of the study and is structured as follows. The research background is provided in Section 1.2, followed by research questions and objectives in Section 1.3. Next, Section 1.4 discusses the significance of the study. The outline of the thesis is then presented in Section 1.5. Finally, the chapter summary is provided in the last section.

1.2 Research background

As one of the most produced and valuable agricultural products in the world, the global dairy production has reached 810 million tonnes by 2016 (FAO, 2016). Milk is ranked third by total output and is the top agricultural product in value terms. Dairy products contribute 27% to the global value of livestock and 10% to that of agriculture. Dairy products are international commodities, which contribute to approximately 14% of agricultural trade worldwide (FAO, 2016).

The growth of the dairy industry is fast and sustainable. Global milk production is predicted to grow by 177 million tonnes by 2025, at an average growth rate of 1.8% per annum in the next decade (FAO, 2016). Over this period, per capita consumption of dairy products is projected to increase between 0.8 and 1.7 per cent in developing economies, and between 0.5 and 1.1 per cent in developed countries (FAO, 2016). With the sheer size of the dairy industry, these growth rates can produce big development payoffs for business related to the dairy industry.

The demand for dairy products in China is growing with rising incomes, population growth, urbanisation and changes in diets. Dairy consumption in China showed a strong growth from less than 5 kg per capita to over 20 kg per capita from 1990 to 2006 (Zhang et

al., 2010). Although the Chinese dairy industry developed its sector with branding, establishment of modern marketing channels and certification by various government safety programs, the Chinese dairy supply was not as reliable as it appeared (Zhang et al., 2010). In August 2008, some brands of infant milk powder manufactured by a Chinese dairy company were recalled due to melamine contamination, a chemical utilised mainly for plastic production. Melamine is nitrogen-rich and was added to watered-down dairy products to deceive food quality inspectors, who usually measure nitrogen levels to indicate protein levels. The Chinese government confirmed that this industrial chemical was detected in various dairy supplies after kidney diseases were linked to dairy consumption. An estimated 300 000 Chinese residents were affected, and there were over 54 000 hospitalisations and six infant deaths (Branigan, 2008; McDonald, 2008; Qiao et al., 2010; Zhang et al., 2010).

The scandal was not isolated to a few dairy companies in China. In fact, most of the 22 Chinese milk companies were large manufacturers with famous brands, and almost all dairy products held at least one quality and safety certification by the government. These companies were also found to be using melamine in dairy products (Qiao et al., 2010; Zhang et al., 2010). The Chinese consumers' confidence in the domestic dairy industry plummeted. Consumption of Chinese dairy products fell dramatically after the scandal. The Chinese domestic dairy industry faced significant financial losses in 2008 (Qiao et al., 2010).

The incident did not restrain the growth of the market size of dairy products in China. As a reaction to the domestic dairy scandal, Chinese consumers showed an increasing interest in foreign dairy products, which promoted the leap of foreign dairy brands purchase. As a result, China, in 2014, absorbed 22.2 per cent (2.051 million tonnes) of global dairy imports compared to 9.4 per cent in 2009 (Qiao et al., 2010; Zhang et al., 2010). In recent years, global media reported the continual shortage of dairy products in retailers of some particular

developed countries and regions including Australia, New Zealand, Europe, and Hong Kong, due to family and friends living overseas sending dairy products to China. This phenomenon resulted in some laws and acts for the restriction of dairy product purchase in some regions (The Government of the Hong Kong Special Region, 2013).

From the perspective of industrial structure, the dairy industry output can contribute up to 20 per cent in the total production output of husbandry in developed countries but this proportion is only 3 per cent in China in 2014. With the development of politics, economic conditions, society and technology, the Chinese dairy market size is anticipated to reach 60 million tonnes per year, and dairy consumption per person is expected to reach 24 kg per year by 2020 (Ministry of Commerce of China, 2015). These results suggest a potential for sustainable growth in the Chinese dairy market in the near future.

A few studies have examined the change in Chinese consumers' decision-making for dairy products after the incident. These studies were mainly conducted in the few years following 2008. Some found that the Chinese consumers' preference for domestic dairy brands recovered, while other researchers emphasised that the Chinese dairy consumers are still concerned about the safety of Chinese milk products (Qiao et al., 2010; Wang et al., 2008; Zhang et al., 2010). These studies did not reach agreement on how Chinese consumers' perceive domestic dairy products. Moreover, there can be a distinction between the consumers' immediate response and long-term response to a food safety shock (Arnade et al., 2009). This indicates that the Chinese consumers' evaluation of dairy products can differ after a certain period following the incident.

With the Chinese people shifting their attitude to foreign dairy products, it is important to study how products' COO affects consumers' perceptions and behaviours. Previous studies have demonstrated that COO is an important factor for consumers to evaluate product quality

in their purchase decision-making process (Li et al., 2012; Yu et al., 2013). COO studies have been conducted not only in developed countries such as Spain (Jiménez & San Martín, 2010), France, Germany and the USA (Hoffmann et al., 2011), but also in developing countries such as Turkey (Cilingir & Basfirinci, 2014) and China (Li et al., 2012). From the Chinese market perspective, the COO effects have been discussed in various product categories such as cars (Wang & Yang, 2008), clothes (Wu & Delong, 2006; Zhang, 1996) and household electrical appliances (Zhang, 1996). However, there is an absence of research on the COO impact on Chinese dairy consumers. In other words, it is necessary to demonstrate whether the COO effect exists in the Chinese dairy market.

Additionally, previous COO studies tended to be limited on partial factors (for example, consumer ethnocentrism) which can drive the COO effect (Ang & Kwon, 2004; Klein, 2002; Nijssen & Douglas, 2004; Shimp et al., 2004; Shin, 2001).

As for the impacts of COO effects, a few studies have tested its partial impacts, such as perceived quality on consumer behaviour (Insch & Mcbride, 2004). However, other studies underlined its overall influence on the consumer-based brand equity, and considered perceived quality, brand awareness, brand loyalty and brand as the mediators between the COO effects and brand equity (Murtiasih et al., 2014; Papadopoulos & Heslop, 2003; Pappu et al., 2007; Yasin et al., 2007). In particular, some researchers have demonstrated that the mediators for the impacts of COO effects on brand equity are varied by product category (Pappu et al., 2007). However, research in the impacts of COO effects on brand equity of dairy products is still absent.

This study aims to develop a more comprehensive model to explore the key variables driving the COO effect and demonstrate its impact on brand equity in the Chinese dairy market.

1.3 Research questions and objectives

Given the above discussion of the research context, the previous studies have evaluated the segmental factors driving the COO effects in various product categories in previous studies(Ang & Kwon, 2004; Cilingir & Basfirinci, 2014; Hoffmann et al., 2011; Klein, 2002; Li et al., 2012; Nijssen & Douglas, 2004; Shimp et al., 2004; Shin, 2001; Yu et al., 2013). The absence of analysis on dairy products in the previous COO studies and the importance of dairy products in global trading suggest one of the key purposes of this research, which is to answer the research question (RQ1): what drives the country-of-origin effects in the Chinese dairy market?

In addition, research in the impacts of COO effects on brand equity of dairy products is still absent while some researchers, such as Pappu et al. (2007), state that these impacts may be varied by product category. Thus, the current study also aims to answer another research question (RQ2): how can the country-of-origin effects impact on brand equity in the Chinese dairy markets?

In line with the above two main research questions, the more specific research objectives of this study are to:

A. Develop a theoretical framework to explain the country-of-origin effects on consumer behaviour.

B. Explore, test and compare the factors that can drive the country-of-origin effects on consumers' behaviour.

C. Identify and examine the country-of-origin's direct effects on consumers' brand loyalty, brand association, brand awareness, perceived quality, and the corresponding indirect effects on brand equity.

D. Provide the recommendations for the implementation of dairy marketing strategies in the Chinese market.

1.4 Definitions of key terms

On the basis of research questions and objectives, three key aspects are studied in this research: the COO effects, the driving factors of COO effects and the impacts of COO effects. Accordingly, the following key terms are adopted in the current study:

1.4.1 The COO effects

The concept of **COO effects** is defined as how consumers perceive imports from a specific country and evaluate their attributes (Papadopoulos, 1993; Roth & Romeo, 1992). The scale of COO effects consists of three items and is shown in Appendix A.

1.4.2 The driving factors of COO effects

The driving factors of COO effects discussed in this study are country image, consumer ethnocentrism and animosity, product involvement, product experiences, and cultural differences. The consumers' product experiences include direct and indirect experiences. Cultural differences can be classified as face consciousness, risk avoidance, uncertainty avoidance.

Country image refers to 'the pictures, reputations and stereotypes attached to products of a specific nation by businessmen and consumers' (Nagashima, 1970, p.68). The measurement for the concept of country image includes five items in this study (See Appendix A).

Consumer ethnocentrism is defined as the views held by people about the adequacy and morality of buying commodities from other countries (Shimp & Sharma, 1987). The scale of Consumer ethnocentrism consists of four items and is presented in Appendix A

Consumer animosity refers to a consumer's negative attitude towards the product from a particular country due to the 'remnants of antipathy related to previous or ongoing military, political, or economic events' (Klein et al., 1998). Country animosity is measured with five items in this study (See Appendix A).

Product involvement is defined 'the general level of interest in the object or the centrality of the object to the person's ego structure' (Day, 1970, p.45). The measurement for product involvement also consists of five items shown in Appendix A.

Consumers' **product experience** refers to 'the sensation of interaction with a product, service, or event, through all of our senses, over time, and on both physical and cognitive levels'. I other words, product experiences are formed from a consumer's interactions with a product (Hoch, 2002; Schmitt & Zarantonello, 2013). Physical interaction with a product provides direct experience while external presentation or description provides indirect experience (Hoch & Ha, 1986; Kempf & Smith, 1998; Zhao, 2013). The current study measures product experiences with seven items (See Appendix A).

The concept of culture in this study is defined as a combination of various individual processes, such as consumers' expressions of identity and affiliation (Cleveland & Laroche, 2007; Roosens, 1995; Zeugner-Roth et al., 2015). In this study, **cultural differences** are assessed in three dimensions: face consciousness, risk avoidance and uncertainty avoidance. Face consciousness refers to the people's desires to maintain face ('face-keeping'), enhance face ('face gaining'), and avoid 'losing face' in relation to significant others in social contexts

(Bao et al., 2003; Xiaolin & Derong, 2015). The scale of **face consciousness** consists of four items. The level of **risk avoidance** is considered as 'the extent to which people feel threatened by ambiguous situations, and have created beliefs and institutions that try to avoid these' (Hofstede & Bond, 1984). Risk avoidance is measured with three items in this study. **Uncertainty avoidance** refers to 'the extent of feeling threatened by uncertain or unknown situations' (Reisinger & Turner, 2003). The measurement for uncertainty avoidance includes four items. All the measurement items for cultural differences are presented in Appendix A

1.4.3 The impacts of COO effects

This study evaluated the indirect impacts of COO effect on overall brand equity of dairy products via four mediators: brand loyalty, brand association, brand awareness and perceived quality.

Brand equity refers to the 'value that is added by the brand's name and/or other intangible attributes of the product, which can act as drivers of consumer choice of products' (Paul & Dasgupta 2010, p.39). This study utilises five items to evaluate the brand equity of dairy products (See Appendix A).

Brand loyalty is defined as 'a deeply held commitment to rebuy or repatronise a preferred product or service consistently in the future, despite situational influences and competitors' marketing efforts having the potential to cause switching behaviour' (Leckie et al., 2016; Oliver, 1999; Paul & Dasgupta, 2010, p.39). The level of brand loyalty is measured with four items (See Appendix A)

Brand association refers to 'anything linked in memory to a brand' (Aaker, 1991; Paul & Dasgupta, 2010, p.39). The scale of brand association consists of four items and is shown in Appendix A.

Brand awareness is considered as 'the strength of a brand's presence in the consumer's mind from recognition to recall to top of the mind to dominant' (Aaker, 1996; Çifci et al., 2016; Godey et al., 2016; Paul & Dasgupta, 2010, p.39), and is measured with four items in this study (See Appendix A).

Perceived quality refers to 'the consumer's subjective judgment about a product's overall excellence or superiority' (Atwal & Williams, 2017; Paul & Dasgupta, 2010, p.39; Zeithaml, 1988). This concept is evaluated with five items presented in Appendix A.

1.5 The significance of the study

Firstly, this study is expected to contribute to the literature review on COO by proposing a new theoretical framework. The existing studies on country-of-origin effects tend to focus on its segmental driving factors and their partial impact. This study will initially develop a comprehensive conceptual model for studying the country-of-origin effect. This more systematic model explains the various driving factors behind COO effects, including country image, consumer ethnocentrism, consumer animosity, product involvement, product experiences and cultural differences. The proposed model also describes the COO effects on brand equity.

Secondly, this study aims to provide empirical evidence to advance the existing COO theory. The empirical results of this study aim to provide tenable evidence and validation of causal relationships among related variables of COO effects in the Chinese dairy market. It

empirically seeks to demonstrate that the scope of application of the COO theory can be expanded to another product category and industry: the Chinese dairy market.

Thirdly, this thesis also intends to contribute to the improvement in the methodology of COO studies, by employing both qualitative and quantitative research methods in the same study. Marketing research methods have been dominated by utilising quantitative approach (Hanson &Grimmer, 2007). As for previous COO studies, many researchers, such as Cui et al. (2014) and Yasin et al. (2007), tended to solely employ quantitative methods, while other studies, such as Genç & Bayraktaroğlu (2017) and Touzani et al. (2015), relied on purely qualitative approaches. This study employs a pluralistic research method in order to fully explain various phenomena and identify the attributes of the complex concepts in COO effect. Therefore, to minimise the methodological limitations of COO research, the present study combines two method techniques: in-depth interviews and an online survey. This approach can capture authentic data from respondents and achieve a satisfactory methodological framework.

Lastly, this study supports marketing management in an under-researched industry. It brings the prospect of the application of COO effect in the Chinese dairy market, which is a significant and unexplored market. Practically, this study seeks to assist dairy marketers in developing effective strategies to promote brand equity by applying COO effects to their marketing activities. Having such knowledge can help international dairy companies understand Chinese dairy consumers' purchase behaviour of domestic and imported dairy products. The findings of this study provide a solid foundation upon which to build consumers' perceived quality, brand awareness, brand association and brand loyalty towards dairy products. It would eventually lead to better market performance.

1.6 Delimitations of the Study

This research was conducted based on the following delimitations that were the boundaries of this research.

1. The chosen product category for this study was limited to dairy products. Other product categories were not accounted for in the scope of this research.

2. The geographic setting was limited to the People's Republic of China in order to focus on the COO effects on the Chinese consumers after the dairy scandal in this country.

3. The participants in this study must be Chinese residents and 18 years old or older.

4. The participants must have at least once purchased dairy products in the past twelve months.

5. The participants in the on-line questionnaire survey must be able to access the internet.

1.7 The thesis outline

This thesis includes six main chapters:

Chapter 1 (Introduction) introduces the background of this study, research questions and research objectives, and the significance of this study. This chapter also provides the structure of the current study.

Chapter 2 (Literature Review) includes a thorough literature review on the primary research constructs, which includes the definition of COO, the drivers of COO effects, and the impacts of COO effects on brand equity. A theoretical framework including two

sub-models and fifteen main latent variables is then proposed based on the existing literature. This chapter also presents a total of twenty-eight research hypotheses.

Chapter 3 (Methodology) discusses the qualitative research method (in-depth interviews) and quantitative approach (online questionnaire survey) employed in this study. Firstly, this chapter explains the key steps for the qualitative research, which includes in-depth interviews' sampling design, sample size, sampling method, the development of interview questions and data analysis. The quantitative research approach is then discussed and it covers item development for the online questionnaire, pilot testing, sampling, data collection, and the data analysis methods. The data analysis methods utilised in this study include reliability tests, confirmatory factor analyses (CFA), regression analysis, Hayes' PROCESS analysis, and structural equation modelling (SEM) to evaluate the full theoretical models and to test the related hypotheses.

Chapter 4 (Data Analysis) details the research results. Firstly, this chapter discusses the findings from data cleaning, outliers and normality tests. Then, the demographic profiles of participants, the results of reliability and validity tests, CFA, regression, Hayes' PROCESS and SEM analyses are presented. Lastly, this chapter reports the results of hypotheses testing.

Chapter 5 (Research Findings and Conclusion) discusses the findings of the hypotheses tests, the related implications for relevant theories and managerial practice. This chapter also outlines the limitations and areas for future research prospects, then ends with a conclusion.

1.8 Chapter summary

This chapter firstly provides the details of the research background in this study. Despite the fact that previous studies have examined COO effects in various product

categories and countries, the COO theory has not been applied to the Chinese dairy market, which is a significant market in the global trading environment. In order to fill this existing gap in COO studies, this thesis focuses on two main research questions:

a) What drives the COO effect in the Chinese dairy market?

b) How can the COO effects impact on brand equity in Chinese dairy markets?

This chapter also specifies the significance of the study. This study provides a new theoretical framework and further empirical evidence to the theory on COO, helps in improving the methodology of COO studies, and empirically supports international marketing activities, particularly in the Chinese dairy market, which is a significant and unexplored market. Finally, the last section outlines the structure of this thesis.

CHAPTER 2. LITERATURE REVIEW

2.1 Introduction

This chapter provides an extensive literature review on the key aspects related to the research objectives and questions stated in the previous chapter. Specifically, Section 2.2 provides the definitions for the concept of COO. Section 2.3 discusses the effects of COO. Section 2.4 explores the drivers of COO. Section 2.5 analyses the potential moderating factors in the COO effects. Section 2.6 proposes the theoretical framework and hypotheses for this study. Section 2.7 provides a summary of this chapter.

2.2 Country-of-origin (COO)

2.2.1 Definition of country-of-origin

The concept of country-of-origin (COO) and its effects has been discussed extensively, however there is an active debate on how to define this concept. COO is defined as a type of information cue that forms consumers' attitudes and perceptions (Ahmed and D'astous, 2001; Chinen et al., 2000; Roth and Romeo, 1992; Samli, 1995; Schooler, 1965; Xie et al., 2016). Essentially, a product's COO is a type of extrinsic product cue, a class of intangible product traits that include a product's brand, price, and warranty. Unlike physical characteristics, a change in these cues has no direct bearing on the product's performance. However, this is a crucial information cue, which can affect consumers' perceptions, product evaluation and willingness to

purchase foreign products thereby influencing imported products' acceptance by consumers in a new market (Cordell, 1992). COO plays a major part in the acceptance of products in international markets as some consumers believe products from a specific country are superior to those from other countries. For example, wines from France are assumed to have better taste than wines made in Chile (Veale & Quester, 2009); German automobiles enjoy a prestige for quality in the global market (Wang & Yang, 2008). The positive country images in respective categories benefit the related products from these countries. In other words, when people hold a favourable attitude towards a country image in a product category, they will show a preference for the product from the particular COO which is considered as superior.

2.2.2 Product origin (PO)

However, a product's COO can be defined in various ways (Ahmed & d'Astous, 2001; Balabanis & Diamantopoulos, 2011; Essoussi & Merunka, 2007). There is a continuous debate on the definition of the true origin of a product. Bilkey and Nes (1982) limited COO to the country where the products were manufactured or assembled. The product origin (PO) is defined as 'Country of Manufacture' (COM) or 'Country of Assembly' (COA). This definition has been supported by many researchers including Han and Terpstra (1988), Ahmed & d'Astous (2001), Mostafa (2015) and Arora et al. (2015). It means if a dairy product was produced in Australia, it will be considered as an Australian product, even if the owner of the manufacturing firm is a Chinese company. Besides, other researchers suggested the use of 'made in' or 'manufactured in' labels to define the origin of the product (Bannister and Saunders, 1978; Chasin & Jaffe, 1980; Klein et al., 2016; Nagashima, 1970, 1977; Xie et al., 2016).

Nevertheless, other academics argued that the origin of a product should be the country where the headquarters of that product, or the brand's company, is located (Johansson et al., 1985). With this definition, when an Australian dairy company expands a branch factory in Beijing, even if their product is made in China, it will still be considered as an Australian product.

Saeed (1994, p.581) defined PO as 'the country which a manufacturer's product or brand is associated with'. It actually developed a new term of PO, "Country of Association" (COA). However, with the development of globalisation, there is an increasing number of multinationals relocating their manufacturing departments in various foreign countries for lower costs. This strategy makes it more difficult to define the exact origin of a product. For example, the brand of iPhone belongs to an American corporation. However, it is assembled by plants located in the Chinese Mainland that are owned by a business headquartered in Taiwan. Therefore, a new term 'Country of Design' (COD) has been developed (Hamzaoui & Merunka, 2006; Genç & Wang, 2017). Some academics argue that the actual COO of a product should be COD rather than other attributes. It is suggested that COD would have considerable influence on how consumers perceive the products. Hamzaoui and Merunka (2006) found that people from developing countries could have a strong sensitivity to COD cues when the products have symbolic values. Actually those hybrid products such as iPhone did not only add more complexity to identify the real origin of a product, but also aggravated the debate on whether COO can be considered as a single dimension. Chao (1993, 2001) stated that the fast development of global corporations causes great difficulties in identifying the COO of hybrid products. Ahmed and d'Astous (1996) pointed out COO is a multi-dimensional cue

that should be divided into at least COA and COD, which supported the viewpoint of Chao (1993, 2001). Insch and McBride (2004) described the difference of effects of COA and COD on product evaluations. Some studies showed that people in emerging markets have more sensitivity to the COD for public productions than private productions, and also attached importance to the COM of branded products (Arora et al., 2015; Essoussi & Merunka, 2007; Mostafa, 2015).

Although PO can be defined via various ways, such as COM, COA and COD, COO studies on food products, such as beef (Chung et al., 2009; Lusk & Anderson, 2004) and fruits (Hooley et al., 1988) tend to employ the approach of where the products were actually produced. This approach is in line with definition of COM. Therefore, this study should adopt the same concept to identify the PO of dairy, which is a type of food products.

2.2.3 Brand origin (BO)

Among the debate of a product's exact COO in terms of COD, COM or COA, the significance of 'brand origin' has been increasingly emphasised in recent researches. Researchers like Batra et al. (2000) and Halkias et al. (2016) found that consumers in developing countries give preference to brands with non-local COO (especially Western brands) compared to local brands in some product categories. It is not only due to perceived quality, but because of social status. This result was further supported by Zhou et al. (2010), who showed that non-local brands are preferred by consumers in the emerging markets to those brands with local origin. Usunier (2011) underlined that there should be a shift from COM to 'Country of Brand' (COB). In other words, the researcher believed COB have a greater significance than 'COM' or 'COD' based origins. Therefore, COB seems to be a dominating information cue in

identifying the product origin according to this viewpoint. Magnusson et al. (2011a) showed his support to Usunier's (2011) view that COB has more significance than 'made in' labels.

In practice, consumers tend to experience difficulties in accurately recognising the COB, as they normally have limited knowledge of the various brands in the market. Thus, there are complexities for consumers in identifying the accurate COO (Balabanis & Diamantopoulos, 2008; Samiee et al., 2005). Zhuang et al. (2008a) further supported this argument by discussing COB confusions among consumers and how it can affect preferences between related products. Balabanis and Diamantopoulos (2011) studied the significance of forming consumers' perceptions of a brand's true origin. When a brand's origin is misclassified or non-classified, it could cause negative impacts on consumers' brand evaluations and purchase intentions. Magnusson et al. (2011b) and Halkias et al. (2016) demonstrated that consumers' attitudes can be affected by COB. Accordingly, the importance of enhancing consumers' perceptions of the brand's true origin is evident.

Many studies proved the growing importance of COB in determining a product's COO. This significance particularly presents in current global economic environments, due to the great number of products which are branded, designed and manufactured in different countries. For instance, there is a trend for Chinese dairy companies to outsource their manufacture to other countries, such as New Zealand. The COB discussion introduces a new perspective of how hybrid products are perceived due to the globalisation of marketing.

2.2.4 The perceived COO

Despite the debate on the precise definition of COO, the meaningful COO of a product depends on how the company communicates it and how consumers perceive it. A product's COO can be communicated in various ways. Perhaps the most transparent method is the usage of ‘Made in …’ labels. Other strategies to communicate a product's COO include the use of a brand or trademark name that contains a geographic reference, for example, ‘Ausnutria’ baby formula, or by utilising a foreign famous brand or trademark name such as Unilever's ‘Boursin’ brand (soft cheese). In addition, packaging and advertising can also contain COO references, either in slogans (such as ‘Pure New Zealand’) or in graphical elements (such as the triangle kangaroo mark on Australian made dairy product packages). These communication strategies can influence consumers’ perception of a product’s COO. For instance, the localisation or globalisation of packaging style affects people’s judgement on whether a brand is domestic or foreign (Saran & Gupta, 2012). Therefore, a more practical approach to study COO effects should analyse the COO from the consumers’ perception perspective (perceived COO) rather than the product perspective.

2.3 The effects of COO

Roth and Romeo (1992) defined the COO effect as how buyers perceive imports from a specific country. The COO effect was referred by Papadopoulos (1993) as a process where the imported product’s origin impacts on how consumers perceive a product and evaluate its attributes. Chinen et al. (2000) considered COO effects as

consumers' beliefs in COO information in their evaluation of the quality of goods from different countries and subsequent purchase decision-making. Other researchers underlined how country images in products' origins affect consumers' perceptions and evaluations. The country image of the product effects can be summarised as the generalisations and perceptions about a country in consumer perceptions, and accordingly impact on their product evaluation from that country (Berry et al., 2015; Costa et al., 2016; Nebenzahl et al., 1997; Stone, 2002; Visbal et al., 2017).

2.3.1 The halo effect and summary construct purchase intention

As to the COO effects, researchers generally focus on two aspects: the process of consumers' product evaluations and consumers' product preferences. In the first aspect, when a COO effect happens, a consumer will use COO information as an important cue for perceiving or evaluating the product's quality (Han, 1989). In the second aspect, the COO effects present as a consumers' preference to the products with particular COO (Diamantopoulos, 2011).

The effect of COO influencing consumer's perceptions, product evaluation and purchase intention was initially explained by the theories of 'halo and summary construct' and 'national stereotypes'. Han (1989) initially found that the 'Halo Effect' and 'Summary Construct' can explain why COO effects can impact on consumers' behaviour. The researcher tested the influence of country image in consumers' evaluations of televisions and automobiles. Firstly, when consumers have low familiarity with products from a country, the country image (CI) would perform as a halo from which consumers infer the attributes of those products. It may cause an

impact on their attitudes to related brands hence their inferential beliefs, although this impact may be indirect. By contrast, when the consumers' familiarity with a country's products increases, CI would become a construct as summary of consumers' recognition of those products' attributes, and people would adjust their brand attitude, and this impact can be direct. As a result, "there is a structural interrelationship between CI, beliefs about product attributes, and brand attitude" (Han 1989). These models are shown in Figure 1.

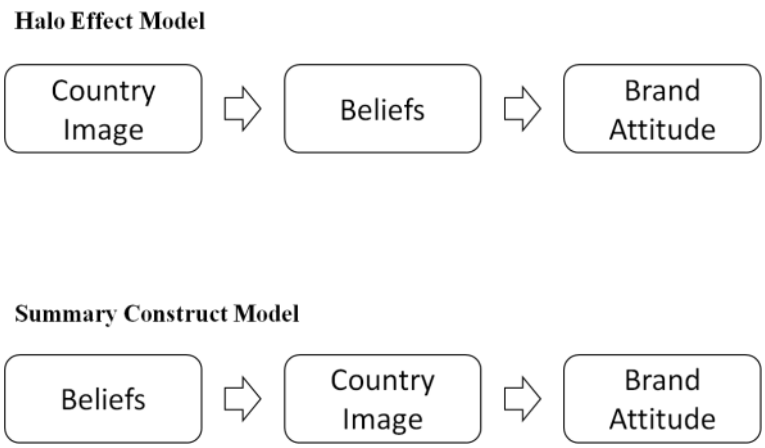


Figure 1: **The Halo Effect Model and Summary Construct Models** (Han, 1989)

Jaffe and Nebenzahl (2001) improved these models and concluded that the effects of 'Halo and Summary Construct' cannot be separated. This is because consumers can experience and be exposed to products and their related information over time. Accordingly, perceptions and recognitions of CI, product evaluations and brand attitude will be modified. This argument supports the viewpoint that

consumers' attitudes are changeable and that their existing recognition and perceptions of CI can be adjusted accordingly. Jaffe and Nebenzahl's (2001) improved model of 'Halo Effect and Summary Construct' is shown in Figure 2.

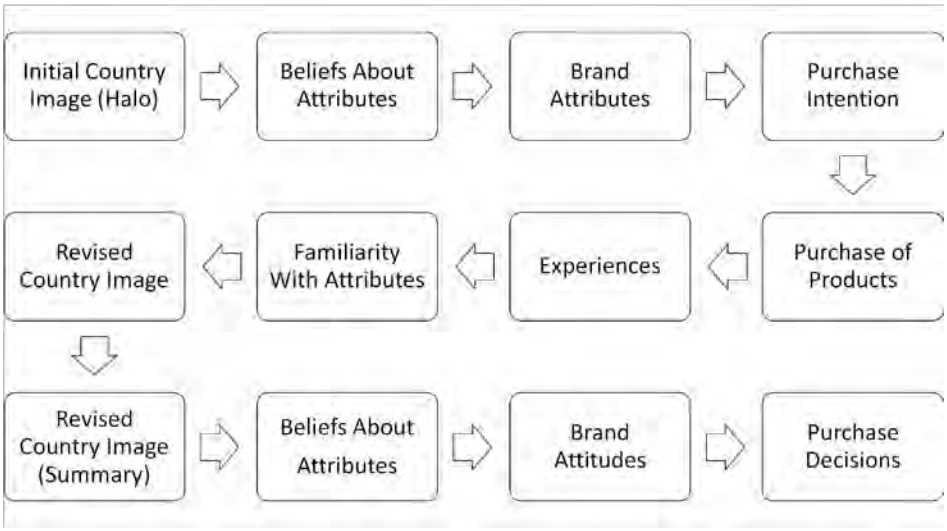


Figure 2: **The Improved Halo Effect/ Summary Construct Model** (Jaffe & Nebenzahl, 2001)

2.3.2 COO effects on brand preference

Previous studies have demonstrated that COO may have effects on consumers' purchase decisions. However, some researchers argue that these effects may be indirect rather than direct. These studies discover that COO, reflected both in country image (CI) and product category image (PCI) perceptions, does not pose direct influence on consumers' purchase intentions (PI) to brands. Actually, the COO concept has an indirect impact. When people find a new brand of Australian milk for example, the positive CI of Australia (e.g. Australia is a developed country) and PCI (e.g. Australian dairy products are good) will promote this brand's image to

consumers, and enhance their purchase intentions due to the positive brand image (Arora et al., 2015; Diamantopoulos et al., 2011; Esch et al., 2006; Hsieh et al., 2004; Mostafa, et al., 2015). Diamantopoulos et al. (2011) summarised this effect in the framework shown in Figure 3.

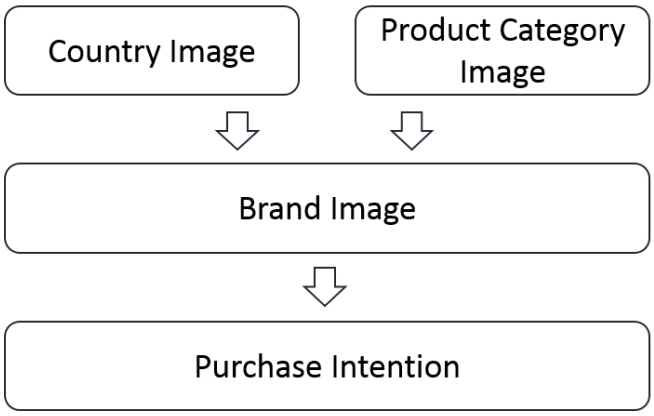


Figure 3: **A model of the indirect impact of COO on purchase intention through brand image** (Diamantopoulos et al., 2011)

Paul and Dasgupta (2010) conducted a study to examine the effects of COO image as an antecedent to brand equity, which is defined as a brand's incremental value (for example, profit margin or market share) due to its brand name. The study showed that COO has important connotations in consumers' decision-making. For example, COO is an important factor when Brazilian consumers are making a decision for choosing cosmetic products (Sutter et al., 2015). The result in the study of Paul and Dasgupta (2010) showed three important findings: firstly, COO can significantly influence the overall brand equity of mobile phones and automobile products. Secondly, there are four factors—namely 'brand loyalty', 'brand association', 'brand awareness' and 'perceived quality' respectively—that

significantly and directly influence the formation of overall brand equity of those products.

Third, the study showed that the effects of these four factors are significant on overall brand equity, while the impact of COO on overall brand equity is not (Paul & Dasgupta, 2010). This implies that the COO effect on overall brand equity should be indirect and mediated through those four factors. Accordingly, Paul and Dasgupta (2010) developed a conceptual model to illustrate the indirect impacts of COO image on brand equity, which is shown in Figure 4.

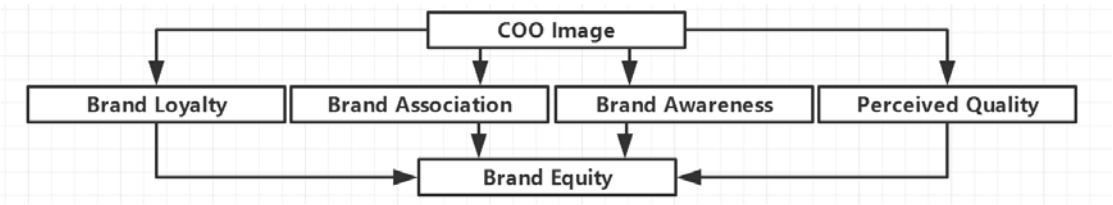


Figure 4: **A conceptual model of indirect impacts of COO image on brand equity** (Paul & Dasgupta, 2010)

2.3.3 Brand equity (BEQ)

Brand equity can be defined as the 'value that is added by the brand's name and/or other intangible attributes of the product, which can act as drivers of consumer choice of products' (Paul & Dasgupta 2010, p. 39). Brand equity happens when a consumer is willing to accept to pay a higher price for the similar quality due to the attractiveness of the brand name for the product or service (Baalbaki & Guzmán et al., 2016; Bello & Holbrook, 1995; Yasin et al.,

2007). In previous marketing studies, consumer-based brand equity is seen as the intangible brand properties. Consumer-based brand equity is created by ‘brand awareness’, ‘brand loyalty’, ‘perceived brand quality’ and ‘brand association’ (Aaker, 1991; Pappu & Quester, 2017; Paul & Dasgupta, 2010). Brand equity will occur when consumers are familiar with the brand and hold some favourable, strong, unique brand associations in their memories. It means that consumers’ preference and purchase intention of a brand indicate the existence of brand equity (Baalbaki & Guzmán et al., 2016; Keller, 1993; Yasin et al., 2007). Consumer-based brand equity is a valuable and strong asset as it provides the company a loyal consumer base that can produce substantial returns to the business (Yasin et al., 2007).

Because consumers’ perceptions of a particular COO influence their evaluation of products and brands from that country, it will impact their preferences, purchase intentions and choice of particular brands. (Yasin et al., 2007). This suggests that consumers could be willing to pay more for a brand associated with their preferred COOs (Koschate-Fischer et al., 2012; Skuras & Vakrou, 2002). In other words, a favourable COO may contribute to the equity of brands from that country.

2.3.4 Brand loyalty (BL)

Brand loyalty refers to ‘a deeply held commitment to rebuy or repatronise a preferred product or service consistently in the future, despite situational influences and competitors’ marketing efforts having the potential to cause switching behaviour’ (Leckie et al., 2016; Oliver, 1999; Paul & Dasgupta, 2010). The value of a brand or brand equity is largely created by brand loyalty. Aaker (1996) underlined the significance of brand loyalty to brand equity that the equity of a brand relies on the

number of regular purchasers. The value of these regular purchasers is considerable as they are considered as a type of revenue stream for the business. Therefore, brand loyalty should be considered as an important element in brand equity. Brand loyalty has been demonstrated to have a positive and direct effect on brand equity (Atilgan et al., 2005; Godey et al., 2016; Yasin et al., 2007). When customers are loyal towards a brand, even if other alternative brands with superior characteristics are available, the consumers still recognise a substantial value of the chosen brand (Godey et al., 2016; Paul & Dasgupta, 2010; Yasin et al., 2007).

A positive image of COO can lead to a high degree of brand loyalty. Consumers are faced with many competing brands in the same product category, which they consider as equally attractive for product attributes and functions. In this case, COO can be an added advantage to a product (Yasin et al., 2007). Consumers' attitudes towards a country are often transferred to brands due to the halo effect. Consumers consider that brands from origins with favourable country images are more reliable than those from countries with less favourable images. Accordingly, these brands are more likely to be preferred and chosen during consumers' purchase decision-making. Eventually, consumers' loyalty towards these brands will be enhanced with long-term repeat purchases (Paul & Dasgupta, 2010; Yasin et al., 2007).

Therefore, the hypotheses for the role of brand loyalty in impact of the COO on brand equity can be developed as the following:

a. The level of importance attached to COO in dairy brand evaluation directly increases brand loyalty.

b. Brand loyalty increases brand equity.

c. Brand loyalty mediates the relationship between the level of importance attached to COO in dairy brand evaluation and brand equity.

2.3.5 Brand association (BAS)

Brand association means ‘anything linked in memory to a brand’ (Aaker, 1991; Paul & Dasgupta, 2010). Brand association represents any messages (such as COO) linked to the brand in consumers’ memories and contains the meanings of the brand for them (Keller, 1998). A brand image in consumers’ perception can be enhanced with four factors: types of brand associations; favourability of brand associations; strength of brand associations; uniqueness of brand associations (Ashill & Sinha, 2004; Gordon et al., 2016; Keller, 1998).

According to Gordon et al. (2016, p. 140) and Keller (1998), there are three types of brand association: attributes, benefits, and attitudes. Attributes are defined as the descriptive features which can characterise a product or service. Benefits refer to the personal value a consumer attaches to the products or services. Attitudes are the results of the consumers’ overall evaluations of a brand, which can be positive or negative. The favourability of brand associations refers to ‘how the product satisfies the consumers’ needs or wants’. The strength of brand associations is considered as ‘the extent to which brand image enters and is maintained in the mind of the consumer’. Uniqueness of brand associations is defined as ‘how much that information recall relates to the particular brand in question’.

Associations that consumers make with a brand can significantly support brand equity as consumers’ positive attitudes will have a significant impact on their purchase intentions and choice of the brands. These behavioural responses have

significant impacts on brand equity (Andéhn et al., 2016). In the context of some products, for example food, brand associations can represent the visual and olfactory attributes given by the specific brand. Some intangible qualities with which buyers associate the brand, for example safety, nutrition, and prestige of the product's COO, can be also defined as brand associations. The coalition of tangible and intangible qualities forms the brand's identity, which is 'a unique set of brand associations that the brand strategist aspires to create or maintain', and can drive brand associations (Aaker, 1996, p. 46). As consumers may identify brands based on their COOs, therefore, the COO of products can have an implication on brand associations and ultimately brand equity (Pappu & Quester, 2017; Yasin et al., 2007).

Thus, the hypotheses for the role of brand association in impact of the COO on brand equity can be developed as the following:

a. The level of importance attached to COO in dairy brand evaluation directly increases brand association.

b. Brand association increases brand equity.

c. Brand association mediates the relationship between the level of importance attached to COO in dairy brand evaluation and brand equity

2.3.6 Brand awareness (BA)

Brand awareness is considered as 'the strength of a brand's presence in the consumer's mind from recognition to recall to top of the mind to dominant' (Aaker, 1996; Çifci et al., 2016; Godey et al., 2016; Paul & Dasgupta, 2010). There are two

components of brand awareness: brand recognition and brand recall performance (Keller, 1993). Brand recognition refers to consumers' capability to recall and confirm their prior exposures to a particular brand when provided the brand as a cue. Brand recall is defined as whether consumers can recall and confirm the brand from their memories when provided with the product category as a cue (Keller, 1993; Ashill & Sinha, 2004). A brand can be perceived positively (such as trustworthy and attractive/ likeable) but, at the same time, brand awareness can stay at a low level. For instance, overseas consumers may not be aware of a brand only sold in a particular country.

When considering a product category, a brand must be comparatively more effortless or more salient for consumers to have in mind, in order to be included in their brand evoked set (Keller, 1993). Moreover, if other specific brand associations are absent, consumers would still prefer to purchase the brand that is more established and familiar to them (Laroche et al., 1996; Roy & Bagdare, 2015). Therefore, when consumers are highly aware of brands from a specific COO, these brands will be likely to significantly influence their purchase intentions compared to the brands with lower awareness levels. This indicates a moderating effect of brand awareness on purchase intention (Wang & Zhang, 2010).

The evoked awareness of a brand in consumers' minds can be seen as a measurement of its consumer-based equity. The importance of brand awareness in brand equity is reflected by the level of the awareness that it achieves. A higher level of awareness implies the dominance of the brand, which can increase the likelihood of the brand being chosen in various purchase situations. Previous studies have found that brand awareness is a principal choice tactic among buyers (for example, Çifci et al., 2016; Cobb-Walgren et al., 1995; D'Souza and Rao, 1995; Godey et al., 2016). If

consumers are highly aware of a brand, it suggests the brand's familiarity and reputability among consumers. Research underlines that people who can recognise a brand name are more likely to purchase the brand as familiar items are generally preferred to those that are less familiar (Macdonald and Sharp, 2000; Roy & Bagdare, 2015). When purchase preference is given to a brand, it will help in developing brand equity (Yasin et al., 2007).

Accordingly, the hypotheses for the role of brand awareness in impact of the COO on brand equity can be developed as the following:

a. The level of importance attached to COO in dairy brand evaluation directly increases brand awareness.

b. Brand awareness increases brand equity.

c. Brand awareness mediates the relationship between the level of importance attached to COO in dairy brand evaluation and brand equity.

2.3.7 Perceived quality (PQ)

Perceived quality (PQ) can be defined as 'the consumer's subjective judgment about a product's overall excellence or superiority' (Atwal & Williams, 2017; Paul & Dasgupta, 2010, p.39 ; Zeithaml, 1988). When a brand's relative difference from, and superiority to, other competitors can be recognised by consumers, it achieves a high perceived quality. This consequently influences consumers' purchase decisions and creates the motivation to purchase the brand rather than alternatives. This means that PQ can influence consumers' choices and enhance the consumer-based brand equity. High perceived quality can allow the

premium pricing and greater profit margins for the business and brand equity (Yoo et al., 2000). This viewpoint is also supported by Aaker (1991) and Yasin et al. (2007), who also argue that PQ is a unity that is normally a core factor in brand equity (Baalbaki & Guzmán, 2016; Yasin et al., 2007).

Many studies have evidenced that COO can impact on the PQ of a product, via observation or experiment approaches. (Bilkey & Nes, 1982; Huber & McCann, 1982; Shimp & Samiee, 1993). Wall et al. (1991) demonstrated that COO can more significantly influence consumers' product evaluations of quality, compared to other information cues (for example, price or brand). This is because consumers tend to use their perceptions of country images in product evaluation when they are unable to perceive the actual quality of products with the related COO. This suggests that consumers often utilise COO to evaluate the quality of unfamiliar products. In some particular food product categories such as wine, COO can in fact be one of the key indicators of product quality when other objective references are hard to access (Balestrini & Gamble, 2006; Elliott and Cameron, 1994).

Other researchers focus on the specific effects of COO to consumers' PQ in product and brand. Some studies found that consumers have more positive PQs towards domestic food products than those with foreign COOs (for example, Pouta et al., 2010). This is also a consistent finding in the study by Lobb and Mazzocchi (2007) who discovered that consumers tend to rank local food products as safer than those with foreign COOs. However, other researchers provide evidence that consumers in some developing countries, such as Bangladesh, believe that food products from developed countries have a higher level of quality than domestic food products (Kaynak et al., 2000). Other studies show that COO effects on consumers' perceived quality can be not significant in some western countries, for example Germany, Spain, the UK, and France (Grunert, 1997; Newman et al., 2014)

Hence, the hypotheses for the role of perceived quality in impact of the COO on brand equity can be developed as the following:

a. The level of importance attached to COO in dairy brand evaluation directly increases perceived quality.

b. Perceived quality increases brand equity.

c. Perceived quality mediates the relationship between the level of importance attached to COO in dairy brand evaluation and brand equity.

2.4 The drivers of country-of-origin effects

2.4.1 Country image (CI)

One of the initial studies on country image (CI) perceptions was Nagashima's (1970) research of business people in the USA and Japan. The author defined country image as: ‘the pictures, reputations and stereotypes attached to products of a specific nation by businessmen and consumers’. This image is derived from factors such as ‘representative products, national characteristics, economic and political background, history, and traditions’ (Nagashima, 1970, p.68). Narayana's (1981) also provide another similar definition for country image: ‘the aggregate image for any particular country's product refers to the entire connotative field associated with that country's product offerings as perceived by consumers’.

Other studies on COO effects also examined the impact of the country’s image and consumers’ stereotypes. Chattalas et al. (2008) developed a model which explains the relationship between CI and COO effect. It shows the COO effect process is initiated by CI, which performs conjointly with other factors, which include ‘product type’, ‘consumer

expertise', 'culture', 'product involvement' and 'consumer ethnocentrism', to cause the COO effect. The model is shown in Figure 5.

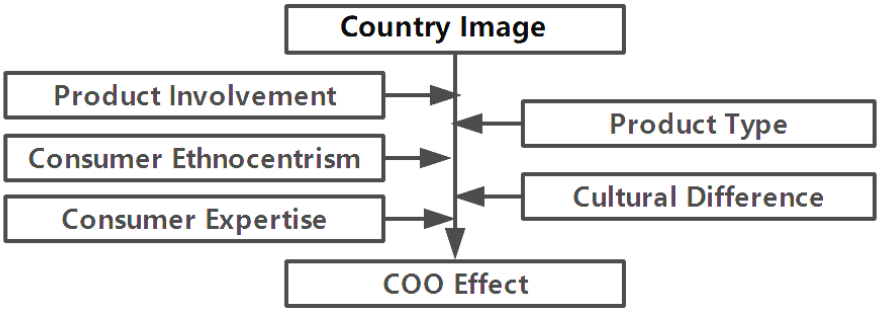


Figure 5: **The conceptual framework of the relationship between 'national stereotypes' and COO effect** (Chattalas et al., 2008)

In addition, a country's image, perceived as a combination of contemporary and historical associations, is an important element in purchase decisions due to its imagery representation as well as its propositional representation. Particularly when propositional representation becomes the reputation capital of the country, which is relevant to a particular product category, its influence leans to be more predominant than a country's overall attractiveness (Balestrini & Gamble, 2006; Costa et al., 2016; O'Shaughnessy and O'Shaughnessy, 2000).

The product's COO can signal affective implications, such as 'authenticity', 'tradition' and 'status'. Food products are often linked with particular COOs, for example 'French

champagne', 'Dutch (Gouda) cheese', 'German beer' and 'Russian Vodka'. These origins tend to be considered 'authentic' and 'typical' for these food products (Frewer et al., 2001). Roth and Romeo (1992) conducted a study in COO to examine the association between countries and product categories. They underlined the significance of product category dimensions (innovativeness, design, prestige, and workmanship) matching the country's image in the same dimensions. Their study showed that consumers in USA, Ireland and Mexico are willing to purchase automobiles or watches from Japan, Germany and the USA as these nations are perceived positively on the dimensions that were also significant to these product categories. However, these consumers prefer not to purchase cars and watches from Mexico and Hungary because these nations are evaluated negatively on dimensions that were important for cars and watch features. This implies that an unfavourable product country match can account for why consumers avoid buying certain products from particular countries. (Al-Sulait & Baker, 1998; Costa et al., 2016; Roth & Romeo, 1992; Visbal, 2017).

An effective match of product and country would appear when a country's image is linked to crucial dimensions for a specific product category. When such a linkage is absent, a mismatch between the product category and country would exist. For example, the country image of France may be linked to good design and prestige, while Hungary is considered as relatively weaker in design and prestige. Design and prestige can be crucial characteristics when consumers purchase shoes, but relatively insignificant in the decision-making process for beer purchase. Therefore, this product-country match for French shoes is more evident (Roth & Romeo, 1992). However, studies discovered the inconsistency of country image ratings across the dimensions. For instance, German cars are evaluated highly on prestige, but relatively negatively on economy. This implies the specificity of a country image to the dimensions being measured. The study also demonstrates the consistency of country image

perceptions across various product categories. For example, both Japanese cars and television sets have moderate levels of prestige (Roth & Romeo, 1992). As country images on some specific product dimensions can be generalised in various product categories, Han and Terpstra (1988) suggest the existence of general country images. However, their study was limited to the American residents' perceptions of only two product categories (autos and televisions) with four COOs (Germany, Japan, Korea, USA). Thus, further research is needed to demonstrate the impact of country image on consumers outside of the United States (such as China) when they evaluate other product categories, such as dairy products. Hence the a hypothesis is proposed to investigate the impact of country image on COO: Positive country images directly increase the level of importance attached to COO in dairy brand evaluation.

2.4.2 Consumer ethnocentrism (CE)

As one of the factors forming a COO effect in the conceptual framework by Chattalas et al. (2008), consumer ethnocentrism (CE) roots in 'ethnocentrism' that is a more general psychological concept that can be found in most domains of inter-group relationships (Balabanis et al., 2017; Lewis, 1976; Shimp and Sharma, 1987). Ethnocentrism was initially defined by Sumner (1906) as a tendency that people believed their own group to be superior to others, and therefore performed a rejection of other groups that are dissimilar while showing accreditation to similar ones. Based on a general framework, Shimp and Sharma (1987) identified CE as the views held by people about the adequacy and morality of buying commodities from other countries. This concept has been further referred as to a phenomenon that some consumers are ethnocentric, and tend to discriminate products from the 'in-group' (domestic) and from 'out-groups' (foreign) and to avoid purchasing foreign products as they consider it as inappropriate, anti-patriotic, and possibly even immoral due to the potential

threat to their domestic economy. As a consequence, consumers with high ethnocentrism tend to have a negative evaluation of the quality of foreign commodities and prefer to buy domestic products (Shimp & Sharma, 1987). Additionally, in their study, they also developed and validated the CETSCALE (Consumer Ethnocentric Tendencies Scale) as a measurement for the scale of CE.

Various studies have tested the relationship between CE and COO among various product categories and countries. For example, consumers in UK, USA, France, Germany, Japan and Italy were selected as the foreign COOs in the researches undertaken by Balabanis and Diamantopoulos (2004), Evanschitzky et al. (2008), Shimp and Sharma (1987), and Watson and Wright (2000). Considering product types, the examination of consumers' preferences between domestic and foreign products was undertaken among a wide range of categories such as automobiles, foods, television sets, toiletries, fashion, toys, DIY equipment and furniture. The CETSCALE was widely applied in those studies and the reliability and validity of the CETSCALE were strongly supported by cross-national studies (Balabanis & Diamantopoulos, 2004; Evanschitzky et al., 2008; Makanyeza & Du, 2017; Shimp and Sharma, 1987; Watson and Wright, 2000). However, the scale was reduced from seventeen items to ten items by Netemeyeret al. (1991). The subsequent study done by Klein et al. (2006) further revised the CETSCALE into a six-item version and presented a tendency to reduce items in the CETSCALE.

The conclusions of the linkage between CE and consumer preferences varied across those product categories and showed that the effects of CE are product and country specific. It implies that the CE effect for one country and one product category cannot necessarily transfer to other countries and categories. Therefore, even if Chinese consumers have strong CE for some products, their attitudes to foreign dairy products still need to be examined.

Accordingly, a hypothesis is proposed to test whether CE drives the COO effects in the Chinese dairy market: consumer ethnocentrism directly increases the level of importance attached to COO in dairy brand evaluation.

2.4.3 Consumer animosity (CA)

Another similar concept to CE, 'animosity' can also be applied in consumer behaviour research, which is defined as 'consumer animosity' (CA) (Klein et al., 1998). In the studies conducted by Chattalas et al. (2008) and Cilingir & Basfirinci (2004), they did not consider the impact of consumer animosity on COO effects. However, a large number of researches have demonstrated that this concept should be applied in consumer studies.

Initially, animosity is considered as a concept that is attitudinal and exists in the minds of individuals. Buss (1961) referred the concept of animosity as an attitude of the dislike and negative evaluation of others. Furthermore, Spielberger (1999) argued that animosity should be 'a complex set of feelings and attitudes that motivate aggressive and often vindictive behaviour'. The concept of consumer animosity was initially introduced and defined by Klein et al. (1998, p.90) as the 'remnants of antipathy related to previous or ongoing military, political, or economic events'. Then, this construct was given attention in consumer behaviour studies in both intranational and international marketing settings (De Nisco et al., 2016; Jung et al., 2002; Klein et al., 1998; Leong et al., 2008; Nijssen and Douglas, 2004; Shimp et al., 2004; Shin, 2001; Shoham & Gavish, 2016; Tian and Pasadeos, 2008). These studies conceptually differentiated the constructs of consumer animosity and COO effects. For example, the COO can influence people's perceptions of the quality of some particular goods from a particular country. However, consumer animosity can impact on consumers'

attitudes to all products from a particular country despite perceived quality. Accordingly, consumers who hold any animosity would refuse to purchase any products related to an offending nation, even though the quality of products with that origin was not undervalued. This argument was supported in the study by Klein et al. (1998).

Other studies gave further support for CA effects on consumer behaviour in various countries or different groups in specific countries (Ang et al., 2004; De Nisco et al., 2016; Klein, 2002; Nijssen and Douglas, 2004; Shimp et al., 2004; Shin, 2001; Shoham & Gavish, 2016). Nevertheless, there are some inconsistent findings among the literature. While the initial research by Klein et al. (1998) and some further studies by other authors presented that CA is not linked to product judgments, Ettenson and Klein (2005) argued that CA could affect product judgments in the long term. Likewise, findings from Shoham et al.'s (2006) study showed that CA negatively influences consumer behaviour in terms of both willingness to purchase and judgments of product quality. Shoham et al. (2006) attribute their findings to the presence of the 'cognitive consistency' (Festinger, 1957). This finding was also shown in other studies of consumers with high levels of animosity (Tian & Pasadeos, 2008). It indicates that it is possible that when the Chinese consumers witness some events (for example, Australia's attempt to be involved in the dispute of the South China Sea), the aroused or enhanced animosity would cause their negative attitudes towards the products from related countries. In terms of types of animosity, researchers classify CA as general animosity, war animosity, perceived threat, antithetical political attitudes, and negative personal experiences (Hoffmann et al., 2011; Jiménez and Martín, 2012; Klein et. al., 1998).

As for the relationship between CE and CA, Klein and Ettenson (1999) argued that there may be a positive correlation between these two concepts. For instance, both of them can be caused by economic or political issues and both provide penetration into attitudes towards

imported goods. The findings of the studies on CE and CA also provide evidence that both of them show negative predictions of purchase intentions. However, CA is a distinct concept from CE because of their different roles in influencing purchase behaviour (Klein et al., 1998). Consumers can hold animosity towards a special nation, whereas the ethnocentric individuals can hold a general negative attitude towards any products with a foreign COO (Klein, 2002). For example, an increasing number of Chinese avoid goods from other countries and show a preference for domestic goods as a result of the developing CE and the improvement in the quality of local products (Zhou & Hui, 2003). Nonetheless, CE cannot be an explanation for the anti-Japanese purchase phenomenon in China, while there are no boycotts of products from other countries. Other studies also found that CE and CA have distinct impact when consumers are evaluating products with COOs. For instance, consistent findings showed that CE can be obviously linked to both product judgments and purchase intentions (De Nisco et al., 2016; Netemeyer et al., 1991; Shimp and Sharma, 1987; Shoham & Gavish, 2016). Consumers who insist that it is inappropriate or unethical to buy foreign products are also likely to keep negative perceptions of the quality of those products. By contrast, the effects of CA on purchase cannot be definitely related to quality judgments of the goods from the boycotted country. For instance, those who show economic animosity towards Japan tend to have a positive perception of the quality of Japanese products, while others whose animosity is based on the previous war conducted by Japan might undervalue Japanese products (Tian & Pasadeos, 2012).

Based on the above discussion, this study hypothesises that consumer ethnocentrism directly increases the level of importance attached to COO in dairy brand evaluation.

2.4.4 Product involvement (PI)

In the framework of Chattalas et al. (2008), consumers' involvement and expertise are also important factors affecting COO effect. This viewpoint was also supported by Cilingir and Basfirinci (2014), who studied the COO effects in Turkey, a developing country. In their study, they concluded that consumers' product involvement and knowledge, associated with CE, modulate the COO effect in product evaluation. This framework is illustrated in Figure 6.

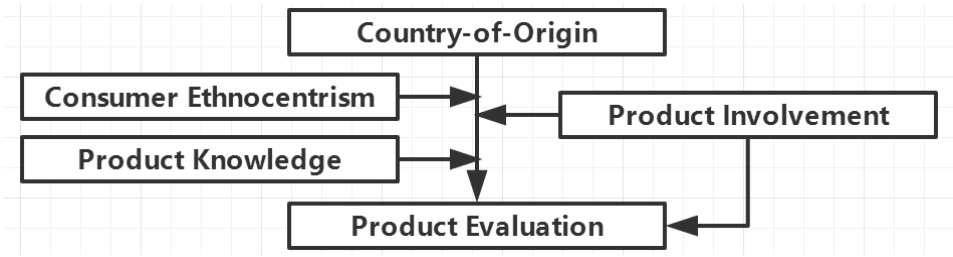


Figure 6 **A framework of COO effect in product evaluation** (Cilingir & Basfirinci, 2014)

Day (1970, p.45) defined product involvement (PI) as 'the general level of interest in the object or the centrality of the object to the person's ego structure'. Previous studies have been debating that PI might have two directions in its interaction with COO effect: positive or negative correlation.

The first perspective on the PI effect is based on the research on persuasion. Persuasion could be formed by either a 'central' or 'peripheral' approach (Haugtvedt et al., 1992; Josiassen et al., 2008; Petty et al., 1983; Vanwesenbeeck, 2017). When

consumers utilise a central approach, they will make the necessary efforts of cognition on the evaluation of any available information (for example, searching for comments on a product on professional websites). On the other hand, when a consumer utilises a peripheral approach, the evaluation is more likely to be based on those messages that are more salient and easily comprehensible, such as information on the packages. Generally, it shows that consumers tend to utilise a central approach in high involvement conditions and choose a peripheral approach in low involvement conditions (Petty et al., 1983). A few studies on COO (Han, 1989; Maheswaran, 1994) argue that COO information will be more important to those who are purchasing lower-involvement products, because COO is salient and easily comprehensible information for a purchase decision (for example, the 'Made in Australia' label on the package) (Han, 1989; Maheswaran, 1994). It implies COO may have a stronger effect on consumers who purchase a dairy product as a low involvement product, while this effect will be weaker when the same dairy product is a high involvement product to other consumers. This is supported by Gurhan-Canli and Maheswaran (2000) and Verlegh et al. (2005). The researchers concluded that: 'Country of Origin has a greater impact on product evaluations when consumers are less motivated to process available information, for example when involvement is low'. In other words, the PI has a negative correlation with COO effect.

Another perspective on the PI effect is based on the supposition that people who have higher involvement with a product would search, pay more attention to, and utilise the cues of the product class before their evaluation and purchase (Celsi & Olson, 1988). As regards high-involvement products, people will utilise any possible cues (for example, prices and designs) when identifying the class of different

products, and also may adopt other information including COO image (Ahmed & D'astous, 2004). This means consumers tend to value every possible source of information when they are highly involved. As a result, the greater the involvement, the greater the likelihood consumers will value the importance of COO information in a product evaluation situation (D'astous & Ahmed, 1999). Actually this is an opposite viewpoint to those previous studies that identified the negative correlation between PI and COO effect. Some studies have evidenced that COO effects matter even in the evaluation of low involvement products such as bread and coffee (Ahmed et al., 2004; Balestrini & Gamble, 2006).

Since there has been no agreement reached on the role of PI in COO effect, further research on consumers in different countries and different product categories is necessary. Hence, a hypothesis is proposed to investigate how PI affects COO effect: product involvement directly increase the level of importance attached to COO in dairy brand evaluation.

2.4.5 Consumers' product experiences (PE)

As for the concept of consumer knowledge about products, many studies linked it to other more specific constructs, for example, experience and familiarity (Alba & Hutchinson, 1987; Biswas & Sherrell, 1993; Kang et al., 2013; Marks & Olson, 1981; Park & Lessig, 1981). Brucks (1985) specifically divided product knowledge into three groups: 'subjective knowledge' (for example, consumers' perceptions of how much they know about the product); 'objective knowledge' (for example, quantity and types of what a consumer actually kept in the memory); and 'experience

knowledge' (for example, how much a consumer previously purchased or utilised the product). Alba and Hutchinson (1987) detail the concept by another two categories: 'familiarity' (for example, how many experiences a consumer has that relates to the product) and 'expertise' (for example, how much a consumer can understand the product and its performance in its related tasks). Generally, the definition of consumer expertise in those previous studies shows a common view that the amount of consumer product knowledge can be linked to their experience with the products.

Studies on the interaction of product experience and COO effects generally base it on how consumers utilise COO cues in their purchase decision-making process. As it has been discussed earlier, COO can be considered as a halo that consumers utilised to evaluate a product with which they have not been familiar. It implies that a consumer, who has limited experiences with a product, uses COO information as an indirect aid to evaluate a product's performance (Alex & Abraham, 2015; Laroche et al., 2005). For example, a consumer may be unfamiliar with a particular milk powder made in Germany, but has a perception that German products are generally of high quality. Therefore, based on the milk powder's German COO, and the consumer's belief that a general feature of German goods is their better quality, the consumer is likely to make a positive evaluation of the unfamiliar German milk powder. This viewpoint is also supported by other studies (Hong & Toner, 1989; Huber & McCann, 1982; Insch & Mcbride, 2004; Johansson et al., 1985; Li et al., 2003; Phau & Suntornnond, 2006; Tse & Gorn, 1993). These studies propose that when consumers evaluate a product, COO is essential only if they do not have adequate experiences. By contrast, COO will play a less important role in consumers' product evaluation once they have knowledge of the product category.

Johansson (1989), however, argues that individuals may generalise their evaluation of a familiar product and then transfer it into the COO as a summary cue. In other words, the researcher believed that consumers will utilise COO formation as an 'agent' for a product's performance or quality provided that they have experienced the performance of other goods with the same COO. For instance, a consumer who had favourable experiences with one or more brands of wine made in Australia will draw a conclusion that Australian wines have very high quality. As a result, the consumer will assume that an untried Australia wine brand has a similar high quality as other Australian wine brands. To sum up, the COO effects are influenced by the consumer's familiarity with the product which comes from their experience. However, there are still two questions: what is the consumers' experience and what kind of experience will impact on consumers' perception and familiarity of products?

To answer the first question, Li et al. (2003) suggest that an experience is more than simply the passive reception of external sensations or subjective mental interpretation of an event or situation; rather, experience is the product of an ongoing transaction that gains in quality, intensity, meaning, and value integrating both psychological and emotional conditions. Based on this, they defined consumers' experience as 'the sensation of interaction with a product, service, or event, through all of our senses, over time, and on both physical and cognitive levels'. This means product experiences are formed from a consumer's physical interaction (for example, evaluate, purchase, use or other behaviour) with a product (Hoch, 2002; Schmitt & Zarantonello, 2013). Some researchers have grouped these interactions into two distinct types of experience: direct experience and indirect experience. In other words, physical interaction with a product provides direct experience while external

presentation or description provides indirect experience (such as advertising) (Hoch & Ha, 1986; Kempf & Smith, 1998; Zhao, 2013). Obviously, product usage experience is one type of a direct experience due to the physical product interaction that involves tangible and intrinsic messages of product attributes. Yet, indirect product experiences, such as watching advertisements or seeing product displays, sometimes can play a significant role in consumers' purchase decision-making (Donovan et al., 2002). For example, a consumer may pay attention to the car displays in the store or look at the car users' comments and recommendations online before they actually purchase a new van. However, some other researchers maintain that direct product experiences provide individuals with more reliable information than indirect experiences due to their more experiential and physical interactions with products (Hamilton & Thompson, 2007). For instance, when a consumer has a trial of a product, such as coffee, the individual tends to have a higher level confidence with the product than from watching advertisements. This explains why product trials promote more purchase intention than advertising exposures (Hamilton & Thompson, 2007).

Another study by Thompson et al., (2005) show that there is a systematic difference in consumers' preferences from their indirect experiences and direct experiences. Before the product (such as coffee) usage, a consumer might prefer those with various features (such as a specific COO) and functions (such as rich in nutritional value), but after the product usage, the preference may be for those that have a good taste. Therefore, consumers may initially rely on their indirect experiences to choose products. However their choice can be more determined by post–direct usage experiences. Direct product usage experience could therefore

change product preferences. Wu and Shaffer (1987) conducted a study to provide evidence that direct experience forms sturdier, more comprehensible brand attitudes, and produces stronger links between present and future purchase behaviour.

While much attention is paid to consumers' direct product experiences, there is an increasing number of studies focused on the impact of consumers' indirect product experiences from tourism, particularly in the wine industry. These studies attempted to demonstrate the positive impact of wine tourism experience on consumers' products COO preference and purchase intentions. For instance, Kolyesnikova and Dodd (2008) found that consumers' purchase will be promoted by their positive experience in the winery. Furthermore, the outcome from a study conducted by Bowe (2013) showed that people who have experience in Australia consider it as a more preferential COO for wines and seafood than the other countries compared to those who have not visited. It also needs to be underlined that the COO is more important to the visitors than the non-visitors. The outcome of the study does not only support the argument that consumers with higher product familiarity tend to evaluate it more positively (Bird et al., 1970) but also shows a new finding that consumers' familiarity with a country may contribute to their positive evaluation of products from that country. The existing gap is that these studies generally examine those consumers who actually participate in visiting the country. However, the halo effect of COO image may also affect those who have not actually visited the related country. For instance, Lockshin and Lee's (2011) experiment in Australia shows that the tourism destination image can provide an indirect influence to consumers' COO preference via product COO beliefs, especially for the Chinese consumers who are unfamiliar with Australia. It implies that the positive tourism destination image could come from

word-of-mouth via the consumers' friends and/or family members who have visited the related country. Therefore, future studies should not only analyse the impact of consumers' direct product experience (usage) and indirect experience (country visit), but also check the influence from the consumers' friends and/or family members' visitation to the related country. This study will consider all the above aspects during the development of measuring items for product experiences, and hypothesises that product experiences directly increase the level of importance attributed to COO in dairy brand evaluation.

2.4.6 Consumers' cultural difference

Culture is one of the significant elements influencing consumers in terms of attitude, behaviour and lifestyle. The definitions of culture are abstract and complex. As a result, few agreements have been reached on a unified definition for this construct (Cleveland & Laroche, 2007).

Yet, among the many existing definitions of culture, a few common intersections can be identified: culture is a type of phenomenon that can be learned, transmitted, and shared. Researchers in Anthropology identify culture '…as a construct at once pervasive, compelling, and elusive, from which a person's sense of reality, identity, and being emerge' (Peñaloza & Gilly, 1999, p.86). With a sociological perspective, culture is a combination of various individual processes, such as consumers' expressions of identity and affiliation (Cleveland & Laroche, 2007; Roosens, 1995; Zeugner-Roth et al., 2015). This viewpoint is in line with Hofstede (1984, p.6), who considered culture as '…the collective programming of the mind, which distinguishes

the members of one group from another'. This suggests that consumers may choose products from some specific COOs to express their belongingness to some defined consumer groups.

Prior literatures demonstrate that culture-specific factors can impact on the importance attached to the COO in consumers' product evaluations. In general, previous studies provide some evidence that COO effects may be varied among different countries and such variations can be attributed to a variety of culture-specific factors (Gürhan-Canli & Maheswaran, 2000). According to Hofstede (1980, 1984, 1991, 2001) and Bao et al. (2003), these multidimensional culture-specific factors include the following aspects:

Individualism vs. collectivism: the level of independence from others and preference to one's own personal vs. in-groups goals.

Power distance: the tendency to accept power inequality in organisations.

Uncertainty avoidance: the level of tolerance for ambiguity or uncertainty about the future.

Masculinity vs. femininity: preference for achievement and assertiveness vs. modesty and nurturing relationships.

Long-term orientation vs. short-term orientation: attaching more importance to the future vs. focusing on the present or past.

Indulgence vs. restraint: preference for the reasonably free satisfaction of the natural desires of humanity from enjoying life and having fun vs. believing that such satisfaction should be confined by strict norms.

Face consciousness: a sense of favourable social self-worth that people expect others to have of them in a relational and network context.

In addition, **risk avoidance** is often seen as a similar or subordinative concept of uncertainty avoidance. For instance, Hofstede (2001) considers people's acceptance of risk as one of the indicators of uncertainty avoidance. However, some other researchers, such as Quintal et al. (2010), recognise risk avoidance as an individual and different concept from uncertainty avoidance. This is because risk appears when the potential outcomes can be identified, whereas uncertainty does the opposite (Quintal et al., 2010).

Compared to some western countries, such as UK, China is considered as a country that has a higher level of collectivism, power distance, long-term orientation and restraint (Hofstede Insights, 2018). Firstly, compared to those from individualist cultures, Chinese consumers have more influences from their in-groups for decision making. They tend to be more concerned about the happiness their in-group members (Sun et al. 2004; Xiao & Kim, 2009). However, according to the study by Sun et al. (2004), no significant differences could be identified between collectivist culture consumers and individualist-culture consumers in the field of food consumption. Secondly, consumers in a high power-distance culture have a less strong impulsive buying tendency (Zhang et al., 2010). This means that Chinese consumers tend to have planned decisions to purchase high internal evaluation products, such as cameras (Li, 2015). Thirdly the long-term orientation and restraint culture also impacts the consumers' choice, for instance, the acceptance of retirement plans (Howlett et al., 2008). As for the dimensions of uncertainty avoidance and masculinity, the

differences between China and some western countries (such as UK) are not significant, according to Hofstede Insights (2018).

In the context of the consumers' food purchase behaviour, the culture-specific factors are highlighted as face consciousness, risk avoidance and uncertainty avoidance in relevant studies (Lim et al., 2013; Liu & Murphy, 2007; McCarthy & Henson, 2004; Shi et al., 2012; Somogyi et al., 2011). Therefore, the current study on dairy products will focus on these factors as the indicators for cultural differences.

2.4.6.1 Face consciousness (FC)

As a part of social network, most consumers experience face-related sentiments, which include the feelings of embarrassment, awkwardness, shame, or pride. Face (or 'Mianzi') consciousness is defined as people's desires to maintain face ('face-keeping'), enhance face ('face gaining'), and avoid 'losing face' in relation to significant others in social contexts (Bao et al., 2003; Xiaolin & Derong, 2015).

Asian consumers, such as Chinese, lean to a high level of face consciousness. This can link their consumptions to a strong social bond and may influence various levels of needs—from physiology to self-actualisation (Bao et al., 2003; Belk, 1988). On the contrary, in some countries of higher individualism like the United States, people value their independence in decision-making (Reykowski, 1994). Accordingly, American consumers present a lower level of face consciousness. It suggests that high face consciousness can be a pattern of collectivism.

As for the face consciousness in consumer behaviour, Ahuvia and Wong (1998) suggested that this culture factor has more significant impact on Asian consumers in terms of emphasising on publicly visible possessions than consumers in Western

developed countries. Batra et al. (2000) underlined that in some developing countries, the ‘Western’ COO has a remarkably positive impact on brand attitudes, particularly for those with a higher admiration for ‘Western’ lifestyles, and for products consumed in public places, emphasising the ‘social’ roles. This is because consumers in developing countries consider Western products as ‘modern’ and ‘successful’. The literature also states that people in developing countries, such as China, prefer international brands to domestic brands to express their social status, social conformity, and wealth (Batra et al., 2000; Khan & Rodrigo, 2015; Wang & Yang, 2008; Zhou & Hui, 2003). This means, the ‘Western’ COO delivers not only an image of high quality, but also a social and symbolic value (Zhou & Hui, 2003). Researchers link this phenomenon to consumers’ face consciousness; that they value the ‘Mianzi’ or ‘face-gaining’ in their purchase, particularly when the product is likely to be consumed publicly or given as a gift (Qian et al., 2007; Sun et al., 2014).

In food consumption, compared with Western consumers, Chinese consumers pay more attention to the views of others and the social effects caused by their own consumption, and the so-called face consciousness is the manifestation of such social effects (Shi et al., 2012). For instance, face-gaining purchase has been identified as a strong motivation of Chinese consumers choosing wines with foreign COOs (Liu & Murphy, 2007; Somogyi et al., 2011; Yap & Chen, 2017). It implies that when consumers have a high level of face consciousness, they may give more importance to the COO when they aim to express their social status by purchasing products from well accepted COOs and valued by other people. Therefore, this study proposes a hypothesis that face consciousness directly increases the level of importance attributed to COO in dairy brand evaluation.

2.4.6.2 Risk avoidance (RA)

COO effects can vary when individuals have different attitudes towards risk and uncertainty. Those who are averse to risk and uncertainty tend to engage in risk and uncertainty–reducing strategies, such as looking for quality assurance (Sweeney et al., 1999) and searching extensively for information (Vogt & Fesenmaier, 1998).

Risk avoidance (RA) is also known as risk aversion, which is defined as 'the extent to which people feel threatened by ambiguous situations, and have created beliefs and institutions that try to avoid these' (Hofstede & Bond, 1984, p.419). People with higher levels of RA tend to sense more threats in risky and ambiguous circumstances (Chen et al., 2016; Hofstede, 1991). Prior studies have shown that risk avoidance could influence consumers' decision-making. For example, consumers with a high level of RA are inclined to search for more information regarding product quality during purchasing decisions (Shimp & Bearden, 1982).

As a typical collectivistic group, Chinese people prefer to maintain the within-group harmony, and are encouraged to follow some certain behavioural norms. Risk-taking behaviours are seen as possible threats that may challenge the group's interests and existence. Therefore, it is normally not encouraged in Chinese society (Tse, 1996). By contrast, in some individualistic countries, such as the United States, people prefer making decisions and initiating behaviours independent of others (Markus & Kitayama, 1991). In particular, exploring uncertainties is considered as a merit in life and therefore encouraged (Triandis, 1995). Accordingly, American consumers have a relatively lower level of RA.

Risk avoidance significantly influences consumers' decision-making (Shimp & Bearden, 1982). When consumers have low RA, they sense fewer threats in ambiguous and novel situations. In the context of purchase, they can even experience excitement by purchasing products with newness and innovation (for example, an unknown COO). By contrast, for those with high RA, new products can be seen as risky as their performance is more uncertain and unknown than that of established products and brands (Bao et al., 2003; Steenkamp et al., 1999). These consumers often avoid trying new or unknown products until the benefits have been evidenced by experience of others (Bao et al., 2003).

Regarding food purchases, RA can affect the importance given to COO information in consumers' decision-making. McCarthy and Henson (2004) found that consumers utilise food labels with clear COO information as a method to reduce the potential risks of food safety, especially for meat products. This finding is also agreed by Newman et al (2014), who conducted a study to demonstrate that consumers will attach more importance to COO when they have a higher level of RA. Accordingly, this study proposes a hypothesis that risk avoidance directly increases the level of importance attributed to COO in dairy brand evaluation.

2.4.6.3 Uncertainty avoidance (UA)

According to Rogers (1995), 'uncertainty implies a lack of predictability, of structure, of information'. Uncertainty avoidance (UA) was defined as 'the extent of feeling threatened by uncertain or unknown situations' (Reisinger & Turner, 2003).

People with higher UA tend to be lower in tolerance for ambiguity (Hofstede, 2001; Hudson et al., 2016; Quintal et al., 2010) and are more likely to favour objects that are more easily interpreted and predicted (Quintal et al., 2010; Winter & Reed, 2015). By contrast, people with lower UA are relatively more willing to accept ambiguity and are more likely to prefer novel and convenient options (Lee et al., 2007).

UA has been found to have significant influence on consumers' product choice. When consumers encounter a new product or brand, they may be faced with some level of uncertainty where they may use COO information in two ways to reduce the perceived uncertainty. One is to choose domestic products as these tend to seem more familiar. The other is to purchase products with favourable COO. According to some studies on low UA consumers, the findings present a negative correlation between the level of product uncertainty (PU) and consumers' perceived quality (Domzal et al., 1995; Lee et al., 2007). Consumers rank products with low uncertainty (for example, those from a COO with prominent quality-stereotypes) as superior quality than high PU ones (for example, those from a COO with weaker quality-stereotypes). In line with these findings, consumers tend to have more purchase intentions for products with lower uncertainty than higher ones. These results suggest the relationship of UA and COO effects (Domzal et al., 1995; Lee et al., 2007).

As both risk and uncertainty can be related to an ambiguous future, these two concepts are often studied as an integrated culture factor in consumer studies (Domzal et al., 1995; Lee et al., 2007; Quintal et al., 2009). However, risk and uncertainty are actually different concepts. Risk appears when the potential outcomes can be identified, whereas uncertainty does the opposite (Quintal et al., 2010). In some situations, consumers with higher UA may undertake higher risk choices in order to

reduce the perceived uncertainty (Lee et al., 2007) . For example, some consumers may purchase all brands in a product category to clarify the best one. This is at the risk of wasting resources for purchasing some brands with poor performance. In addition, UA has a positive correlation to the extent of information search, while the RA does not (Quintal et al., 2010). In other words, the higher UA consumers have, the more information they will seek in their product evaluation. However, consumers' RA does not influence the amount of messages they collect for decision-making. This implies that the RA and UA are distinct constructs and possibly have different impact on COO effects. Hence, this study proposes an additional hypothesis that uncertainty avoidance directly increases the level of importance attributed to COO in dairy brand evaluation.

2.5 Other factors related to country-of-origin effects

According to Papadopoulos et al. (1990, 2002), the COO effects can differ across different product categories for different consumer types. This argument is supported by the vast literature that shows the inconsistent findings of COO effects in various product categories to consumers with various demographic backgrounds (Ahmed & D'astous, 2001; Al-Sulait & Baker, 1998; Balestrini & Gamble, 2006; Chinen et al., 2000; Diamantopoulos, 2011; Han, 1989; Jap et al., 2009; Paul & Dasgupta, 2010; Roth & Romeo, 1992; Samli, 1995; Schooler, 1965; Yasin et al., 2007; Yang et al., 2017). This suggests that product categories and consumer demographic profiles can moderate COO effects.

2.5.1 Product types

COO effects can appear at different levels, from general products (Darling & Wood, 1990; Howard, 1989), to specific product categories (Cordell, 1992; Costa et al., 2016; Hong & Wyer, 1989; Roth & Romeo, 1992), and even to some particular brands (Chao, 1993; Han & Terpstra, 1988; Haubl, 1996; Kim et al., 2017; Tse & Gorn, 1993; Witt, 1990). This is because in some cases, COO perceptions can cover global product categories from a country. For example, Chinese consumers in Hong Kong have various perceptions about American products (prestige), Japanese products (innovativeness), and Chinese products (cheapness) (Siu & Chan, 1997). Pappu et al. (2006) also identified the various COO effects in different product categories that influenced British consumers tending to prefer some domestic products—such as cars, foods, toiletries, fashion, toys and furniture— while favouring television sets from Japan.

However, the importance of COO may be less significant when consumers purchase some products. For instance, consumers in some nations, such as Poland, do not consider COO as an important factor when they are buying inexpensive items or those that have been already widely consumed by their families or friends (Balestrini & Gamble, 2006 ; Lascu & Babb, 1995).

In studies by Jacoby et al. (1977) and Zeithaml (1988), COO was found as unimportant for consumers when they purchase some products such as candies and beers while it is relatively significant when they are buying cheese. The inconsistency of the importance of COO across various product categories was also identified by Hugstad and Durr (1986) and Urbonavičius and Ggineikienė (2009). These studies found that COO is a key factor when consumers choose some durable products (for example, cars, televisions, furniture) while COO is not important when they purchase some frequently-updated products (for example, mobile phones). Piron (2000) also underlined that ‘product type’ can moderate COO’s effects

on consumer behaviour. The researcher explained that the reason why COO is a significant criterion for buying some products (for example, automobiles, televisions, furniture) is because they are publicly-consumed. By contrast, COO is insignificant for some necessities (such as candies) consumed privately. Lin and Kao (2004) further attributed the inconsistent COO importance in various product categories to the complexity of the related products.

Previous studies on the moderating role of product types tend to be limited in the product category level such as cars, toiletries, fashion, toys, furniture, wines and cell phones (Ahmed & D'astous, 2001; Al-Sulaiti & Baker, 1998; Balestrini & Gamble, 2006; Chinen et al., 2000; Diamantopoulos, 2011; Pappu et al., 2006; Paul & Dasgupta, 2010; Urbonavičius & Ggineikienė, 2009; Yasin et al., 2007). However, there can be subcategories existing within a specific product category (Bello & Holbrook, 1995; Chang, 2011; Cowley & Mitchell, 2003). For example, dairy products are a subcategory of food products. Many researchers have discussed the various results of COO effects in different subcategories of food products, such as meat (Balcombe et al., 2016), fruits (Lopes et al., 2014), vegetables (Xie et al., 2016) and bread (Kim et al., 2017), while others limited their studies to the global food category level, such as Insch and Jackson (2014). However, the lack of studies on dairy products suggests the necessity to study the COO effects on consumer behaviour in this product subcategory.

2.5.2 Demographic profiles of consumers

Demographic factors are defined as the socioeconomic characteristics of consumers which can be expressed statistically, which includes age, sex, education level, income level, marital status, occupation, religion, and family size. In the context of COO effects, previous studies have identified the influences of consumers' demographic backgrounds in terms of

age, gender, education, income (Cilingir & Basfirinci, 2014; Ding, 2017; Jap et al., 2009; Meeusen et al., 2013; Ramsaran-Fowdar, 2010).

Wall et al. (1988) found how the age factor can influence consumers' evaluations of products. In other words, their study demonstrated that younger people showed more favourable attitudes towards imports/foreign products in comparison to older consumers. This was also supported by Schooler (1971), McLain and Sternquist (1992), Bailey and Pineres (1997), Al-Sulaiti and Baker (1998) and Yang et al. (2017). The findings in their studies showed that the older age group rated the foreign products lower than the younger age group. Ramsaran-Fowdar (2010) also reported that elderly consumers tend to favour domestic products.

There is a continuous debate on how gender can moderate COO effects. The study conducted by Han (1988) provided the evidence that there is a correlation between gender of the consumers and COO preference. Female consumers have less likelihood to choose foreign products/imports. The general tendency that female consumers hold a more positive COO bias towards domestic products than males was also found in other COO studies (Ding, 2016; Good & Huddleston, 1995; Heslop & Wall, 1985; Lawrence, 1992; Shar ma et al., 1995). By contrast, other studies discovered that female consumers evaluated foreign products more highly than males (Al-Sulaiti & Baker, 1998; Schooler, 1971). However, a study by Dornoff et al. (1974) showed the insignificant differences among the perceptions by consumers with different genders towards foreign products. As a further instance, Ramsaran-Fowdar (2010) found that foreign products were not preferred by male consumers either.

The education background of consumers is also considered as an influential demographic factor that controls COO effects (Festervand et al., 1985). Compared to other demographic

variables, education shows consistent results in different COO studies. Most studies discovered that highly educated consumers have a more positive attitude towards foreign products than those with lower education levels (Al-hammad, 1988; Anderson & Cunningham, 1972; Dor noff et al., 1974; Festervand et al., 1985; Good & Huddleston, 1995; Greer, 1971; Schooler, 1971; Sharma et al., 1994; Wall et al., 1991). Likewise, McLain and Sternquist (1992), Bailey and Pineres (1997), Ding (2016), and Meeusen et al. (2013) revealed an inverse correlation between the level of consumer ethnocentrism and education level.

As for income levels, both Han (1990) and McLain et al. (1991) believed that variations in COO effects among consumers should not be attributed to the different income levels. Nevertheless, Wall et al. (1990) suggested that there is a strongly positive correlation between income level and positive attitudes towards products with foreign COOs. Bailey and Pineres (1997); Good and Huddleston (1995), and Sharma et al. (1995) argued that when consumers have higher income levels, they would be less likely to purchase domestic products. Other studies also found that the phenomenon that consumers with higher incomes tend to favour the products with foreign COOs (Jap et al., 2009; Wall & Heslop, 1986). However, when it comes to the national level, consumers in developed countries are more likely to purchase domestic products (such as cars), while consumers in developing countries tend to choose imported products (Sharma, 2011).

The moderating effects of demographic variables can vary across different product categories. For instance, gender has a significant impact on consumers' choices for cars, toys, DIY tools and toiletries with different COOs. However, this impact is weak in other product categories such as food, televisions, furniture and fashion wear, which are significantly influenced by consumers' age. In addition, education's moderating effect is mostly

significant in DIY products, while income is one of the most influential factors controlling the COO importance in fashion wear purchases (Balabanis & Diamantopoulos, 2004). Among these demographic variables, gender was identified to be the least significant factor in moderating COO effects among the consumers, while age was demonstrated to be the most significant (Al-Sulait & Baker, 1998; Ghadir, 1990).

To sum up, it shows inconsistent results in the findings of previous studies related to the roles of consumers' demographic profiles in COO effects. Therefore, other researchers, for example, Buil et al. (2008), Papou et al. (2007) and Yasin et al (2007), tended to control the relevant demographic factors when they conducted their studies on the impact of COO effects on brand equity at national or cross-national levels. Accordingly, the current study followed this approach, and controlled the related demographic factors during the data analysis.

2.5.3 Purchase frequency (PF)

Previous studies on COO effects distinguished consumers based on the differences of their demographic backgrounds and purchased products. However, other marketing studies have demonstrated that purchase frequency is a significant factor that should not be neglected due to its significant influences on consumers' behaviour (Hood et al.,2015; Kara et al., 1995; Magnini & Karande ; Zeng et al., 2011).

Many prior studies have demonstrated the impact of purchase frequency on consumers' behaviour in terms of price sensitivity. Although some researchers argued less frequent buyers considered price as one of the most important factors for their choices of alternatives (Kara et al., 1995), other studies demonstrated the significance of price for frequent buyers. Allenby and Lenk (1995) proved that frequent buyers are more likely to be more

price-sensitive than infrequent ones. They linked price-sensitivity with product knowledge and argued that frequent buyers tend to have more knowledge about a brand's information, including regular prices, and are consequently more price-sensitive. In addition, consumers with high purchase frequency tend to more intensively seek more product information than infrequent buyers due to the larger potential benefits from an information search. Customers who search product information more frequently are more likely to be aware of price changes and consequently have a lower acceptance of price change (Zeng et al., 2011). This argument was supported by other researchers who stated that frequent purchasers have more market information and are less willing to accept higher prices for manufacturer brands (Baltas et al., 2003).

Some researchers examined the relationship between purchase frequency and the amount of information search. For example, Hoyer (1984) found that consumers tended to limit the information search on packages when they purchased a product frequently. This finding was also supported by the study conducted by Magnini & Karande (2011). They discovered that consumers who are least frequent buyers for airlines and hotels utilise the most external information search. Baltas et al. (2003) explained that frequent purchasers are prone to have more relevant experiences and knowledge, therefore rely less on simple information cues (for example, brand name and packaging) when evaluating product quality. Hood et al. (2015) also agree with the viewpoint that the difference of purchase frequency can be indicated by the importance of information search by customers. However, their research finding showed the positive correlation between consumers' purchase frequency and their interaction with online information. Some researchers considered intensive information search as a pattern of consumers' high product involvement. An early study conducted by Zaichkowsky (1985) showed that high-involved consumers are more interested in information search. This finding

was supported by other researchers, such as Holmes et al. (2013), who argued that consumers with higher product involvement attribute more importance to information search. Hourigan and Bougoure (2012) further concluded that information search is an ongoing behaviour for high-involved consumers. Goldsmith (2002) found that the purchase frequency can be linked to consumers' product involvement and knowledge. However, he did not introduce this factor into the relationship between COO effect and product involvement or product knowledge. In the context of COO information, Barrena and Sánchez (2009) argued that COO origin information is only important to high frequency beef consumers. The study conducted by Verbeke and Ward (2006) showed the moderate interests of Belgian beef consumers in COO information. The authors analysed the purchase frequency of these consumers, however did not explain how this concept moderates COO effects.

Other studies focus on the consumers' COO preference due to their purchase frequency. Kim and Rossi (1994) found that less-frequent buyers tend to prefer local brands; however, they did not examine the consumers' attitudes to products with different COOs. Schnettler et al. (2009) found that COO of meat products was a factor more important than price for consumers in Chile. They also surveyed the purchase frequency of these meat consumers, however did not analyse the moderating role of purchase frequency in the COO effects. In fact, although many researchers applied the concept of purchase frequency in their studies on COO or other factors (such as product involvement) related to COO effects, they did not examine the moderating effect of purchase frequency in the relationship between COO effects and the driving factors. Therefore, this thesis should analyse the purchase frequency as a moderator for the COO effects in order to fill this existing gap in COO research.

2.6 Theoretical framework and hypotheses

The literature review provides an insight into the relevant concepts of COO studies. A synthesise summary of literature review in presented in Table 1

Table 1 A synthesise summary of literature review

Concept	Finding	Supported	Refuted
Country-of-origin （COO）	The product origin (PO) is defined as ‘Country of Manufacture’ or ‘Country of Assembly’.	Han and Terpstra (1988), Ahmed and d'Astous (2001), Mostafa (2015), Arora et al. (2015)	
	PO is ‘Country of Association'.	Saeed (1994)	
	PO is ‘Country of Design’	Hamzaoui and Merunka (2006); Genç and Wang (2017)	
	‘Country of Manufacture’s a more appropriate definition of PO of food products.	Hooley et al.(1988), Lusk and Anderson (2004), Chung et al.,(2009)	
	Country-of-origin should be defined as ‘Country of Brand’ (COB).	Batra et al. (2000), ,Zhou et al. (2010),Balabanis and Diamantopoulos (2011), Halkias et al. (2016)	
COO effects on brand preference	COO effects can promote this brand’s image to consumers, and enhance their purchase intentions due to the positive brand image	Hsieh et al.(2004),Esch et al.(2006),Diamantopoulos et al.(2011), Arora et al.(2015) Mostafa, et al.(2015)	
	COO effects can directly affect brand awareness, brand loyalty, perceived brand quality and brand association.	Paul and Dasgupta (2010)	
	Consumer-based brand equity is created by brand awareness, brand loyalty, perceived brand quality and brand association.	Aaker (1991), Paul and Dasgupta (2010), Pappu and Quester (2017)	
country images	Positive country images can enhance the COO effects	Roth and Romeo (1992),Al-Sulait and Baker (1998),Frewer et al.(2001),	

		Costa et al. (2016), Visbal (2017)	
consumer ethnocentrism	Consumer ethnocentrism drives the COO effects	Shimp and Sharma (1987), Watson and Wright (2000),Balabanis and Diamantopoulos (2004), Evanschitzky et al. (2008)	
consumer animosity	Consumer animosity influences consumers' willingness to purchase products from a particular country without judgments of product quality.	Klein (1998, 2002),Shin (2001), Ang et al. (2004), Nijssen and Douglas (2004), Shimp et al.(2004), De Nisco et al.(2016)	Shoham et al. (2006)
product involvement	COO is important when consumers have low level of product involvement	Han (1989), Maheswaran (1994), Gurhan-Canli and Maheswaran (2000), Verlegh et al. (2005)	Ahmed et al.(2004),Balestrini and Gamble (2006)
product experiences	Direct product experiences influence consumers' behaviours	Hoch and Ha (1986), Kempf and Smith (1998), Zhao(2013)	
	Indirect product experiences influence consumers' behaviours	Donovan et al.(2002), Thompson et al., (2005), Kolyesnikova and Dodd (2008), Lockshin and Lee (2011)	
face consciousness	face-gaining purchase has been identified as a strong motivation of Chinese consumers choosing products with foreign COOs	Liu & Murphy (2007), Somogyi et al.(2011), Yap & Chen (2017)	
risk avoidance	Risk avoidance can affect the importance given to COO information in consumers' decision-making	McCarthy and Henson (2004),Newman et al (2014)	
uncertainty avoidance	Uncertainty avoidance has significant influence on consumers' product choice	Domzal et al.(1995), Lee et al.(2007)	
purchase frequency	Purchase frequency affects COO effects	Kim and Rossi (1994), Verbeke and Ward (2006), Barrena and Sánchez (2009),Schnettler et al. (2009)	

Based on the literature review, this study proposes a theoretical framework to illustrate the driving factors of COO effects, and its indirect and direct impacts, which is shown in Figure 7.

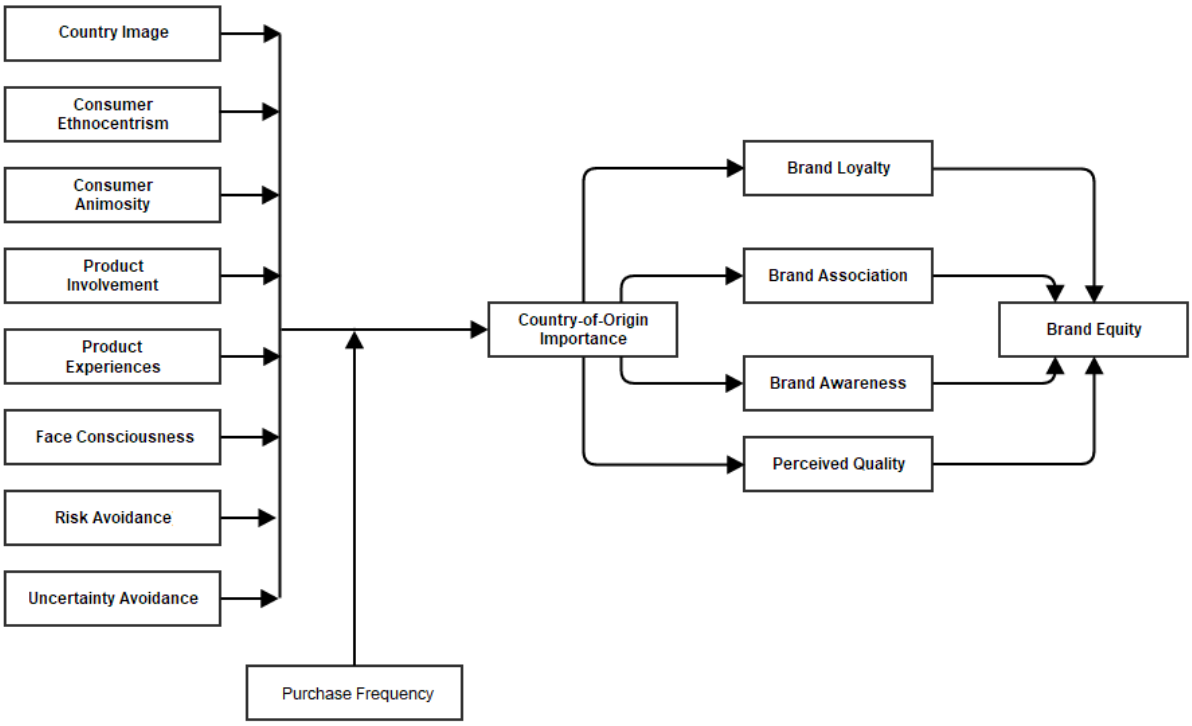


Figure 7 **A conceptual framework of the COO effects**

In particular, this framework can be divided into two sub-models in terms of the two research questions in this study: 'the drivers of COO effects' model (for research question 1) and 'the impacts of COO effects' model (for research question 2). These two sub-models are presented in Figure 8 and 9.

As for Research Question 1—'What drives the country-of-origin effects in the Chinese dairy market?'—the existing literature suggests that the forming of COO effect can be driven

by various factors: country image (CI); consumer ethnocentrism (CE); consumer animosity (CA); product involvement (PI); consumers' product experiences (PE); and cultural differences including face consciousness (FC), risk avoidance (RA) and uncertainty avoidance (UA). The relationship between COO effect and these factors can be moderated by purchase frequency (PF).

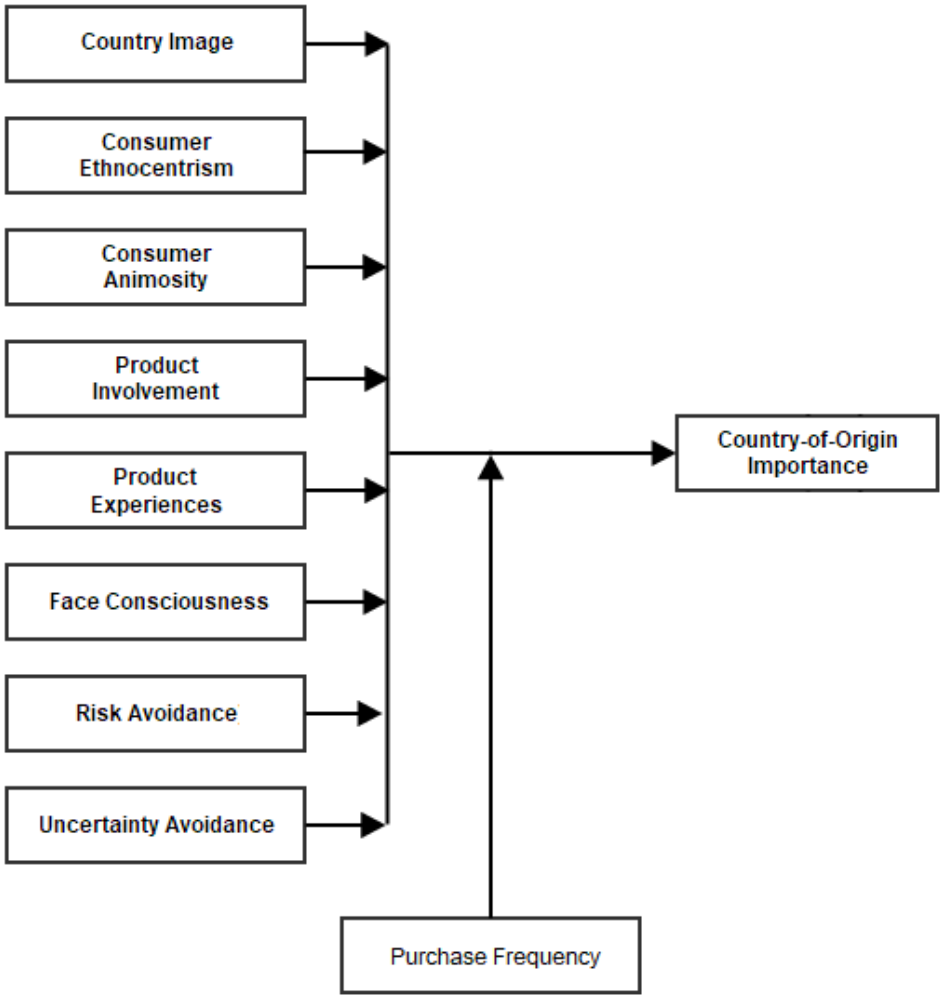


Figure 8 **The 'Drivers of COO effects' model**

To test whether these factors can drive the COO effects in the Chinese dairy market, the following hypotheses were developed.

Driving factors of the COO effect

H1. Positive country images directly increase the level of importance attached to COO in dairy brand evaluation.

H2. Consumer ethnocentrism directly increases the level of importance attached to COO in dairy brand evaluation.

H3. Consumer animosity directly increases the level of importance attached to COO in dairy brand evaluation.

H4. Product involvement directly increases the level of importance attached to COO in dairy brand evaluation.

H5. Product experiences directly increase the level of importance attached to COO in dairy brand evaluation.

H6. Face consciousness directly increases the level of importance attached to COO in dairy brand evaluation.

H7. Risk avoidance directly increases the level of importance attached to COO in dairy brand evaluation.

H8. Uncertainty avoidance directly increases the level of importance attached to COO in dairy brand evaluation.

Purchase frequency as a moderator in the COO effect

H9. Purchase frequency moderates the relationship between country images and the level of importance attached to COO in dairy brand evaluation.

H10. Purchase frequency moderates the relationship between consumer ethnocentrism and the level of importance attached to COO in dairy brand evaluation.

H11. Purchase frequency moderates the relationship between consumer animosity and the level of importance attached to COO in dairy brand evaluation.

H12. Purchase frequency moderates the relationship between product involvement and the level of importance attached to COO in dairy brand evaluation.

H13. Purchase frequency moderates the relationship between product experiences and the level of importance attached to COO in dairy brand evaluation.

H14. Purchase frequency moderates the relationship between face consciousness and the level of importance attached to COO in dairy brand evaluation.

H15. Purchase frequency moderates the relationship between risk avoidance and the level of importance attached to COO in dairy brand evaluation.

H16. Purchase frequency moderates the relationship between uncertainty avoidance and the level of importance attached to COO in dairy brand evaluation.

As for Research Question 2—‘How can the country-of-origin effects impact on brand equity in Chinese dairy markets?’—previous studies suggest the indirect impacts of COO effects on brand equity (BEQ), mediated by brand loyalty (BL), brand association (BAS), brand awareness (BA) and perceived quality (PQ).

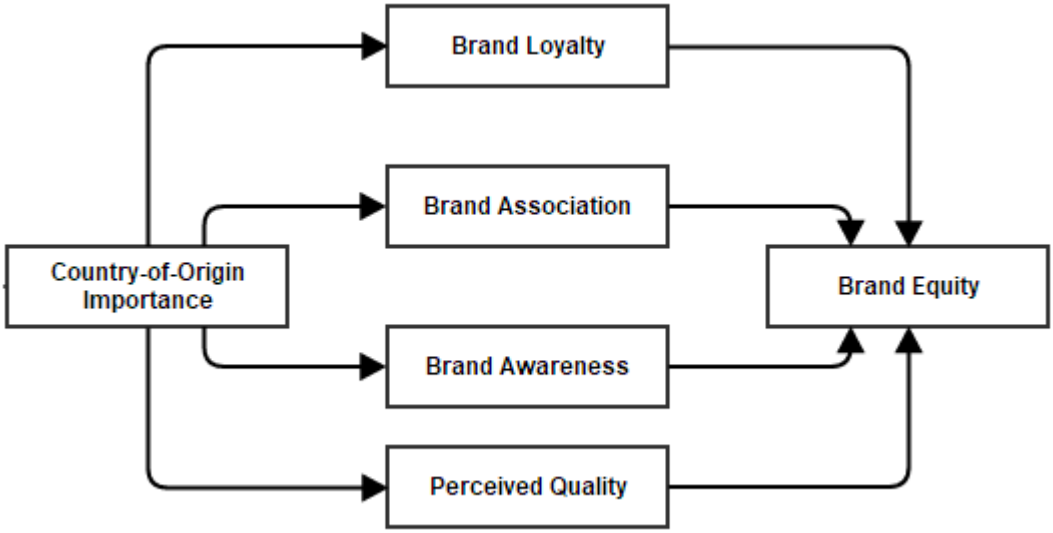


Figure 9 **The 'Impacts of COO effects' model**

To test the COO effect's impacts on branding in the Chinese dairy market, the following hypotheses are developed:

Impacts of COO effect on branding

H17. The level of importance attached to COO in dairy brand evaluation directly increases brand loyalty.

H18. The level of importance attached to COO in dairy brand evaluation directly increases brand association.

H19. The level of importance attached to COO in dairy brand evaluation directly increases brand loyalty

H20. The level of importance attached to COO in dairy brand evaluation directly increases perceived quality.

H21. Brand loyalty increases brand equity.

H22. Brand association increases brand equity.

H23. Brand awareness increases brand equity.

H24. Perceived quality increases brand equity.

The mediators between COO effect and brand equity

H25. Brand loyalty mediates the relationship between the level of importance attached to COO in dairy brand evaluation and brand equity.

H26. Brand association mediates the relationship between the level of importance attached to COO in dairy brand evaluation and brand equity.

H27. Brand awareness mediates the relationship between the level of importance attached to COO in dairy brand evaluation and brand equity.

H28. Perceived quality mediates the relationship between the level of importance attached to COO in dairy brand evaluation and brand equity.

2.7 Chapter summary

This chapter reviews the existing literature on two major aspects.

Firstly, previous studies in various product categories and countries provide the findings that the COO effects can be driven by various factors: country image; consumer ethnocentrism and animosity; product involvement; product experiences; and cultural differences. The consumers' product experiences include direct and indirect experiences. Cultural differences can be classified as face consciousness, risk avoidance, uncertainty avoidance. In addition, purchase frequency is proposed as a moderator for the relationship between these driving factors and COO effects.

Secondly, prior studies suggest the direct impact of COO effects on consumers' brand loyalty, brand association, brand awareness and perceived quality, as well as the indirect impact on brand equity. In other words, consumers' brand loyalty, brand association, brand awareness and perceived quality mediate the relationship between COO effect and brand equity.

A new theoretical framework was developed in this chapter and it comprehensively describes the various driving factors and impacts of the COO effects. Accordingly, this chapter proposed twenty-eight hypotheses based on the theoretical framework.

In order to test the proposed hypotheses, the next chapter will discuss the methodology for the current study.

CHAPTER 3: METHODOLOGY

3.1 Introduction

There are four major sections in this chapter:

Section 3.2 introduces the theories related to the research methods utilised in this research.

Section 3.3 discusses the methodology for the qualitative study, and the development of in-depth interview questions. This section also describes the findings from the qualitative study.

Section 3.4 provides the details of the methodology for the quantitative study, including the development of the questionnaire items and the sampling method.

Section 3.5 discusses the techniques for the quantitative data analysis.

3.2 Theoretical background of research methods in this study

This study commenced with an exploratory research approach. The initial literature review on prior research papers was undertaken to gather secondary data and develop the theoretical framework. However, in most contemporary marketing studies, requirements for information are unlikely to be met by such secondary data only, due to the inappropriateness and lack of control over data (Hester, 1996; Zikmund et al., 2014). Furthermore, the number of empirical studies on the COO effects in the Chinese dairy market is limited. Therefore, there was a requirement for the collection of primary data (descriptive research) from the

Chinese dairy consumers. The purpose of a descriptive approach in a marketing study, such as survey, is to gather primary data based on verbal or textual communication that collects the information about consumers' perceptions (Zikmund et al., 2014). The combination of an exploratory research approach and descriptive research approach has been applied in vast marketing studies.

As for the primary data collection for business or social research, it normally includes quantitative and qualitative methods (Atkinson 2012; Bryman 2015; Zikmund, 2013). According to Atkinson (2012) and Bryman (2015), the comparison between quantitative and qualitative studies are presented in Table 2.

Table 2 **Comparison between quantitative and qualitative research**

	Qualitative	**Quantitative**
Theory	Inductive	Deductive
Approach	Subjective	Objective
Investigation	In real world	In unnatural or contrived settings
Focuses	Experiences within particular cultures	Variables and causal factors
Purpose	Identify patterns in how people assign meaning to life	Discovery of scientific laws
Ontology	Constructionism	Objectivism
Data	Words, images, texts	Numeric

Note. Adopted from Atkinson (2012) and Bryman (2015)

When a concept or a phenomenon needs to be understood despite the lack of research, a qualitative study is highly appropriate as this research method can discover the significant variables which have not been explored in the previous studies (Atkinson, 2012; Bryman, 2015). Researchers also underlined that employing a single research approach may have limitations in terms of the lack of capability of understanding the variety of phenomena and confirming attributes of sophisticated concepts to measure the phenomena. Therefore, in order to reduce the methodological limitations, this study comprises a mixture of techniques, namely in-depth interviews (qualitative) and online survey (quantitative) for data collections. This method enables the present study to obtain authentic data from consumers while achieving a satisfactory methodological framework. As the initial research phase for this study, the qualitative study (in-depth interviews) was designed to verify the previous literature review, and examine whether there are any new driving factors and impacts of COO effects in the Chinese dairy market available to be further explored and analysed in the subsequent quantitative study. Then, a quantitative survey was employed to test and evaluate the proposed theoretical framework.

3.3 Qualitative Study

The qualitative approach was utilised for the exploratory study in order to understand the COO effects in the Chinese dairy market.

> "If a concept or a phenomenon needs to be understood because little research has been done on it, then it merits a qualitative approach since qualitative research is exploratory and is useful when the researcher does not know the important variables

to examine". (Creswell, 2009, p. 22).

Qualitative research methods include individual interviews, focus groups, observations, and action research (Zikmund et al., 2013). In particular, in-depth interviews are employed by vast numbers of consumer behavior studies as one of the effective techniques for qualitative data collection, as they enable the face-to-face interactions between researcher and individual interviewees, as well as providing opportunities to clarify unclear questions (Tashakkori & Teddlie, 1998; Zikmund et al., 2014). Another reason for the common usage of interview techniques among qualitative researchers is that it allows for a deeper understanding of complex behaviour whereby comprehensive and deep questions (Gubrium & Holstein, 2002; Walsh, 2003). By comparison, a particular drawback of using focus group is that participants may be hesitant to express their honest and personal opinions, especially when they are inconsistent with the views of other group members (Acocella, 2012). In addition, conducting observations or action research tend to more time consuming than using interview methods (Pope et al., 2000; Walsham, 2006). Therefore, interviews have been applied to many COO studies, for example, Cicia et al. (2013) and Klöckner et al. (2013)

Interviews for qualitative data collection commonly present in two forms: in-depth interviews (face-to-face) and telephone (Gubrium & Holstein, 2002; Sturges & Hanrahan, 2004; Zikmund et al., 2013). However, this study considered in-depth interview as a more suitable data collection method than telephone interviews due to the locations for participant recruitment (shopping centres) and the complex nature of questions. This is in accord with Sturges & Hanrahan' argument (2004) that the personal face-to-face interview approach is able to obtain a greater depth of answers.

Accordingly, the in-depth interview method was employed in order to explore the driving factors of COO effects as well as their impact on consumer behaviour, and determine

the underlying constructs and sub-constructs of COO effects on consumers' dairy brand evaluation. The results from the qualitative study can explain whether COO effects in the Chinese dairy market are consistent with the findings from the literature of previous studies on COO effects in other product categories and countries.

Patton (2002) divided the patterns of interviews into five categories: 'informal conversation, general guided approach, open-ended, closed fixed-response (or structured approach) and combined approach'. The informal interview approach gathers information from informal conversations, while a general guided interview should follow a basic line of enquiries. When interviewers conduct an open-ended interview, they may script the questions but the interviewers usually cannot confirm what the contents of the responses will be. In a structured interview, the interviewer asks each of the interviewees the same series of questions that are developed prior to the interview, and usually designed with a limited set of response categories. Patton (2002) underlined that, in practice, researchers can adopt one specific approach, or all those methods, or combine several of the techniques.

Informal conversational interviews and general guided approaches were not adopted in this study. Patton (2002) does not recommend the use of these techniques due to their high demands on time for data processing because of the variety of questions over time as each new interview is based on the foregoing responses. Accordingly, the semi-structured interviews are employed in this study, which combine a list of pre-designed open questions with the opportunity for the researchers to ask further questions based on responses. This strategy has the advantage in gathering and comparing of interview results as each response builds on the same questions.

However, the disadvantage of this approach is that interviewees have to fit their experiences and perceptions into the interviewers' categories, which may result in a limitation

of their response choices (Patton, 2002). To reduce this limitation, an interview guide (see Table 3) combined with interview questions was utilised to inform interviewees that they could provide other answers besides those shown on the interview question sheet, before they were asked with the interview questions. The use of an interview guide also helps the consistency of interviews and builds a systematic manner for comprehensive data collection from each participant (Bauer & Gaskell, 2000).

Ethics approval was obtained from the CQUniversity Ethics Committee before the commencement of the in-depth interviews. The interviews began with the explanations for the aims of the study and a pre-written introduction. During this introduction section, all participants were given an interview protocol with the information that only the consumers who purchased any dairy products in the past twelve months can participate in the interviews, and they can withdraw their participation anytime.

Then, the participants were interviewed about their experiences and perception of dairy products. Convergence in the responses or repetition and saturation were achieved at the fifty-interviews mark. Five more interviews were done to ensure no new message was being given. At the conclusion of interviews, the interviewees received the appreciation for their participation. The participants agreed to receive the overall results of interviews and the information of subsequent studies in this research project, and decided not to withdraw any answers they had provided in the interviews.

After the fifty-five in-depth interviews were recorded, a transcription (approximately 28500 words) was formed.

Table 3 **Information guide for in-depth interviews**

Section A: In-depth Interview Introduction	
Introduction	Greeting to interviewees
	Introduction of research topics; interview protocol (see Appendix D)
	Expression of appreciation of time given
	Clarification for interviewees' contribution to this study and their rights to withdraw their participation anytime
Section B: Open-ended Main questions	
Product Type	What types of dairy product do you normally purchase?
Purchasing Place	Where do you normally purchase dairy products?
Importance of COO	Is COO an important reference for you when you choose a dairy product?
Dairy Product Evaluation Criteria	What are your concerns when purchasing milk products besides COO?
Country Image	Which countries do you think are nice countries? Why?
	Which countries do you think make good products? Why?
Consumer Ethnocentrism	Do you think we should give priority to domestic products when we make purchases? Why?
	Do you think China produces good dairy products? Why?
Consumer Animosity	Do you have any countries in mind that you dislike? Why?
	Do you try to avoid purchasing products from those countries? For what kind of products?
Product Involvement	Do you think milk products are very important in your everyday life? Why?
	What things would you do if you wanted to find good milk products? Why?
	Do you think you know about milk products? Why?
Product Experiences	Have you visited any foreign countries? Do you have any friends and/or family members who visited overseas countries before?
Cultural Differences (Risk avoidance)	Would you purchase a product with potential risk? Why?

Cultural Differences (Uncertainty avoidance)	Would you want to be sure before you purchase anything? Why?
Cultural Differences (Face consciousness)	Do you think 'Face Saving/ Face Giving' is very important when you are choosing products? Why?
Country-of-origin Preference	Is there any country-of-origin that you prefer when you are choosing milk products? Is there any country-of-origin that you dislike when you are choosing milk product?
Brand Association	When thinking about milk products, which country do you have in your mind?
Brand Awareness	Can you name some milk brands from your preferred COO?
Brand Loyalty	Will you buy other dairy brands if dairy brands from your preferred country-of-origin are available for purchase?
Perceived Quality	Which countries do you think produce good dairy products?
Brand Equity	If another brand has the same features as your brand, would you prefer to buy the dairy brands from your preferred country-of-origin, even if they are more expensive?
Section C : Demographic Information (by ticking the appropriate category)	
Age	18-29;30-39;40-49;50-59;60 and more
Gender	Female; Male
Education	Secondary school or lower; High school; Diploma; Bachelor; Masters or higher
Locations	Larger-size city; Small-size city; Town/village
Number of family members	Less than 3;3;4;5;more than 5
Number of family members aged less than 3	1;2;3 or more

3.3.1 Sampling, sample size, and recruitment of participants

In-depth interviews were conducted in a three-week period in April 2016 with fifty-five residents in China who had purchased dairy products in the past twelve months. The interviewees were recruited in various locations in China, including larger-size cities

(provincial-level cities such as Beijing, Tianjin and Shanghai), smaller-size cities (prefectural-level cities such as Nanjing, Hangzhou, Xiamen, Fuzhou, Yangzhou, and Quanzhou), and a few towns/villages near those cities (Government of the People's Republic of China, 2018). The sample size of fifty-five was adequate for qualitative research since twenty in-depth interviews are considered to be sufficient for qualitative research (Roller & Lavrakas, 2015; Travers, 2001). In an exploratory study, a greater quantity of interviews does not consequentially provide a better understanding of related phenomena (Gaskell, 2000). The interviewer adopted a systematic random sampling method by inviting every third person passing by the reception counters at shopping centres. Residents of different age groups (eighteen and above), gender and education levels were interviewed throughout different regional levels (larger-size city, smaller-size city, and town/village). This diversity in terms of demographic backgrounds gave the researcher various insights into the outlook of Chinese dairy consumers. A summary of the in-depth interviews participants' demographic profiles is shown in Table 4.

Table 4 **A summary of the in-depth interviews participants' demographic features**

Variable	**Scale**	**Number**
Number of informants		55
Gender	Female	38
	Male	17
Age	18-29	8
	30-39	33
	40-49	9
	50-59	2
	60 and more	3
Education	Secondary school or lower	7
	High school	6
	Diploma	12
	Bachelor	25
	Masters or higher	5
Locations	Provincial-level city	14

	prefectural-level city	19
	Town/village	22
Number of family members	did not tell	1
	Less than 3	3
	3	20
	4	9
	5	13
	more than 5	9
Number of family members aged less than 3	0	38
	1	16
	2	1

To analyse the data obtained from the in-depth interviews, this study utilised the iterative processing method developed by Graneheim & Lundman (2004) to code and label categories and concepts. The coding and labelling procedures were examined and re-examined in order to verify and obtain a well-grounded interpretation. The data were then

compared with the findings provided by previous studies on COO effects to check whether they confirmed the existing literature, in order to achieve triangulation (Ban & Ramsaran, 2017).

3.3.2 Qualitative research findings

The outcome of interviews presented diversity with respect to the dairy products Chinese consumers purchased and their purchasing places. The majority of informants purchased yogurt, liquid milk and baby formula from supermarkets/department stores and/or bought directly from overseas (Daigou). Most of them normally purchased one or two types of dairy products and less frequently than once a week. Forty-six out of fifty-five interviewees (84%) claimed that the COO is an important reference when choosing a dairy product. Some interviewees perceived a dairy product's COO in general, while others specified it as 'where the product was made' or 'where the dairy brand was from'. Besides COO, more than half of the interviewees claimed safety, nutrition and taste of dairy products were important criteria.

Interviewees selected Australia, US, China, UK and New Zealand as their top five favourite countries. Twenty-two out of fifty-five interviewees (40%) agreed that Germany, Australia, Japan and the USA are the countries that produce quality products in general. As for the preferred COO for dairy products, the top COOs reported by informants were all developed countries, such as Australia (18/55 or 33%), New Zealand (15/55 or 27%), Germany (9/55 or 16%), Netherlands (8/55 or 15%) and US (8/55 or 15%). Interviewees also reported they favoured these countries due to the country images of 'nice environment' (informant 2, 4) and 'high production standards' (informant 3, 22).

Secondly, Chinese consumers' evident preference for dairy products from developed countries was also supported by the relative absence of consumer ethnocentrism in the Chinese dairy market. Thirty-eight per cent of informants agreed that Chinese consumers should give priority to domestic products when they make purchases, while 31% disagreed and another 31% answered 'it depends'. However, only 8 out of 55 informants (15%) thought Chinese dairy products are good. Some of those who claimed they want to support Chinese products in the last question however felt negative towards Chinese dairy products, due to the dairy scandal (Informant 52), the unreliable standards of dairy production in China (informant 26), and pollutions (informant 40).

Thirdly, in relation to consumer animosity, 14 of 55 (25%) interviewees disliked Japan. African and Middle Eastern countries were also disliked by 10% of interviewees. More than half (30/55) of informants reported that they will try to avoid buying products from the disliked countries. This is consistent with the finding that these countries were not reported as consumers' preferred COO. Therefore, consumer animosity was found to influence consumers' COO preference and purchase decision. The source of consumer animosity reported included warfare (informant 33, 37) or backwardness of the relevant countries (informant 16, 42).

Fourthly, thirty-two out of fifty-five or 58% of informants claimed milk products are very important in their everyday life. This was because they purchased or consumed dairy product for health (informant 3) or feeding their offspring (informant 14, 16). The result implies the high level of consumer involvement for dairy products. As for what Chinese consumers will do when they are highly involved with dairy products, most of them believed in finding appropriate channels or buying directly from overseas (Daigou). Checking brands and COO of the products, and looking for more references from internet or word-of-mouth

were also reported (informant 10, 28, 30, 50). This means when consumers are highly involved with dairy products, COO information will be one of the important references. As for the interviewees' knowledge and direct experience of dairy products, only 9 of 55 informants (16%) reported they were familiar with milk products because they do not purchase these products frequently unless they have infants (informant 27, 50 54). As for indirect experience, consumers were more likely to favour products from a country which they (or even their friends or family) had visited.

To examine the consumers' cultural values, the majority of informants (40/55 or 73%) reported they would not purchase products with a potential risk because they preferred to avoid the potential cost or loss from wrong purchase decision (informant 20, 32). Thirty-eight out of fifty-five or 69% of dairy consumers would want to be confident before they make a purchase. This explains why Chinese consumers check brands and COO to confirm the quality of dairy products. They also claimed that they attached more importance to 'choosing quality' than 'saving face or honour' when purchasing dairy products (informant 10, 40, 52). Therefore, Chinese consumers portrayed a high level of risk avoidance and uncertainty avoidance. As for 'saving face or honour', it was not reported as a reason why Chinese consumers preferred dairy products with foreign COO.

As for the brand association, interviewees were asked 'When thinking about milk products, which country would you have in your mind?' The most frequently reported answers of informants were: New Zealand (22/55 or 40%), Australia (19/55 or 35%), Netherlands (10/55 or 18%), Germany (6/55 or 11%) and US (5/55 or 9%). This showed a consistency with the preferred COO question. Moreover, thirty-four out of fifty-five or 62% of interviewees were able to provide examples of dairy brands from their preferred COO. In

other words, Chinese consumers have a significant awareness of dairy brands from their preferred COO.

In addition, the majority of informants (40/55 or 73%) claimed they did repeat their purchase of particular brands and stayed loyal to a brand. When interviewees were asked 'Which countries do you think makes quality dairy products?' the most popular answers were Australia (15/55 or 27%), New Zealand (15/55 or 27%) and Germany (10/55 or 18%). The interviewees linked 'good quality' to 'safe', 'trustable', 'good taste', and 'nutritiousness' (informant 5, 8, 22). Lastly, the majority of informants (43/55 or 78%) claimed they were willing to pay at least 10% additional price for dairy products from their preferred COO. This means that brand equity was enhanced through a willingness to pay a price premium to own a brand of preferred COO.

The qualitative study explored the key concepts in the proposed model. The findings were referenced for development of measurement items in the subsequent quantitative study. A summary of the key findings from qualitative study is shown in Table 5.

Table 5 **A summary of the key findings from qualitative study**

Key constructs	Interview questions	Findings	Quotes from interviews
Importance of COO	Is COO an important reference for you when you choose a dairy product?	46 out of 55 (84 %) interviewees agreed that COO is important when they are evaluating a dairy product	‘Yes. Because good COO means good quality of the dairy products.’ (Informant 3) ‘Yes. Because the Chinese dairy products are not safe.’ (Informant 9) ‘Yes. I prefer dairy products from a COO with better environment, such as nice grassland. They are better.’ (Informant 25) ‘Yes. I prefer dairy products come from developed countries. I trust them more.’ (Informant 42)
Country-of-origin preference	Is there any country-of-origin that you prefer when you are choosing milk products?	The top COOs reported by informants were Australia (18/55 or 33%), New Zealand (15/55 or 27%), Germany (9/55 or 16%), Netherlands (8/55 or 14.5%) and US (8/55 or 14.5%).	‘Normally I prefer dairy products made in Australia and New Zealand.’ (Informant 4) ‘I trust dairy products from US, Germany, New Zealand.’ (Informant 17) ‘I prefer Australia and New Zealand.’ (Informant 55) ‘I like those made in Australia and Netherlands.’ (Informant 9)
Country image	Which countries do you think are nice countries?	The majority of informants (45 out of 55 or 82%) chose	‘I guess I prefer USA as it is a rich and powerful nation.’ (Informant 26) ‘New Zealand and Australia are trustable countries.’ (Informant 32)

		developed countries	‘I like UK and Germany as they are a developed country.’ (Informant 37)
	Which countries do you think make good products?		‘I like New Zealand because they are so clean!’ (Informant 2) ‘I choose Germany and USA as they have better quality control management for their products.’ *(*Informant 3*)* ‘I like Australia because they have nice environment.’ (Informant 4) ‘Australia and Japan, I think they have better supervision systems for production.’ (Informant 22)
Consumer ethnocentrism	Do you think we should give priority to domestic products when we make purchases?	21 out of 55 (38 %) interviewees agreed, while 17 (31 %) interviewees said no ,and another 17 interviewees thought ‘it depends’.	‘Yes, some of Chinese products are world class.’ (Informant 52) ‘Not really. I don’t think they are reliable.’ (Informant 31) ‘Yes, Chinese should buy Chinese products.’ (Informant 26) ‘It depends on the type of product and the quality. I will not buy Chinese baby formula, they are too risky.’ (Informant 44)
	Do you think China produces good dairy products?	Only 8 out of 55 (15 %) informants thought Chinese dairy products are good.	‘I guess they are not as good as foreign ones. You know about the scandal, right?’ (Informant 52) ‘I don’t think so. Chinese dairy manufacturers use bad standards of production, they just want profits.’ (Informant 26) ‘No! Because of the bad milk source, polluted air, and too many additives.’ (Informant 40)
Consumer animosity	Do you have any countries in mind that	25 of 55 (45%) interviewees claimed they did not have any. 14 of 55 (25%) interviewees disliked	‘Japan, because they were, are, and will always be our enemy.’ (Informant 37) ‘Japan, because they invaded us before.’ (Informant 33)

	you dislike?	Japan. African and Middle Eastern countries were disliked by 5 (9 %) interviewees.	‘I don’t like African countries as I think they are poor. I don’t like Middle Eastern either since they are having wars.’ (Informant 16) ‘Those are in Africa, because I think they have a dirty environment.’ (Informant 42)
	Do you try to avoid purchasing products from those countries? For what kind of products?	30 out of 55 (55%) of informants reported that they will try to avoid buying products from the disliked countries.	‘I will avoid buying Japanese products.’ (Informant 33) ‘I won’t buy food and cosmetic products from those countries as their environment is dirty.’ (Informant 42) ‘I won’t purchase any products from Japan as long as I know they are made in Japan.’ (Informant 28)
Product involvement	Do you think milk products are very important in your everyday life?	32 out of 55 (58%) of informants agreed	‘I think dairy products are important because they are my family’s staple food and they are important for health.’ (Informant 3) ‘They are very important because my baby has milk everyday.’ (Informant 14) ‘I think milk is more important for infants and children, not for me.’ (Informant 16)
	What things would you do if you want to find good milk products?	As for what people will do when they are highly involved with dairy products, most of them believed in finding the proper channels or buying directly from overseas (Daigou). Checking brands and COO, and looking for more information from the internet or word-of-mouth were	‘I will try to find a good Daigou, and look for good brands.’ (Informant 10) ‘I will try to buy foreign dairy products.’ (Informant 30) ‘I will buy from big supermarkets I trust or Daigou from my family members who live in Australia.’ (Informant 28) ‘I will look for the information and comments on the producer from the internet and other people.’ (Informant 50)

		also reported.	
Product knowledge and experience	Do you think you know about milk products	Only 9 of 55 (16 %) informants reported they knew about milk products	‘I do not have much knowledge about dairy products as I only just started purchasing dairy products since I had my baby.’ (Informant 27) ‘I don’t think I know about dairy products much, I started drinking milk a couple years ago.’ (Informant 54) ‘I guess I know little about dairy products, I started buying them since my child was born.’ Informant 50)
	Have you visited any foreign countries? Do you have any friends and/or family members who visited overseas countries before?	We found people are more likely to favour the products from a country which they (or even their friends or family) had visited.	‘I visited Australia and Singapore before. One of my family members is studying in Australia at the moment.’ ‘I think dairy products from Australia and New Zealand are good.’ (Informant 53) ‘I haven’t visited any foreign countries yet, but my uncle used to work in the USA and Japan.’ ‘I think American and European products are better.’ (Informant 48) ‘I recently visited New Zealand, Australia and Hongkong.’ ‘I prefer dairy products from New Zealand.’ (Informant 2)
Cultural differences (Risk avoidance)	Would you purchase a product with potential risk?	The majority of informants (40 out of 55 or 73%) reported they prefer to avoid risks.	‘I don’t like risks because the cost can be huge.’ (Informant 20) ‘No. I want to avoid the loss.’ (Informant 32) ‘It depends, I won’t buy risky products if they are important or expensive.’ (Informant 30)
Cultural differences (Uncertainty avoidance)	Would you want to be sure before you purchase anything?	The majority of informants (38 out of 55 or 69%) did not like uncertainty	‘Yes. I will try to look for more information and references.’ (Informant 32) ‘It depends on how important and expensive the product is.’ (Informant 54) ‘Yes. I will ask for other people’s recommendation.’ (Informant 37)

Cultural differences (Face Consciousness/Mianzi)	Do you think 'Face Saving/ Face Giving' is very important when you are choosing products?	The majority of informants (43 out of 55 or 78%) disagreed that 'Face saving/Face Giving' was important when choosing products.	'No. I care about quality.' (Informant 40) 'No. Quality is more important for dairy products.' (Informant 52) 'No. Mianzi is not related to good dairy products.' (Informant 10)
Brand Association	When thinking about milk products, which country do you have in your mind?	The most frequently reported answers from informants were: New Zealand (22/55 or 40%), Australia (19/55 or 35%), Netherlands (10/55 or 18%), Germany (6/55 or 11%) and US (5/55 or 9%).	'I will say New Zealand and Australia because of the beautiful grassland in these countries.' (Informant 7) 'New Zealand, Australia, Netherland, Germany, they have a good environment and provide quality products.' (Informant 3) 'Germany and US. They are more reliable.' (Informant 17)
Brand Awareness	Can you name some milk brands from your preferred COO?	34 out of 55 (or 62%) interviewees were able to provide examples of dairy brands from their preferred COO.	'Devondale is a famous Australian brand.' (Informant 54) 'I like the milk powder from New Zealand and I know Fonterra is a very famous manufacturer in this country.' (Informant 2) 'I know HIPP and Aptamil are brands made in Germany.' (Informant 29)
Brand Loyalty	Will you buy other dairy brands if dairy brands from your preferred country-of-origin are available for purchase?	The majority of informants (40/55 or 72%) claimed they did repeat purchase of particular brands and stayed loyal to a brand.	'I will keep buying brands I trust and it is not necessary for me to try other brands.' (Informant 21) 'If I am able to have a channel to buy the dairy products from a reputable country, I will keep on buying it.' (Informant 26) 'I only buy baby formula from Australia and New Zealand because my baby consumes milk and I want to give her the best.' (Informant 51)

Perceived quality	Which countries do you think makes good dairy products?	The most frequent answers were Australia (15/55 or 27%), New Zealand (15/55 or 27%) and Germany 18 / 27 (10/55 or 66%).	‘I think German and Australian dairy products are good.’ (Informant 45) ‘Australian dairy products are famous.’ (Informant 49) ‘New Zealand makes very good baby formula.’ (Informant 50)
	Why do you think their dairy products have good quality?		‘Safety is the most essential attribute for food products. And these countries’ products are trustable.’ (Informant 22) ‘Because my baby is willing to drink it only if the baby formula is tasty.’ (Informant 8) ‘They are nutritious and safe. Nutrition is important for health.’ (Informant 5)
Brand Equity	If another brand has the same features as your brand, would you prefer to buy the dairy brands from your preferred country-of-origin, if even they are more expensive?	The majority of informants (43/55 or 78%) claimed they were willing to pay at least 10% additional price for their preferred COO.	‘I guess I will pay 50% additional price, because drinking safe milk is very important for health.’ (Informant 22) ‘Yes 10% because they have better milk source.’ (Informant 8) ‘Yes, about 20% I think because they are more reliable.’ (Informant 21)

3.4 Quantitative research

Quantitative research techniques in business research include experiments, observations and surveys. Experiments refer to scientific procedures wherein the factors under study are isolated to test hypotheses. The purpose of an experimental study is to determine what effect a particular treatment has on the outcomes. Therefore, this approach is often involved with manipulated variables because it has the researchers' purposely attempting to influence the outcomes. As the environments of experimental studies are controlled, better results are often achieved. However, the manipulated and controlled environment cannot usually represent real life, the reactions of the participants may not be actual indicators of their behaviours in the non-experimental environment (Cooper et al., 2006; Hair et al., 2015). Therefore, experimental approach is not adopted by this research.

Observations, as the name implies, is type of techniques of collecting data through observing. In the context of marketing research, this approach often involves human or mechanical observation of what consumers actually behave or what events occur during a purchase or consumption situation. Observations often produce more objective and accurate data as it can be applied in an environment of real life. However, this approach has the disadvantage in terms of high financial and time costs (Cooper et al., 2006; Hair et al., 2015).

The frequently used forms of surveys include face-to-face interview, telephone interview, and questionnaires. A questionnaire is a type of data collection instruments that ask participants to respond to a cluster of oral or written questions (Cooper et al., 2006; Hair et al., 2015). While paper-based survey questionnaires have been widely used in market studies, there is increasing number of researchers who prefer the online

(web-based) approach. Online questionnaires are lower-cost, enable large sample sizes, and provide speedy and accurate results (Fleming & Bowden, 2009). Many researchers, such as Chen et al. (2011), Godey et al. (2009), and Carneiro and Faria (2016) employed this technique for their recent COO studies. Hence, this study adopts an online questionnaire for the quantitative data collection.

3.4.1 Online questionnaire design

3.4.1.1 Types of questions used in the online questionnaire

This study employed three main types of questions for quantitative data collection: behavioural, attitudinal, and classification based on Hague and Jackson's (1995) classification. Firstly, behavioural questions are usually employed to probe into the general purchase behaviour of consumers. For this current study, behavioural questions were designed to investigate factual information about whether the participants had purchased any dairy products, what types of dairy products they had purchased in the past twelve months, and where and how often the participants purchased dairy products. The questions were structured in order to elicit accurate responses and to screen (Hague & Jackson, 1995). For instance, the question in regard to whether the participants had purchased any dairy products in the past twelve months was chosen as the first question for the questionnaire survey. Those who reported no actual dairy product purchase were disqualified for this study, and the survey was discontinued. This structure made sure all the qualitative data were collected from actual consumers of dairy products.

Secondly, attitudinal questions were developed to explore and examine the levels of consumers' perceptions and knowledge about the related aspects of the COO of dairy products. In order to enhance the reliability, this study utilised multi-item measures for the attitudinal constructs (Bergkvist & Rossiter 2007; Churchill, 1979; Peter, 1979).

Responses to these questions used a seven-point Likert Scale to determine the opinions of participants in regard to the following: the importance of COO in their dairy brand evaluations; preferred COO; country image; consumer ethnocentrism; product involvement; product experiences; cultural values; consumer animosity; brand awareness; brand association; perceived quality; brand loyalty; and brand equity.

Lastly, classification questions were designed to develop a profile of respondents, which included gender, age, education, income, and place of residence. These classification questions were utilised in this study to clarify the participants' demographic profiles.

3.4.1.2 Format of questions for the online questionnaire

A combination of structured, closed-ended questions and unstructured open-ended questions (place of residence) was employed for the survey questionnaire. Some questions allowed 'other' response options with a blank space in order to encourage participants to provide and specify additional answers. According to Zikmund et al. (2014), each key concept was measured by several items in order to output a more accurate measure than being measured by a single question. This study developed these items by adapting previous research which had been discussed in the literature review of Chapter 2 and the findings from the qualitative study.

Response rate of questionnaires can be influenced by the order of questions (Babbie, 1990). Accordingly, this study designed the questions with a logical sequence for participants in order to gather information about COO effects on the Chinese consumers' behaviours of dairy purchase, moving from general behaviours to specific perceptions /opinions. Demographic questions including gender, age, education, place of residence, and number of young family members, were located at the end of the questionnaire as the

responses could be sensitive, and might discourage participants from completing the entire questionnaire (Babbie, 1990; Nardi, 2003).

In order to test the proposed theoretical framework and its related hypotheses in this research, Table 6 shows how the questions of the questionnaire survey were constructed and adopted from previous studies.

Table 6 **Development of online questionnaire items**

Variables	Allocated Questions	Sources
Dairy purchase history	Q1	
Dairy purchase frequency	Q2	
Type of dairy products purchase	Q3	In-depth interviews (qualitative study)
Place of dairy products purchase	Q4	In-depth interviews (qualitative study)
COO importance	Q5-Q7	In-depth interviews (qualitative study)
Preferred COO for dairy products	Q8	In-depth interviews (qualitative study)
Country image	Q9–Q13	Paul and Dasgupta (2010); Yasin et al. (2007) and In-depth interviews (qualitative study)
Consumer Ethnocentrism	Q14–Q23	Shankarmahesh (2006); Evanschitzky et al. (2008); Lindquist et al. (2001)
Product involvement	Q24–28	Zaichkowsky (1994); O'Cass (2000) and Lee et al. (2005)
Direct product experiences	Q29–Q31	Batra et al. (2000)
Indirect product experiences	Q32–Q35	In-depth interviews (qualitative study)

Uncertainty avoidance	Q36–Q39	Hwang (2009) and Quintal et al. (2010)
Risk Avoidance	Q40–Q42	Quinta et al. (2010)
Face consciousness	Q43–Q46	Bao et al. (2003) and Liao and Wang (2009).
Disliked COO	Q47	In-depth interview (qualitative study)
Consumer Animosity	Q48–Q52	Hoffmann et al. (2011)
Country image	Q53–Q57	Paul and Dasgupta (2010); Yasin et al. (2007) and In-depth interview (qualitative study
Brand loyalty	Q58–Q61	Paul and Dasgupta (2010)
Perceived quality	Q62–66	Paul and Dasgupta (2010) and In-depth interview (qualitative study)
Brand awareness	Q67–Q70	Paul and Dasgupta (2010)
Brand association	Q71–Q74	Paul and Dasgupta (2010) and Buil et al. (2008)
Brand equity	Q75–Q79	Paul and Dasgupta (2010) and Buil et al. (2008).
Gender	Q80	
Age	Q81	
Education	Q82	
Income	Q83	
Family members	Q84	
Location of residency	Q85	

In order to test the proposed theoretical framework (Figure 7), eighty-five questions were designed in the questionnaire.

Questions 1–4 were designed to investigate the participants' general purchase behaviour. Question1 was used to confirm if the participants had purchased any dairy products in the past twelve months. Question 2 asked the frequencies (on average) that

participants purchased dairy products each month. Question 3 and 4 were about what and where the participants purchased dairy products. The items Question 3 and 4 were adapted from the answers provided by the informants to the in-depth interviews (qualitative study).

Question 5–7 were utilised to explore whether COO is important for the participants when they chose dairy products. Then Question 8 asked which countries (or regions) were the participants' preferred COOs for dairy products. The listed countries (or regions) in this question were selected from the answers provided by the informants to the in-depth interviews. This question allowed 'other' response options with a blank space in order to encourage participants to provide and specify additional answers that matched their actual circumstances.

Questions 9–13 were employed to understand the perceived country images by the participants for their preferred COOs. In particular, Questions 10 and 11 referenced the answers provided by the informants to the in-depth interviews. The other three questions were adapted from the items employed in the studies by Paul and Dasgupta (2010) and Yasin et al. (2007) .

CE was initially measured by the seventeen items of CETSCALE by Shimp & Sharma (1987). CETSCALE was widely used by many other researchers, for example, Shankarmahesh (2006) and Evanschitzky et al. (2008). However, in other studies, the CETSCALE was modified into ten items with proven validity (Lindquist et al., 2001). Accordingly, the modified ten-items CETSCALE was employed as Questions 14–23 to measure the CE in the Chinese dairy market.

Questions 24–28 were used to test the participants' involvement levels for dairy products. The Questions 27 and 28 referenced the answers provided by the informants to

the in-depth interviews. The other three questions were chosen from the items (for example, 'I pay a lot of attention to dairy products') employed in the studies by Zaichkowsky (1994), O'Cass (2000) and Lee et al. (2005), which were more relevant to milk products.

Questions 29–31 adapted from the study of Batra et al. (2000), were for testing the participants' direct experiences with dairy products. Then Questions 32–35 referenced the answers provided by the informants to the in-depth interviews in order to check participants' indirect experiences that can be linked to dairy products.

Questions 36–39 were designed for assessing the participants' uncertainty avoidance level in dairy products purchase. These questions referenced the items utilised by Hwang (2009) and Quintal et al. (2010).

Questions 40–42 were employed to test the participants' risk avoidance level in dairy products purchase (Quintal et al. 2010).

In order to explore the participants' face consciousness, Questions 43–46 adapted the items in the studies by Bao (2003) and Liao and Wang (2009).

Question 47 asked the participants to report the COOs they disliked the most. The COOs listed in this question referenced the answers provided by the informants to the in-depth interviews.

Then Questions 48–52 were used to confirm if the participants held CA towards their disliked COOs. These questions were adapted from a study by Hoffmann et al. (2011). Then Questions 53–57 were designed for exploring the participants' country images/stereotypes of their disliked COOs, similar to Question10–14.

Questions 58-61 were utilised to assess the participants' loyalty to the dairy brands from their preferred COOs. These questions were adapted from the study by Paul and Dasgupta (2010).

Questions 62 was adapted from the study by Paul and Dasgupta (2010) while Question 63–66 referenced the answers provided by the informants to the in-depth interviews to assess the perceived quality.

Questions 67–70 were designed to probe into the participants' awareness of the dairy brands from their preferred COOs. These questions originated from the study by Paul and Dasgupta (2010).

Questions 71–74 were used to check the participants' association with the dairy brand from their preferred COO. These questions referenced the items utilised in the studies by Paul and Dasgupta (2010) and Buil et al. (2008).

Consumer-based brand equity was assessed by Questions 75–79 that were referenced in the studies by Paul and Dasgupta (2010) and Buil et al. (2008).

Lastly, Questions 80–85 asked participants for their demographic information including gender, age, education, income, family members and location of residency.

3.4.1.3 Scales for measurement

As for the selection of the most adequate scales for measurement, Pallant (2016) recommended Likert scales, and argued that they should be widely used because of their simplicity and convenience of interpretation for participants and researchers. Therefore, this study employed a seven-point Likert scale for quantitative data collection in order to provide participants more score options from which to choose. This enabled gathering more precise data for analysis.

3.4.2 Refining the questionnaire

McLennan (1999) underlined the importance of the process of testing for the preparation and development of the survey questionnaire as it allows the researchers to identify and correct some issues before conducting the full survey. Accordingly, this study utilised three main types of testing methods, namely 'observation, pre-testing, and pilot testing', to develop the survey questionnaire (Van Teijlingen, 2001).

3.4.2.1 Observation

This study applied observation to refine the draft questionnaire questions before the stage of pre-testing (Van Teijlingen, 2001). The researcher observed eight participants when they were asked to answer the draft questionnaire questions. Those participants were dairy consumers randomly recruited at the locations where the previous in-depth interviews were conducted, and were required to detail how they understood the questions when they were completing the hard-copy questionnaire in the meantime. The participants were advised with the fact that the survey was not being formally tested; in other words, it was not a part of the actual study. Moreover, they were not provided any assistance in giving answers to the questions. This observational technique assisted the researcher in identifying unclear questions. Some opinions and comments on the wording of questionnaire were collected from the participants during the process of observational study. Based on these comments, the wording of questions in the questionnaire was improved before the pre-testing stage.

3.4.2.2 Pre-testing

Pre-testing a survey on a small number of participants allows researchers to discover issues in the questionnaire at a time when they can be solved. Accordingly, the first minor-sized trial of pre-test of the questionnaire was undertaken among a total of ten participants. The participants were randomly recruited from Zhubajie.com, an on-line platform in China, which has been utilised by many recent studies on the Chinese consumers (Ding et al., 2015; Xu et al., 2016; Ye et al., 2013). This on-line platform has the advantage of recruiting people from various locations in China and providing nationally representative samples (Li et al., 2018). The reliability of this platform has been verified in these studies.

The participants provided feedback after completing the self-administered on-line questionnaire. Pre-test was conducted by the researcher to solve the problems in questionnaire design and also to identify unclear questions. It also checked the consistency of participants' understanding of same questions (Van Teijlingen, 2001; Zikmund 2013).

Feedback from the pre-testing showed that the participants were able to have clear and consistent understanding of the majority of questions. However, a few participants reported that Q18–Q23 (See Appendix A) were confusing to them as they thought these questions did not really match the context of dairy purchase. Therefore, those questions were then removed from the questionnaire, which left four items for testing consumer ethnocentrism in dairy purchase. As a result, there were seventy-eight questions in total in the questionnaire after the revision. The second trial of pre-test with the revised questionnaire was conducted with ten additional participants. No further issues were identified in the second pre-test. Finally, it ensured all questions could match the proposed model prior to implementing the questionnaire for pilot testing with Chinese dairy consumers.

3.4.2.3 Pilot test

The pilot test was employed for testing instruments, and identifying and eliminating potential problems in the questionnaire (Kinnear & Taylor, 1996; Malhotra et al., 2006; Zikmund et al., 2013). This stage aimed to confirm that the orders of questions flowed logically, wording of questions and format were clear and time required for answering the questions was reasonable (Pallant, 2016; Nardi, 2003; Zikmund et al., 2014). The pilot test was also employed to improve the validity and reliability of the questionnaire (Kivela et al., 1999). In this study, the observation, pre-testing and pilot test were conducted in December, 2016. This study was approved by the Human Research Ethics Committee of CQUniversity (H16/10-279), prior to the questionnaire testing methods being implemented.

Convenience and purposive sampling methods were utilised for the pilot test. Emails were sent to fifty-five informants who participated in the previous qualitative study (in-depth interviews) to invite them to participate in the pilot test for the on-line quantitative study. The invitations included the information that the participants could freely withdraw during the survey process and their information and responses would remain confidential. It took the participants an average of twenty-five minutes to complete once provided the link to the self-administered survey website. A total of thirty-nine responses was received with a response rate of 70.9%.

As for the factor analysis, this study employed the principal component analysis to test measurement adequacy, and to detail common, specific and random error variances of the collected data from the pilot test (Hair et al., 2010; Kalema et al., 2011). The results showed that all the factor loadings of the items were higher than .30 in the pilot study, which met the minimal level for interpretation of structure recommended by Hair

et al., (2010). The researcher then examined the internal consistency of the constructs with Cronbach's alpha, which has been widely employed as a technique for evaluating the reliability of scales (Hair et al., 2010). The results showed the statistical acceptability of the constructs as all values surpassed the minimum requirements .60 (Hair et al., 2010). Accordingly, based on the results of the pilot tests, seventy-eight questions remained for the quantitative study, which were proved to meet the objectives of this study.

3.4.3 Sampling frame

Sampling design can influence the quality of meaningful research outcomes and conclusions. Although a great number of studies on consumer behaviour has been conducted with samples of university students, this group has different reactions towards purchase decisions (e.g. pricing actions) when compared to the general population (Peterson & Merunka 2014). By contrast, using random samples from the general population for this study can contribute to the generalisability of the results (Vaidyanthan & Aggarwal, 2003). Therefore, the participants were randomly recruited on the on-lin platform (Zhubajie.com) in line with the random sampling strategy employed during the pre-testing stage. In other words, the questionnaire surveys were randomly distributed by the platform to its registered users who were the residents from diverse geographic locations across China.

3.4.4 Sample size

Cochran (1977) introduced a formula to compute a representative sample size for proportions: $n=z^2*(p*q)/e^2$. In this formula, n refers to the sample size, z equals the threshold of desired confidence level, p refers to the estimated proportion of an attribute existing in the population, $q=p-1$, and e equals the desired precision level. Based on this

formula, a critical sample size n=384 is commonly adopted by survey researches, where the maximum variability is assumed (p =0.5) with 95% confidence level and ±5% precision, q =1-0.5 = 0.5; e = 0.05; z =1.96 (Kotrlik & Higgins, 2001).

For the application of SEM (structural equation modeling) technique, the sample size must be large enough to obtain stable or meaningful estimates (Burns & Bush, 2013; Hair et. al, 2010). Sample sizes in some previous studies with SEM applications that contained 10–15 observed variables generally employed 200 to 400 respondents as the acceptable sample sizes, while a sample size of 300 is recommended. A sample size larger than that can be considered to be large (Hair et al., 2010; Sekaran, 2016). As this study had 15 latent variables, a targeted sample size of 500 was considered more adequate.

3.4.5 Ethical considerations

Consistent with the previous qualitative study, ethics approval was also obtained from the CQUniversity Ethics Committee before the quantitative study commenced. As required by the university ethics protocol, the researcher should conduct the questionnaire survey in a manner that would not violate the rights and interests of the societies while ensuring anonymity of the participants. All data collected from the responses would be summarised and utilised for research purposes only, and strict confidentiality of individual responses would be ensured. Participants were free to decide whether to participate or not and to withdraw their participation in the survey at anytime. Therefore, the questionnaire survey complied with all ethical requirements stipulated by the University.

3.4.6 Administering the questionnaire

Online survey techniques have been widely applied to current marketing research as the new internet technologies have been well accepted, and the need for faster data collection is growing (Howell et al., 2010; Wright, 2005). In addition, online survey techniques have the advantage of increasing the likelihood of participation while reducing the processing time and costs (Sax et al., 2003).

There were three sections in the online questionnaire for this research, which included an information sheet, consent form, and the main online survey questionnaire (seventy-eight items, which are shown in Appendix A). The questionnaire was initially developed in English then translated into simplified Chinese, which was checked with the back translation method (Brislin, 1970). To recruit participants for the questionnaire, this study utilised a polular online agents (for example, Zhubajie), which have been employed by many studies to conduct surveys in China (Zhao et al., 2014; Zhao et al., 2016).

The quantitative data collection process was implemented from January 2017 to March 2017. A total of 700 responses were collected. Each response was reviewed and removed from the data set if it did not match the requirements of completion or more than 90% of the total questions. After 127 unqualified responses were eliminated (18.14 %), a total of 573 responses were confirmed for data analysis. Therefore, the questionnaire survey presented an 81.86% valid response rate with a confidence level of 95%.

3.5 Data analysis techniques for quantitative study

3.5.1 Introduction

This section details how this study analysed the quantitative data with the statistical package (SPSS) and structural equation modelling application (AMOS). A detailed discussion of the analysis outputs and SEM is provided.

3.5.2 Method of analysis of data with the SEM approach

This study compiled the collected information from the online survey into a data set with SPSS version 23. In order to minimise the errors in transcribing or data entry, the researcher re-checked all the entered data and was assisted with a second person in proofreading and verifying the data entry. This study also identified outliers and missing responses with the application of some statistical tools (minimum, maximum and mean) . The non-response items were treated as missing data and then missing values were filled by the SPSS software. A clean database was generated from the survey responses.

After the data cleaning and descriptive statistics tabulation were done, model evaluation was conducted via either a one or two-stage approach. When the conventional structural equation modelling (SEM) approach is adopted, the measurement and structural models are evaluated together. This approach can be employed when a proposed model has a strong theoretical fundamental and highly reliable measurements (Hair et al., 2010; Sekaran, 2016). This approach was considered suitable for this study as the key measurements had been applied to previous studies on COO effects or developed by the findings from the qualitative study. In addition, the reliability of those measurements was tested and proved, which will be detailed in a later chapter of this study.

This study firstly evaluated the quality of the measurement items. After it was completed, the structural model was then estimated. The overall analysis with this second approach was completed with the following steps.

3.5.2.1 Development of descriptive statistics

The researcher developed descriptive statistics from the demographic information to create a profile of the respondents in order to obtain a global overview of the data, which could guide the multivariate analysis (Hair et al., 2010), and model outputs interpretation (Hair et al., 2010; Sekaran, 2016).

3.5.2.2 Use of structural equation modelling (SEM)

SEM was utilised to examine the theoretical relationships in the proposed 'Impacts of COO effects' model. SEM is a family of statistical techniques which is an integration of path analysis and factor analysis and has been applied to vast and various studies for more than three decades (Tabachnick & Fidell, 1996). This technique has been widely employed in business research and other empirical studies to test proposed models and hypotheses for causal influences (Byrne, 2001; Hooper et al., 2008). SEM suits these studies because it computes the correlated independents, multiple latent independents and measurement errors (Byrne, 2001). SEM therefore can provide an approach by which 'hypotheses for relationships among latent and observed variables are tested by simultaneously estimating a set of multiple regression equations' (Hair et al., 2010).

Many studies have successfully applied SEM to investigate relationships in COO effects and consumer behaviour, for example Andéhn et al. (2016) and Olsen & Olsson (2002) .

SEM is often considered as a confirmatory rather than exploratory program, which utilises one of the following three approaches (Garson, 2005):

1. Alternative models approach. This approach tests several models to confirm which model has the best fit with the various goodness-of-fit indicators.

2. Model development approach. In this approach, a model will be first examined by SEM procedures. If it has significant deficiency, an alternative model will be then evaluated based on the modification recommended by the SEM index. It has a drawback as such models may be unstable with other datasets because they were developed based on the unique existing data. Consequentially, the model has to be confirmed subsequently with independent data.

3. Strictly confirmatory approach. The researcher evaluates the model with SEM goodness-of-fit tests to check whether the pattern of variances and covariances in the data match the structural (path) model specified by the researcher.

As for implementing SEM analysis, Hair et al. (2010) and Kline (2015) introduced the six stages in SEM process, which are shown as follows:

"1. Defining individual constructs

2. Developing the overall measurement model

3. Designing a study to yield empirical results

4. Assessing the measurement model validity

5. Specifying the structural model

6. Testing structural model validity."

3.5.2.3 Use of SPSS and AMOS software

As a popular and proven software technique, SPSS has been widely used for statistical analysis in research (Pallant, 2016). In regard to SEM, researchers can utilise a few statistical softwares, for example, Linear Structural Relations (LISREL), Analysis of Moment Structure (AMOS) and Equations (EQS). In particular, AMOS (Analysis of Moment Structures) has become a popular software package for SEM study due to its simplification for specifying structural models with user-friendly graphical interfaces. Moreover, AMOS can be linked with SPSS datasets. Therefore, these two software packages were employed in this study.

Users can input data into AMOS via one of two approaches: SPSS can enter raw data or alternatively a computed correlation or covariance matrix into AMOS. This study inputted raw data from SPSS software directly into AMOS for SEM analysis.

3.5.3 Data analysis process

The data analysis process consisted of 'reliability test', 'confirmatory factor analysis (CFA)', and 'structural equation modeling (SEM)'. To begin with, reliability test was conducted with Cronbach's alpha coefficient by SPSS 23.0. Then, CFA was employed as a test for the validity of measurements and specifying the structure between observed and latent variables, in order to determine if the dependent and independent variables in the current study were distinguished from one another (such as discriminant validity) (Hair et al., 2010). After the CFA, SEM analyses were conducted as the last stage for data

analysis. This study used SEM to test structural equations among latent variables and the proposed hypotheses to evaluate the fitness of the theory for reality (Hair et al., 2010).

3.5.3.1 Reliability test

Reliability test was used to test the soundness of measurement and consistency of variables sets (Zikmund et al., 2013). The reliability is defined as the tendency towards consistency existing in same measurements for the same phenomenon (Kline, 2015) and the degree by which research instruments produce consistent results (Pallant, 2016). The reliability is an essential, which must be achieved as it is a requirement for SEM without random error (Kline, 2015; Pallant, 2016). In addition, it is a prior condition for the validity test (Zikmund et al., 2013).

The reliability was examined by a Cronbach's Alpha coefficient to assess the item-to-total correlations and test whether the inter-relatedness of the item sets can remain in a satisfactory scope. This test represents the value of coefficient alpha ranges between 0 (none-consistency) and 1 (perfect consistency). The reliability values generally suggest the effectiveness of the scales, and they are various in different business studies (Hair et al., 2010; Zikmund et al., 2013). In the majority of studies, it is recommended that an acceptable range for internal consistency of a scale should be more than .60. Specifically, Scales with a coefficient alpha score between .60 and .70 represents acceptable reliability. A score between .70 and .80 is normally seen as great reliability, and above .80 indicates excellent reliability (Devellis, 2012; Hair et al., 2010; Pallant, 2016). Accordingly, .60 was considered as a minimum acceptable coefficient alpha score for the scales (Devellis, 2012; Hair et al., 2010; Malhotra, 2004; Pallant, 2016).

3.5.3.2 Confirmatory factor analysis (CFA)

CFA was employed in this study for testing the degrees of relationships that existed among the observed variables and any underlying factors, and then assessing research hypotheses (Kline, 2015). A specific purpose for using CFA in this study was to develop satisfactory levels of goodness-of-fit for the measurement models. Particularly, it established the reliability of the measurement items in terms of the factor loadings (Kline, 2015). To be specific, the initial CFA was used to identify inapt indicators for developing a parsimonious and powerful measurement model. As for the modifying and revising the measurement models, it was necessary to follow a methodological mechanism, for example, 'model integrity', 'model fit', or 'construct validity' (Hair et al., 2010; Kline, 2015). The statistics produced by CFA were then tested with the fit indexes which demonstrate the adequacy of the model fit. they included the 'absolute fit measures', 'incremental fit measures', and 'parsimonious fit measures'. When a measurement model shows a poor fit, in the subsequent analysis the structural model would not be able to proceed. At this stage, the best model would be chosen for examining the hypothesised structural model with AMOS 23.0. It can detail the amount of observed variables and the variances among the common factors (Hair et al., 2010; Kline, 2015).

Hair et al (2010) recommended a few diagnostic measurements for testing the model validity in CFA, which include standardised loadings and standardised residuals. Field (2005) adopted the recommendation by Guadagnoli and Velicer (1988) in their study that standardised loadings should be at least 0.6 to prove the reliability. Stevens (1992) suggested that 0.4 is a bottom line for acceptable standardised loadings. However, Hair et al. (2010) argued that the cut-off point for standardised loadings should consider the impacts of sample size. For example, they recommended 0.3 should be the bottom line for acceptable standardised loadings when the sample size is larger than 350.

3.5.3.3 Analysis of structural model estimation

SEM contains various techniques for data analysis to test their causal relationships within a theoretical interpretation, and accordingly yield inferential outcomes (Landis et al., 2000; Kline, 2015). SEM can also evaluate how well the theory fits reality with the representation of collected data. In order to obtain adequate measurements for the constructs, SEM perform and assess various Goodness-of-fit (GOF) measures for the derived factor structure. The GOF measures can be classified as three groups: 'absolute fit measures', 'incremental fit measures' and 'parsimonious fit measures' (Hair et al., 2010; Kline, 2015).

Absolute fit measures. SEM performs the absolute fit measures as the most fundamental assessment. It includes Chi–square ($\chi 2$), Goodness-of-fit-index (GFI), Root Mean Square Error of Approximation (RMSEA), Standardised Root Mean Square Residual (SRMR), and a Normed Chi-square ($\chi 2/pf$). As an elementary assessment for absolute fit measures, the Chi-square ($\chi 2$) tests "the matrix of empirical sample variances and covariance as well as the inconsistency between the model implied covariance and the observed covariance" (Hair et al., 2010; Kline, 2015).

Firstly, $\chi 2$ value should be insignificant ($p > .05$) to satisfy the acceptability for $\chi 2$ statistics (Hair et al., 2010; Kline, 2015). However, the $\chi 2$ test can be dramatically influenced by a large sample size (when $n > 200$). Moreover, the $\chi 2$ value tends to grow while the amount of observed variables increase (Holmes-Smith, 2010). Consequently, it

may create complexity for researchers when they employ Chi–square ($\chi 2$) as the only model fit indicator. Therefore, it is necessary to combine the Chi–square ($\chi 2$) with other GOF indicators, for example a Normed Chi-square ($\chi 2/df$), to measure the model fit (Holmes-Smith, 2010). When the score of Normed Chi-square ($\chi 2/df$) is < 3.0, it can be considered as a good model fit, while < 5.0 is an acceptable model fit (Hair et al., 2010; Kline, 2015).

Then, GFI index compares the superiority of the proposed model fits with no model at all, and estimates the number of variances and covariances corporately explained by the model (Byrne, 2010; Hair et al, 2010). The GFI has less sensitivity to sample size. In other words, the influences of different sample sizes are minimised in this test (Byrne, 2010; Hair et al, 2010). The results for this measurement can vary from 0 (poor fit) to 1 (perfect fit) and the closer GFT score to 1.0, the more satisfactory the fit of the data is demonstrated (Kline, 2015).

Lastly, the RMSEA is considered as a measure for assessing the goodness-of-fit expected in the population, not just for estimating the selected sample in the study (Hair et al., 2010). The RMSEA values falling between 0.05 and 0.08 are seen as satisfactory; between 0.08 and 0.10 show an acceptable fit; while greater than 0.10 mean a poor fit (Byrne, 2006; Ho, 2006). In addition, a SRMR value below 0.08 also indicates a good model fit (Kline, 2015).

Incremental fit measures. The incremental fit measures are the applications for assessing the proposed model's fit to some alternative null models with the assumption that all observed variables were not correlated (Hair et al., 2010; Kline, 2015). The

popular incremental fit measures include the ‘Normed Fit Index (NFI)’, ‘Tucker-Lewis Index (TLI)’, ‘Comparative Fit Index (CFI)’, and ‘Incremental Fit Index (IFI)’.

Firstly, the NFI is ‘a ratio of difference in the chi–square value for the fitted model and a null model divided by the null model’ (Hair et al., 2010; Kline, 2015). The NFI ratio varies from 0 (not better than the independent model) to 1 (perfect fit). When a NFI ratio is closer to 1, it will be seen as a better fit (Hair et al., 2010). As an improved version of the NFI, CFI is widely utilised in vast numbers of studies (Hair et al., 2010; Kline, 2015). The CFI values can also range from 0 to 1. When NFI and CFI values both exceed 0.95, it suggests a sound model fit (Byrne, 2010; Hair et al., 2010; Holmes-Smith, 2000; Kline, 2015).

Secondly, although the TLI appears a conceptual similarity to NFI, the actual comparison in TLI is between the normed chi–square values for the null and the specified model (with consideration for extents of model complexity). Similarly, TLI value can also fluctuate between 0 and. By contrast, it may fall below 0 or above 1 as the TLI is not normed (Hair et al., 2010; Holmes-Smith 2000; Kline, 2015). Good fits are also suggested by a TLI value close to 1 (Hair et al., 2010; Kline, 2015).

Lastly the IFI is an actual comparison on the lack of fit for the proposed models (Holmes-Smith, 2010). Normally, 0.90 is considered as the cut-off point for acceptable IFI values. However, the IFI values below 0.90 might also be accepted as the model fit basically relies on the theoretical background related to the specific research purpose (Hair et al., 2010; Kline, 2015).

Parsimonious fit measures. The parsimonious fit measures are utilised for checking if the number of estimated coefficients required can achieve the improvement of model fit (Kline, 2015). According to Byrne (2010) and Kline (2015), these measures are based on the theoretical concepts in scientific studies, which aim to be as simple or compact as possible to obtain good fit. Parsimonious fit measures are formed from Parsimonious Normed Fit Index (PNFI) and Parsimonious Comparative of Fit Index (PCFI). PNFI is based on the NFI by aligning for degrees of freedom, while PCFI is based on the CFI by aligning for loss of degrees of freedom (Hair et al., 2010; Kline, 2015). Both PNFI and PCFI may have relatively lower scores than other goodness-of-fit indexes according to the significance of model complexity (Byrne, 2010; Kline, 2015). Basing on this, values between 0.60 and 0.90 can indicate a satisfactory level of fit (Hair et al., 2010; Kline, 2015).

The Akaike Information Criterion (AIC) is recognised as another form of PFI. The AIC is an application for identifying the most parsimonious model when it is compared to non-nested models evaluated with the same database (Kline, 2015). When a AIC value is lower, it suggests a better model fit, while the index is not formatted to a 0–1 scale like others (Byrne, 2010; Kline, 2015).

The accepted norms for the discussed fit indexes are summarised and shown in Table 7.

Table 7 **Indexes for Goodness-of-fit evaluation**

Type	Fit Index	Accepted Norms
Absolute fit measures	$\chi 2$	$\chi 2$ value should be less with p>.05
	$\chi 2/df$	A value 3.0 or less
	GFI	> 0.9
	RMSEA	0.05–0.08 acceptable fit; 0.08–0.1 average fit; 0.1 and above poor fit to a population
	RMR	A value close to zero is a better fit. (<.05)
	SRMR	A value less than 0.08
Incremental fit measures	TLI	> 0.9
	NFI	> 0.9
	IFI	> 0.9
	RFI	> 0.9
	CFI	> 0.9
Parsimonious fit measures	PNFI	A higher value is a better fit. (between 0.6-0.9)
	PCFI	A higher value is a better fit
	AIC	Smaller values indicating a better model fit

Note. Adapted from Byrne (2010), Hair et al. (2010), Holmes-Smith (2010).

and Kline (2015)

3.6 Chapter summary

To sum up, this chapter provided explanation for the methodology of this study. Pluralistic methods were utilised, which combined qualitative and quantitative approaches in order to explore and develop the key constructs, as well as to enhance the validity of the initial set of variables. Initially, this study utilised the in-depth interview approach with content analysis to explore the key concepts in this study and develop some items for the subsequent quantitative research. Then, in the quantitative research phase, data collection was done with an online questionnaire. After that, a dataset was

created for the empirical test for reliability, validity and causal relationships of the proposed models with the SPSS and AMOS package. The last stage of data analysis consisted of confirmatory factor analysis and structural equation modelling (SEM). The SEM has been widely applied to many behavioural studies as an adequately sophisticated technique for modelling the complex relationships, which is instrumental for achieving the objectives of this study (Byrne, 2010; Hair et al., 2010: Kline, 2015).

This chapter also provided a step-by-step discussion on the measurement model analysis and the structural model analysis. It is crucial to confirm a good fit of the measurement model before the structural model test, as this can suggest the validity and appropriateness of the underlying structure of the latent variables (Kline, 2015). It also covered the various goodness-of-fit indexes, including absolute fit measures, incremental fit measures and parsimonious fit measures and their norms.

CHAPTER 4. DATA ANALYSIS

4.1 Structure of quantitative data analysis

This chapter presents the analysis of data collected from quantitative studies. Firstly, Section 4.2 will present how the data were prepared for further analyses. The details of the descriptive analysis for the data will be also provided in this section. Section 4.3 will represent the reliability test, and Section 4.4 will then discuss the validity of this study, in terms of convergent validity and discriminant validity. Section 4.5 will compare and assess the potential measurement models. Sections 4.6 and 4.7 will respectively test the hypotheses in regard to the two proposed models in this study: the 'Drivers of COO Effects' Model and 'Impacts of COO Effects' Model. Lastly, Section 4.8 will provide a summary for this chapter.

4.2 Data preparation

In order to more accurately represent the collected quantitative data and more implicitly interpret the gathered information from the questionnaire survey, this study adopted the data preparation procedure recommended by Tabachnick and Fidell (1996) and Zikmund et al., (2014) prior to the data analysis stage. The data preparation process included cleaning the dataset, handling missing data, identifying outliers and testing the normality of data.

4.2.1 Data cleaning

Data cleaning is one of the primary stages prior to statistical data analysis, as it is essential to identify the characteristics of the raw dataset to ensure the legibility and reliability of all answers provided by the participants (Pallant, 2016). A total of 700 responses were collected from the online questionnaire survey. Each response was reviewed and removed from the data set if it did not match the requirements or complete the total questions (Hair et al., 2010; Tabachnick & Fidell, 1996; Zikmund et al., 2014). After 127 unqualified responses were eliminated (18.14 %), a total of 573 responses were confirmed. Therefore, the questionnaire survey presented 81.86% valid response rate with a confidence level of 95%.

Next, the process of sorting the collected data showed that no unacceptable response was identified and deleted as containing consistent extreme values that was far from what one would expect based on the rest of the data (Hair et al., 2010). In total, 573 responses were finalised for outliers and normality test.

4.2.2 Assessment of outliers

Outliers refer to the data values with consistently abnormally high or low scores, compared to the majority or others in the same dataset. The existence of outliers can bias final results of data analysis (Barnett & Lewis, 1994; Pallant, 2016). For example, multiple regression analyses have high sensitivity to outliers because of their nature of abnormal data behaviour (Pallant, 2016). In order to check the potential outliers in the quantitative dataset for this study, a boxplot analysis was conducted with SPSS 23.0. The boxplot provided graphical description for the median, quartiles, and extreme values, as a summary of plot of the dataset. According to the results of the boxplot analyses, there were some cases showing extreme values in several variables. For example, ID 512

provided two responses of extreme values to consumer ethnocentrism items. However, there was no case showing consistent extreme values throughout the majority of variables. Therefore, no response was classified as an outlier in the dataset for this study.

The results of the boxplot analyses for outliers are shown in Appendix B.

4.2.3 Normality test

In order to examine how much the distribution of the sample data can correspond to a normal distribution, a normality test was required before the formal data analysis (Hair et al., 2010; Pallant, 2014). Although normality is one of the common assumptions in data analysis, most statistical techniques are able to reasonably tolerate when this assumption is violated (Pallant, 2014). There are two techniques that are widely used for the normality test: Skewness (SI) and Kurtosis (KI). SI scores is a type of indication for the symmetry of a distribution. KI scores indicate the distribution's peakedness or flatness (Hair et al., 2010; Pallant, 2014).

Generally, previous studies defined a distribution with both SI and KI scores between -1 and +1 as perfect normality (Hair et al., 2010; Kline, 2015; Tabachnick & Fidell, 1996). The skewness and kurtosis among different variables can present a variety and mixture of positive and negative SI and KI. In many cases, the distribution of data did not present the perfect normality, given that the SI and KI scores did not fall within the range of -1 and +1. Kline (2015) recommended as the cut-off points for skewness and kurtosis and suggested that the normality of any distribution can be accepted if the SI score is between -3 and 3 while the KI score is in the range of -10 to 10.

The scores of SI and KI of each variable in this study was computed with SPSS 23.0. The results (presented in Appendix C) show that SI scores for each variable in this study fell between -1.029 to 0.578 and the KI scores ranged between -0.460 to 1.248. All

these scores did not exceed the cut-off points recommended by Kline (2015). Therefore, the data can be considered as a normal distribution.

4.2.4 Sample

The sample for the quantitative study included 321 (56.0%) female informants and 252 (44.0%) male informants. These informants were grouped into five categories in terms of age: 18–29, 30–39, 40–49, 50 or more. The group with the largest number of participants was the 30–39 (283/573; 49.4%) followed by the 18–29 group (251/573; 43.8%). The 40–49 group and 50 or more group had fewer numbers of participants, which were 31 (5.4%) and 8 (1.4%) respectively.

As for the highest level of education the participants had achieved, the two largest groups were Bachelor degree (334/573; 58.3%) and Diploma (120/573; 20.9%); 57 (9.9%) informants completed Master level education while 48 (8.4%) finished senior secondary study; 10 (1.7%) informants completed junior secondary education while 4 (0.7%) informants held doctorate degrees.

In regards to the locations of the participants, 341 (59.5%) of them were living in cities, while others were residing in counties (116/573; 20.2%), towns (76/573; 13.3%), and villages (40/573; 7.0%).

This study also distinguished the participants by income level in terms of their annual family income (RMB) per capita before tax. There were 242 (42.2%) participants whose income belonged ranged between $20001–49999, which was followed by the groups of $20000 or less (114/573; 19.9%) and $50000–99999 (112/573; 19.5%). Then, 77 (13.4%) and 28 (4.9%) informants' income levels fell into to the ranges of $100000–199999 and $200000 (or more) respectively.

Lastly, 253 (44.2%) respondents purchased dairy products one to five times every month. There were 109 (19.0%) respondents who purchased dairy products six to ten times every month, 173 (30.2%) respondents who purchased dairy products eleven to fifteen times every month, and 38 (6.6%) respondents who purchased dairy products sixteen times or more every month.

A summary for the demographic profiles of participants for the quantitative study is provided in Table 8.

Table 8 **A Summary for Demographic Profiles**

Variables	Scale	Number	Frequency
Number of informants		573	
Gender	1. Female	321	56.00%
	2. Male	252	44.00%
Age	1. 18-29	251	43.80%
	2. 30-39	283	49.40%
	3. 40-49	31	5.40%
	4. 50/more	8	1.40%
Education	1. Uneducated	0	0.00%
	2. Primary	0	0.00%
	3. Junior secondary	10	1.70%
	4. Senior secondary	48	8.40%
	5. Diploma	120	20.90%

	6. Bachelor	334	58.30%
	7. Masters	57	9.90%
	8. Doctorates	4	0.70%
Location	1. City	341	59.50%
	2. County	116	20.20%
	3. Town	76	13.30%
	4. Village	40	7.00%
Annual family income per capita before tax (RMB)	1. 20000/ less	114	19.90%
	2. 20001-49999	242	42.20%
	3. 50000-99999	112	19.50%
	4. 100000-199999	77	13.40%
	5. 200000/ more	28	4.90%
Purchase frequency of dairy products every month	1 to 5	253	44.20%
	6 to 10	109	19.00%
	11 to 15	173	30.20%
	16 to 20	29	5.10%
	21 to 25	6	1.00%
	30 or more	3	0.50%

4.3 Reliability testing

As discussed in the previous chapter, this study uses Cronbach's alpha value to test the overall reliability of the constructs. Cronbach's alpha value indicates the internal

consistency, in other words, ‘how closely related a set of items are as a group’. This measurement indicator has been utilised by many students in various areas including experimental psychology, sociology, statistics and business (Bonett & Wright, 2015)

The results of the reliability show that all the Cronbach’s Alpha values of the variables are from 0.667 to 0.884, which exceed 0.6, the bottom line recommended by previous studies for acceptable reliability (Bonett & Wright, 2015; Devellis, 2012; Hair et al., 2010; Pallant, 2016). In addition, it also showed that all the factor loadings of the items are higher than 0.30, which met the minimal level for interpretation of structure recommended by Hair et al., (2010). A summary of reliability test results is presented in the Table 9.

Table 9 **Reliability test results**

Variables/ Items	Factor Loading	Cronbach`s Alpha	Mean	Std. Deviation
COO importance (COOI)		0.841		
COOI1: ‘The COO of dairy products is very important when I evaluate dairy products’	0.823		5.76	1.152
COOI2: ‘When I purchase dairy products, I care about in which country they are made’	0.821		5.57	1.236
COOI3: ‘When I choose dairy products, I care about which country the brands are from’	0.759		5.54	1.266
Country Image (CI)		0.774		
CI1: ‘It is a country that has an image of an advanced country’	0.382		5.67	1.116
CI2: ‘It is a country that has a nice environment for dairy products’	0.734		6.22	0.960

CI3: ‘It is a country that has high dairy production standards’	0.821		6.16	0.929
CI4: ‘It is a country that has high quality dairy products’	0.828		6.09	0.963
CI5: ‘It is a country that is prestigious’	0.359		5.51	1.192
Consumer Ethnocentrism (CE)		0.836		
CE1: ‘A Chinese citizen should always buy Chinese dairy products’	0.867		3.57	1.412
CE2: ‘Chinese should not buy foreign dairy products, because this hurts Chinese business and causes unemployment’	0.794		3.11	1.301
CE3: ‘It may cost me in the long-run but I prefer to support Chinese dairy products’	0.564		4.49	1.404
CE4: ‘We should give priority to Chinese dairy products’	0.636		4.40	1.405
Consumer Animosity (CA)		0.884		
CA1: ‘I dislike this country’	0.752		5.20	1.721
CA2: ‘I feel anger towards this country’	0.925		4.70	1.958
CA3: ‘I feel this country is a potential threat to our country’	0.901		4.32	1.898
CA4: ‘I often disagree with the political attitude or decision of this country’	0.817		4.73	1.859
CA5: ‘Personally, I have had a bad experience with this country or people from this country’	0.491		3.42	1.656
Product Involvement (PI)		0.768		
PI1: ‘Consuming milk products is very important to me’	0.508		5.96	1.031
PI2: ‘Purchasing milk products is very important to me’	0.662		5.80	1.039

PI3: ‘I pay a lot attention to dairy products information’	0.637		5.48	1.248
PI4: ‘I try to find the most appropriate place to purchase when I buy dairy products’	0.490		6.20	0.888
PI5: ‘I pay a lot attention to dairy products’	0.763		5.51	1.213
Product Experience (PE)		0.786		
PE1: ‘I know a lot about dairy products’	0.702		5.08	1.101
PE2: ‘I am quite familiar with dairy products from this country’	0.761		5.05	1.179
PE3: ‘I consume dairy products from this country all the time’	0.555		5.16	1.292
PE4: ‘I have many experiences (touring/ studying/ working/ living) in this country’	0.393		4.08	1.982
PE5: ‘I have friends or family members who have many experiences (touring/ studying/ working/ living) in this country’	0.454		4.71	1.705
PE6: ‘I have read a lot of news about this country online or elsewhere’	0.464		5.46	1.221
PE7: ‘I would like to visit this country in the next 24 months if there is an opportunity’	0.367		5.46	1.424
Uncertainty Avoidance (UA)		0.772		
UA1: ‘It is important for me to have product instructions spelled out in detail so that I always know what I am expected to do’	0.685		6.10	0.890
UA2: ‘It is important for me to closely follow instructions and procedures’	0.769		5.91	1.031
UA3: ‘Production rules and regulations are important because they inform me what the sellers do’	0.672		6.12	0.958
UA4: ‘Standard production procedures are helpful to	0.582		6.10	0.892

me’				
Risk Avoidance (RA)		0.671		
RA1: ‘I would rather be safe than sorry’	0.573		5.93	1.133
RA2: ‘I avoid risky things’	0.645		5.26	1.353
RA3: ‘I want to be sure before I purchase anything’	0.687		5.08	1.329
Face Consciousness (FC)		0.745		
FC1: ‘It is important that others like the products and brands I buy’	0.422		4.85	1.328
FC2: ‘Sometimes I buy a product because my friends do so’	0.444		5.09	1.182
FC3: ‘Name-brand purchase is a good way to distinguish people from others’	0.868		4.53	1.452
FC4: ‘Name products and brands purchase can bring me a sense of prestige’	0.780		4.10	1.532
Brand Loyalty (BL)		0.667		
BL1: ‘I would love to recommend the dairy brands from my preferred COO to my friends’	0.533		6.02	0.874
BL2: ‘I will not buy others if the dairy brands from my preferred COO are available for purchase’	0.561		4.55	1.478
BL3: ‘I will think twice to buy other brands even if they are almost the same with the dairy brand from my preferred COO’	0.569		5.20	1.148
BL4: ‘I make my purchase selection according to my favourite dairy brand’s COO, regardless of price’	0.675		4.90	1.356
Perceived Quality (PQ)		0.877		
PQ1: ‘The Dairy products from my preferred COO are of very good quality’	0.825		5.86	0.997
PQ2: ‘The dairy products from my preferred COO are	0.869		5.91	0.965

safe’				
PQ3: ‘The dairy products from my preferred COO taste good’	0.582		5.54	1.086
PQ4: ‘The dairy products from my preferred COO are nutritious’	0.683		5.50	1.126
PQ5: ‘The dairy products from my preferred COO are trustable’	0.843		5.87	1.021
Brand Awareness (BA)		0.819		
BA1: ‘I can recognise the dairy brands from my preferred COO among other competing brands’	0.569		5.03	1.255
BA2: ‘I am aware of the dairy brands from my preferred COO’	0.669		5.13	1.262
BA3: ‘Some of the characteristics of the dairy brands from my preferred COO come to my mind quickly’	0.826		5.19	1.231
BA4: ‘I can quickly recall the dairy brands' logo or symbols from my preferred COO’	0.791		5.21	1.260
Brand Association (BAS)		0.747		
BAS1: ‘There is a reason to buy the dairy brands from my preferred COO over others’	0.607		5.42	1.082
BAS2: ‘I have a clear image of the type of person who would use the dairy brands from my preferred COO’	0.618		4.73	1.362
BAS3: ‘I trust the dairy companies which are from my preferred COO’	0.661		5.63	1.035
BAS4: ‘The dairy brands from my preferred COO are good value for money’	0.677		5.62	0.962
Brand Equity (BEQ)		0.861		
BEQ1: ‘Even if another brand has the same features as my brand, I would still prefer to buy the dairy brands from my preferred COO’	0.745		5.32	1.189

BEQ2: 'If another brand is not different from the dairy brands from my preferred COO in any way, it still seems smarter to purchase my brand'	0.771	5.08	1.253
BEQ3: 'Even if there is another brand as good as my brand, I would still prefer to buy my brand'	0.814	5.14	1.239
BEQ4: 'Compared to other dairy products that have similar features, I am willing to pay a higher price for the dairy brands from my preferred COO'	0.701	4.72	1.399
BEQ5: 'The dairy brands from my preferred COO are different from other brands'	0.666	4.99	1.197

Note. the Likert Scale ranges from 1 to 7: 1: Strongly Disagree; 2: Disagree; 3: Somewhat Disagree; 4: Neutral; 5: Somewhat Agree; 6: Agree; 7:Strongly Agree.

4.4. Validity testing

4.4.1 Convergent validity

Convergent validity is an evaluation on the item and other items for measuring the same or similar variable, which expects that all those measurements of a specific variable should present a significant level of variance (Hair et al., 2010). Convergent validity assumes that the various measurements for a construct should produce the same results when different methods are employed (Byrne, 2010; Hair et al., 2010). There are a few indicators that can be utilised for testing convergent validity: standardised loadings of each item, average variance extracted (AVE) and composite reliability (CR) of each variable.

Firstly, all the standardised loadings of the variables in this study exceed the cut-off point (0.3) recommended by Brown (2014) and Hair et al. (2010) for studies that have sample sizes of more than 350. This suggests the common points of convergence of

the measurements. This demonstrates that there exists some common points of convergence (Byrne, 2010; Hair et al., 2010). Then, AVE was used to examine each latent variable, with the square root of total variance from the CFA results. Hair et al. (2010) suggested that convergent validity is satisfactory when AVE is higher than .50. However, other researchers demonstrated that an AVE score of less than 0.5 is still acceptable, when the CR of the variable is higher than 0.6. This rule for AVE has been applied to a few behavioural studies, such as Huang et al. (2013) and Shyu et al. (2013). Therefore, as presented in Table 10, the variables in this study present reasonable reliability and stability. Although the AVE scores for some constructs, such as CI, are below 0.5, they still achieve the acceptable convergent validity with satisfactory CR scores.

Table 10 **Average variance extracted (AVE) and composite reliability (CR) of variables**

Variables	CR	AVE
Country Image (CI)	0.775	0.435
Consumer Ethnocentrism (CE)	0.812	0.526
Consumer Animosity(CA)	0.890	0.628
Product Involvement (PI)	0.753	0.385
Product Experience (PE)	0.736	0.299
Risk Avoidance (RA)	0.670	0.405
Uncertainty Avoidance (UA)	0.773	0.463
Face Consciousness (FC)	0.736	0.434

Country-of-Origin Importance (COOI)	0.843	0.642
Brand Awareness (BA)	0.809	0.520
Perceived Quality (PQ)	0.876	0.590
Brand Loyalty (BL)	0.676	0.345
Brand Association (BAS)	0.736	0.411
Brand Equity (BEQ)	0.858	0.549

4.4.2 Discriminant validity

The discriminant validity reflects the distinction among various constructs. In other words, any variable should not theoretically correlate to any other constructs within the same study (Fornell & Larcker, 1981; Hair et al., 2010; Zikmund et al., 2013). This suggests that when a study achieves a good discriminant validity, all latent variables are optimally reflected by their own observed variables, rather than those from any other latent variables (Hair et al., 2010; Zikmund et al., 2013).

There are various methods that can be employed to assess discriminant validity. One of the most direct approaches is to evaluate the correlations among the constructs. Correlation coefficient between any two variables less than 1 was a criterion for discriminant validity in the study by Huang et al. (2013). Other researchers, such as Shaffer et al. (2016), used correlations of 0.90 as a peak point for acceptable discriminant validity. Brown (2006), Cohen et al. (2003) and Tabachnick (1996) considered a factor correlation ≥0.85 as the evidence for poor discriminant validity. As shown in Tables 11 and 12, the correlation coefficients calculated by SPSS for all the variables in the two sub

models were below the cut-off point, 0.85. Therefore, adequate discriminant validity can be confirmed based on this result.

In addition, more rigorous tests of discriminant validity can be demonstrated by CFA for the measurement model (Farrell & Rudd, 2009). The results of CFA will be presented in the next section of this chapter.

Table 11 **Correlations of the variables in the 'Drivers of COO Effects' model**

Variables	Mean	SD	1	2	3	4	5	6	7	8
1. COOI	5.62	1.06								
2. CI	5.93	0.75	.497**							
3. CE	3.89	1.13	.057	.070						
4. CA	4.47	1.51	.035	.036	.419**					
5. PI	5.79	0.79	.410**	.463**	.140**	.091*				
6. PE	5.00	0.96	.273**	.229**	.351**	.347**	.435**			
7. UA	6.06	0.73	.265**	.332**	0.033	0.034	.444**	.258**		
8. RA	5.42	0.99	.248**	.176**	.161**	.157**	.220**	.212**	.367**	
9. FC	4.64	1.04	.258**	.208**	.127**	.142**	.312**	.229**	.169**	.175**

Note. * Correlation is significant at the 0.05 level (2-tailed); ** Correlation is significant at the 0.01 level (2-tailed).

Table 12 **Correlations of the variables in the 'Impacts of COO Effects' model**

Variables	Mean	SD	1	2	3	4	5
1. COOI	5.62	1.06					
2. BL	5.17	0.87	.422**				
3. PQ	5.73	0.85	.419**	.448**			
4. BA	5.14	1.01	.308**	.520**	.423**		
5. BAS	5.35	0.85	.393**	.567**	.654**	.605**	
6. BEQ	5.05	1.01	.356**	.637**	.469**	.555**	.600**

Note.* Correlation is significant at the 0.05 level (2-tailed)； ** Correlation is significant at the 0.01 level (2-tailed).

4.5 Measurement model

As discussed in the previous chapters, the proposed theoretical framework in this study consisted of two models: the drivers of COO effects model and the impacts of COO effects model.

The 'Drivers of COO Effects' Model included 9 latent constructs with 40 measured indicator variables. A total of 3 indicators for COO Importance (COOI), 5 indicators for Country Image (CI), 4 indicators for Consumer Ethnocentrism (CE), 5 indicators for Consumer Animosity (CA), 5 indicators for Product Involvement (PI), 7 indicators for Consumer Experience (PE), 4 indicators for Uncertainty Avoidance (UA),

3 indicators for Risk Avoidance (RA) and 4 indicators for Face Consciousness (FC) were utilised for measurement.

The 'Impacts of COO Effects' Model contained 6 latent constructs with 25 measured indicator variables. A total of 3 indicators for COO Importance (COOI), 5 indicators for Perceived Quality (PQ), 4 indicators for Brand Loyalty (BL), 4 indicators for Brand Awareness (BA), 4 indicators for Brand Association (BAS) and 5 indicators for Brand equity (BEQ) were employed for measurement.

In order to confirm the distinctiveness of the constructs in the drivers of COO effects model, this study compared the hypothesised 9-factor model with alternative 8-factor models. This comparison also identified which set of variables presented the best fit. In each 8-factor model, two different constructs in the 9-factor model were loaded on one factor. Likewise, for the impacts of COO effects model, this study compared the hypothesised 6-factor model with alternative 5-factor models. The results of CFA for these two models are presented in the Tables 13 and 14 respectively. The format of these tables is adapted from Jiang (2015).

Table 13 **Results of CFA for the 'Drivers of COO Effects' model**

Models	χ^2/df	*df*	CFI	SRMR	RMSEA	AIC
9-Factor Model	2.421	695	0.901	0.078	0.050	1932.732
8-Factor Model 1	3.038	703	0.856	0.076	0.060	2370.041
8-Factor Model 2	3.434	703	0.828	0.103	0.065	2647.877
8-Factor Model 3	2.974	703	0.861	0.083	0.059	2324.962

8-Factor Model 4	2.929	703	0.864	0.094	0.058	2292.967
8-Factor Model 5	3.209	703	0.844	0.087	0.062	2489.988
8-Factor Model 6	2.798	703	0.873	0.084	0.056	2200.986
8-Factor Model7	3.017	703	0.858	0.083	0.059	2354.972
8-Factor Model 8	3.709	703	0.809	0.105	0.069	2841.342
8-Factor Model 9	3.453	703	0.827	0.107	0.065	2661.412
8-Factor Model 10	3.005	703	0.859	0.079	0.059	2346.403
8-Factor Model 11	3.072	703	0.854	0.107	0.060	2393.935
8-Factor Model 12	3.168	703	0.847	0.085	0.062	2641.133
8-Factor Model 13	2.873	703	0.868	0.088	0.057	2253.870
8-Factor Model 14	3.095	703	0.852	0.087	0.061	2409.516
8-Factor Model 15	3.704	703	0.809	0.111	0.069	2837.866
8-Factor Model 16	3.486	703	0.825	0.120	0.066	2684.821
8-Factor Model 17	3.037	703	0.856	0.101	0.060	2368.741
8-Factor Model 18	3.466	703	0.826	0.108	0.066	2670.704
8-Factor Model 19	2.879	703	0.868	0.090	0.057	2257.947
8-Factor Model 20	3.109	703	0.851	0.091	0.061	2419.835
8-Factor Model 21	3.097	703	0.852	0.085	0.061	2411.172
8-Factor Model 22	2.564	703	0.890	0.083	0.052	2036.806
8-Factor Model 23	2.833	703	0.871	0.084	0.057	2225.880
8-Factor Model 24	2.742	703	0.877	0.081	0.055	2161.769

8-Factor Model 25	2.922	703	0.864	0.079	0.058	2288.352
8-Factor Model 26	3.517	703	0.823	0.123	0.066	2706.708
8-Factor Model 27	2.968	703	0.861	0.091	0.059	2320.410
8-Factor Model 28	2.708	703	0.880	0.081	0.055	2137.936
8-Factor Model 29	2.928	703	0.864	0.079	0.058	2292.575
8-Factor Model 30	3.068	703	0.854	0.110	0.060	2390.808
8-Factor Model 31	2.653	703	0.883	0.081	0.054	2098.833
8-Factor Model 32	3.059	703	0.855	0.084	0.060	2384.696
8-Factor Model 33	3.466	703	0.826	0.108	0.066	2670.860
8-Factor Model 34	2.898	703	0.866	0.090	0.058	2271.639
8-Factor Model 35	2.891	703	0.867	0.091	0.058	2266.624
8-Factor Model 36	3.129	703	0.850	0.093	0.061	2433.876

Note. The 9-factor Model: COOI, CI, CE, CA, PI, PE, UA, RA and FC were respectively loaded on 9 independent factors.

The 8-factor Model 1: COOI and CI were loaded on one factor.

The 8-factor Model 2: COOI and CE were loaded on one factor.

The 8-factor Model 3: COOI and PI were loaded on one factor.

The 8-factor Model 4: COOI and KE were loaded on one factor.

The 8-factor Model 5: COOI and UA were loaded on one factor.

The 8-factor Model 6: COOI and RA were loaded on one factor.

The 8-factor Model 7: COOI and FC were loaded on one factor.

The 8-factor Model 8: COOI and CA were loaded on one factor.

The 8-factor Model 9: CI and CE were loaded on one factor.

The 8-factor Model 10: CI and PI were loaded on one factor.

The 8-factor Model 11: CI and KE were loaded on one factor.

The 8-factor Model 12: CI and UA were loaded on one factor.

The 8-factor Model 13: CI and RA were loaded on one factor.

The 8-factor Model 14: CI and FC were loaded on one factor.

The 8-factor Model 15: CI and CA were loaded on one factor.

The 8-factor Model 16: CE and PI were loaded on one factor.

The 8-factor Model 17: CE and KE were loaded on one factor.

The 8-factor Model 18: CE and UA were loaded on one factor.

The 8-factor Model 19: CE and RA were loaded on one factor.

The 8-factor Model 20: CE and FC were loaded on one factor.

The 8-factor Model 21: CE and CA were loaded on one factor.

The 8-factor Model 22: PI and KE were loaded on one factor.

The 8-factor Model 23: PI and UA were loaded on one factor.

The 8-factor Model 24: PI and RA were loaded on one factor.

The 8-factor Model 25: PI and FC were loaded on one factor.

The 8-factor Model 26: PI and CA were loaded on one factor.

The 8-factor Model 27: PE and UA were loaded on one factor.

The 8-factor Model 28: PE and RA were loaded on one factor.

The 8-factor Model 29: PE and FC were loaded on one factor.

The 8-factor Model 30: PE and CA were loaded on one factor.

The 8-factor Model 31: UA and RA were loaded on one factor.

The 8-factor Model 32: UA and FC were loaded on one factor.

The 8-factor Model 33: UA and CA were loaded on one factor.

The 8-factor Model 34: RA and FC were loaded on one factor.

The 8-factor Model 35: RA and CA were loaded on one factor.

The 8-factor Model 36: FC and CA were loaded on one factor.

Table 14 **Results of CFA for the 'Impacts of COO Effects' model**

Models	χ^2/df	df	CFI	SRMR	RMSEA	AIC
6-Factor Model	2.728	254	0.938	0.058	0.055	834.880
5-factor Model 1	3.298	259	0.917	0.068	0.063	986.106
5-factor Model 2	3.802	259	0.898	0.060	0.070	1116.840
5-factor Model 3	3.385	259	0.913	0.063	0.065	1008.698
5-factor Model 4	4.912	259	0.858	0.087	0.083	1404.178
5-factor Model 5	5.074	259	0.852	0.074	0.084	1446.065
5-factor Model 6	4.860	259	0.860	0.075	0.082	1390.760
5-factor Model 7	4.069	259	0.888	0.087	0.073	1185.958
5-factor Model 8	4.527	259	0.872	0.072	0.079	1304.464
5-factor Model 9	4.926	259	0.857	0.072	0.083	1407.753
5-factor Model 10	4.055	259	0.889	0.085	0.073	1182.284
5-factor Model 11	3.484	259	0.910	0.075	0.066	1034.319
5-factor Model 12	5.158	259	0.849	0.088	0.085	1468.040
5-factor Model 13	2.952	259	0.929	0.060	0.058	896.567

5-factor Model 14	2.986	259	0.928	0.060	0.059	905.366
5-factor Model 15	3.440	259	0.911	0.065	0.065	1022.937

Note. The 6-factor Model: COOI, PQ, BA, BAS, BL and BEQ were respectively loaded on 6 independent factors.

The 5-factor Model 1: BA and BAS were loaded on one factor.

The 5-factor Model 2: BA and BEQ were loaded on one factor.

The 5-factor Model 3: BA and BL were loaded on one factor.

The 5-factor Model 4: BA and PQ were loaded on one factor.

The 5-factor Model 5: BA and COOI were loaded on one factor.

The 5-factor Model 6: COOI and PQ were loaded on one factor.

The 5-factor Model 7: COOI and BL were loaded on one factor.

The 5-factor Model 8: COOI and BAS were loaded on one factor.

The 5-factor Model 9: COOI and EQ were loaded on one factor.

The 5-factor Model 10: PQ and BL were loaded on one factor.

The 5-factor Model 11: PQ and BAS were loaded on one factor.

The 5-factor Model 12: PQ and BEQ were loaded on one factor.

The 5-factor Model 13: BL and BAS were loaded on one factor.

The 5-factor Model 14: BL and BEQ were loaded on one factor.

The 5-factor Model 15: BAS and BEQ were loaded on one factor.

According to the results of fit indexes shown in Tables 12 and 13, the hypothesised 9-factor drivers of COO effects model and 6-factor impacts of COO effects model achieved the best fit and values fell within the specified criteria in all indices. This further confirmed the satisfactory discriminant validity of the constructs used in this study in terms of significant distinctiveness (Jiang, 2015).

Since the data were collected at a single time point using a self-report survey, this study examined the common method variance that may potentially impact the results. The CFA results would present a good fit for the 1-factor model when the method variance is influential. Therefore, the single-factor tests were also employed in this thesis, which was recommended by previous business studies (Jiang, 2015; Podsakoff et al., 2003). According to Tables 15 and 16, the results of the tests suggested that the 1-factor model presented a much poorer fit compared to the original models. The results of common method variance test for the 'drivers of COO effects' model showed the 1-factor model had a higher AIC value (6174.806) than the original model (AIC=1932.732). Also, other indices for the 1-factor model ($\chi 2/df$=8.204, CFI=0.472, SRMR=0.1249 and RMSEA=0.112) did not fall into the acceptable scopes ($\chi 2/df$ <3; CFI >0.90; SRMR <0.08; RMSEA <0.08). Similarly, results of common method variance test for the 'impacts of COO effects' model showed the 1-factor model had a higher AIC value (2326.264) than the original model (AIC=834.880). The poorer fit of the 1-factor model can be also demonstrated by other indices ($\chi 2/df$=8.231, CFI=0.727, SRMR=0.088 and RMSEA=0.112). These results indicated that common method variance was not likely to influence the significance of the resulting parameters in this study (Podsakoff et al., 2003). Thus, this study tends to be less affected by the common method bias.

Table 15 **Results of common method variance test for the 'Drivers of COO Effects' model**

Models	χ^2/df	*df*	CFI	SRMR	RMSEA	AIC
9-Factor Model	2.421	695	0.901	0.0777	0.050	1932.732
1-Factor Model	8.204	731	0.472	0.1249	0.112	6174.806

Note. The 9-factor Model: COOI, CI, CE, CA, PI, PE, UA, RA and FC were respectively loaded on 9 independent factors. The 1-factor Model: all the above 9 variables were loaded on one factor.

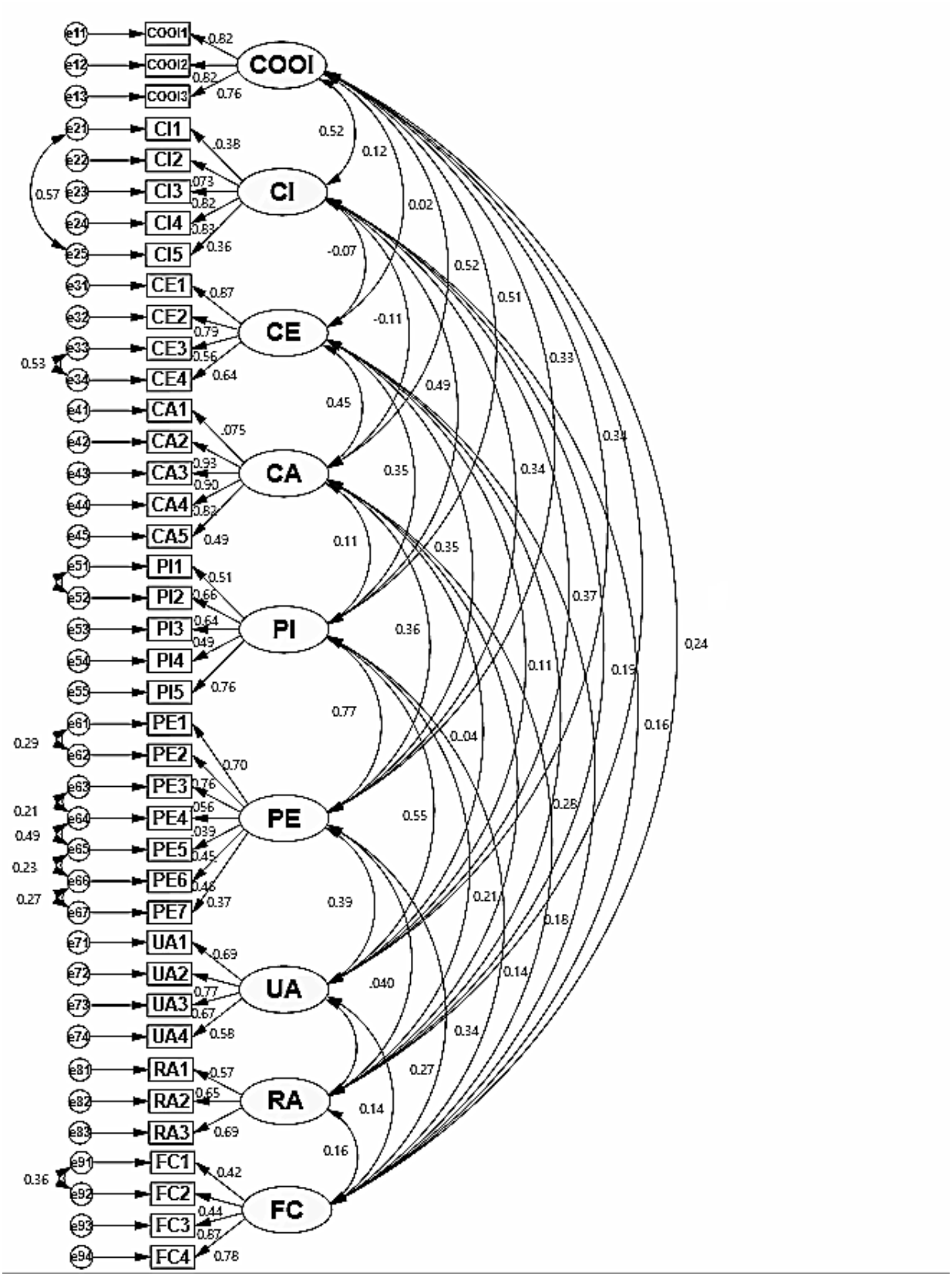
Table 16 **Results of common method variance test for the 'Impacts of COO Effects' model**

Models	χ^2/df	*df*	CFI	SRMR	RMSEA	AIC
6-Factor Model	2.728	254	0.938	0.058	0.055	834.880
1-Factor Model	8.231	269	0.727	0.088	0.112	2326.264

Note. The 6-Factor Model: COOI, PQ, BA, BAS, BL and BEQ were respectively loaded on 6 independent factors. The 1-Factor Model: all the above 6 variables were loaded on one factor.

Based on the CFA results, the models were developed with AMOS graphic. In the AMOS graphic, ovals were used to present the latent constructs (unobserved variables), and squares were seen as indicator variables (observed variables) that were employed as measurements for the latent constructs. The relationships between these two types of variables were represented with the direction of the arrow. In addition, the graphic used circles to represent the measurement errors existing in each observed variable. The measurement errors can be examined as the indications for how accurately the observed

variables represent the theoretical concepts (Byrne, 2010; Hair et al., 2010). The best fit measurement models with standardised estimates are presented in Figures 10 and 11.



Where COOI：the level of importance attached to COO in dairy brand evaluation

CI: Country Image

CE: Consumer Ethnocentrism

CA: Consumer Animosity

PI: Product Involvement

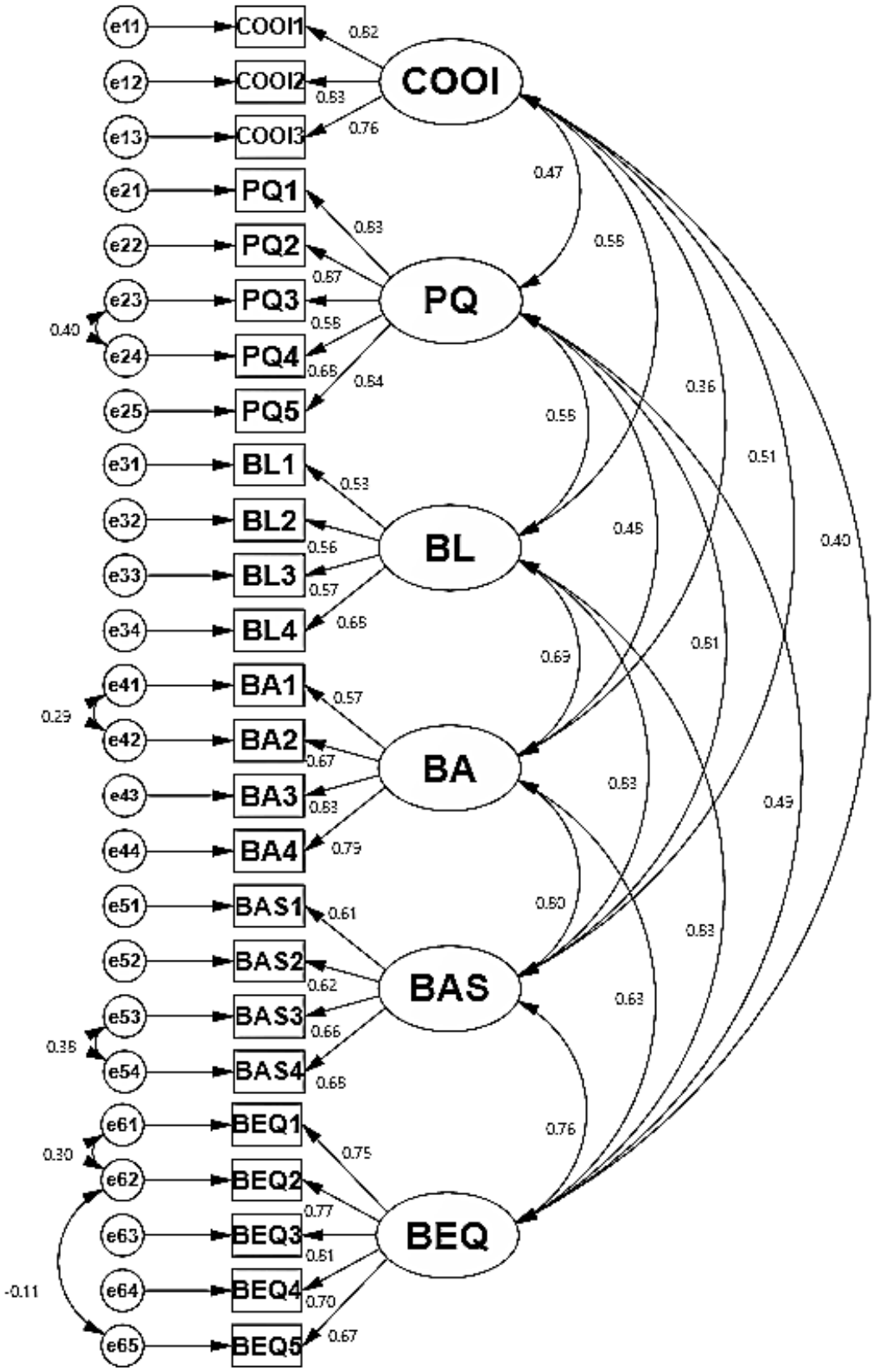
PE: Product Experiences

FC: Face Consciousness

RA: Risk Avoidance

UA: Uncertainty Avoidance

Figure 10 **Measurement model for the drivers of COO effects**



Where COOI：the level of importance attached to COO in dairy brand evaluation

PQ: Perceived Quality

BL: Brand Loyalty

BA: Brand Awareness

BAS: Brand Association

BEQ: Brand Equity

Figure 11 **Measurement model for the impacts of COO effects**

After the validation for the measurement models, the regression and SEM analyses were conducted to test proposed models and related hypotheses, which will be discussed in the following sections.

4.6 Regression analysis and hypotheses testing for the 'Drivers of COO Effects' model

4.6.1 Zero-order correlation analysis

The proposed 'Drivers of COO Effects Model' describes the relationship between COO Importance (COOI) and its driving factors, which include Country image(CI), Consumer Ethnocentrism (CE), Consumer Animosity (CA), Product Involvement (PI), Product familiarity and experiences (PE), Uncertainty Avoidance (UA), Risk Avoidance (RA) and Face Consciousness (FC). This model also assumes that 'purchase frequency' (PF) can moderate the driving effects of these factors on COOI. A moderator is a variable that can affect the directions and/or strength of the relationship between independent and dependent variables (Aguinis et al., 2017).

This study accordingly conducted the analysis for the means, standard deviations and correlational coefficients of the related variables, prior to the stage of hierarchical regression analysis. Based on the results presented in the Table 17, some variables such as PF, ‘Sex’, ‘Age’, ‘Income’ and ‘Education’ were identified to be controlled in the hierarchical regression analysis, due to the significant correlations between these variables and one or more of COOI, CI, CE, CA, PI, PE, UA, RA and FC. For instance, PF with CI (**r** = 0.109, p < .001), CE (**r** = 0.119, p < .001), CA (**r** = 0.117, p < .05), PI (**r** = 0.172, p < .001). and PE (**r** = 0.159, p < .001); “Sex” with PI (**r**= -0.159, p < .001), and PE (**r** = -0.145, p < .001); “Age” with COOI (**r** = 0.099, p < .05), CI (**r** = 0.137, p < .001), CE (**r** = 0.165, p < .001), CA (**r**= 0.113, p < .05), PI (**r** = 0.085, p < .05), PE (**r** = 0.214, p < .001) and RA (**r** = 0.094, p < .05); “Education” with CE (**r**= -0.136, p < .05) ; “Income” with COOI (**r** = 0.145, p < .001) , CI (**r** = 0.120, p < .001), PI (**r** = 0.09, p < .05) and PE (**r**= 0.097, p < .05).

In addition, ‘Sex’ is a categorical variable, while other variables could be measured with continuing scales. Therefore, ‘dummy coding’ was required for this categorical variable, in order to ensure the proper interpretation. The dummy coding was defined as a process to code categorical variables, for example gender and marital status, into multiple dichotomous variables. As a result, data will be grouped into two distinct categories, such as value of ‘0’ and ‘1’ (Alkharusi, 2012).

Table 17 **The correlations of variables in the 'Drivers of COO Effects' model**

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1.COOI	5.62	1.06													
2.CI	5.93	0.75	.497**												
3.CE	3.89	1.13	.060	.070											
4.CA	4.47	1.51	.040	.040	.419**										
5.PI	5.79	0.79	.410**	.463**	.140**	.091*									
6.PE	5.00	0.96	.273**	.229**	.351**	.347**	.435**								
7.UA	6.06	0.73	.265**	.332**	.030	.030	.444**	.258**							
8.RA	5.42	0.99	.248**	.176**	.161**	.157**	.220**	.212**	.367**						
9.FC	4.64	1.04	.258**	.208**	.127**	.142**	.312**	.229**	.169**	.175**					
10.PF	8.28	5.77	.050	.109**	.119**	.117**	.172**	.159**	.020	-.010	.030				
11.SEX	0.43	0.50	-.060	-.070	-.080	-.020	-.159**	-.145**	.030	.020	.030	-.113**			
12.AGE	30.43	6.61	.099*	.137**	.165**	.113**	.085*	.214**	-.030	.094*	.060	.304**	-.050		

13.EDUCATION	5.69	0.84	.060	.080	-.136**	-.070	.030	-.030	-.060	-.070	.020	.040	.040	.040	
14.INCOME	54665.18	55770.70	.145**	.120**	.050	.060	.090*	.097*	.060	.010	.116**	.030	.060	.111**	.050

4.6.2 Regression analysis and hypotheses testing for H1 to H8

This study conducted a regression analysis in order to evaluate whether the independent variables (CI, CE, CA, PI, PE, UA, RA, FC) can explain statistically significant amount of variance of the dependent variable (COOI) in the 'Drivers of COO Effects' Model (Cohen et al., 2013; Vaughn, 2008). During the regression analysis, other variables including PF, 'Sex', 'Age', 'Income' and 'Education' were controlled, according to the results in the previous section. The results of regression analysis were presented in Table 18 and Table 19. COOI was the dependent variable for both models in Table 18 and Table 19. The predictors in Model 1 included PF, 'Sex', 'Age', 'Income' and 'Education', while Model 2 had the additional predictors including CI, CE, CA, PI, PE, UA, RA, FC. Although both models achieved statistical significance in the regression analysis ($P<0.05$), Model 2 had a greater R Square value (0.331) than Model 1 (0.035), which indicated the better goodness-of-fit for Model 2 (Draper & Smith, 2014).

Table 18 **The results of regression analysis (goodness-of-fit)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	p
1	0.188	0.035	0.027	1.049	0.035	4.139	5	567	0.001
2	0.575	0.331	0.315	0.880	0.296	30.774	13	559	0.000

Table 19 **The results of regression analysis (variables)**

Model	Variables	b	SE	beta	t	p
1	(constant)	4.949	0.377		13.124	0.000
	Sex	-0.147	0.089	-0.069	-1.646	0.100
	Age	0.012	0.007	0.075	1.723	0.085
	Education	0.063	0.052	0.050	1.197	0.232
	Income	0.000	0.000	0.138	3.312	0.001
	PF	0.002	0.008	0.012	0.269	0.788
2	(constant)	-0.161	0.511		-0.314	0.753
	Sex	-0.036	0.077	-0.017	-0.470	0.638
	Age	0.001	0.006	0.009	0.226	0.821
	Education	0.030	0.045	0.024	0.679	0.497
	Income	0.000	0.000	0.071	2.009	0.045
	PF	-0.006	0.007	-0.033	-0.883	0.378
	CI	0.508	0.057	0.359	8.911	0.000
	CE	-0.035	0.038	-0.037	-0.931	0.352
	CA	-0.031	0.028	-0.043	-1.089	0.276
	PI	0.205	0.062	0.152	3.297	0.001
	PE	0.110	0.048	0.099	2.304	0.022

UA	-0.017	0.061	-0.012	-0.274	0.785
RA	0.141	0.041	0.132	3.431	0.001
FC	0.098	0.038	0.096	2.555	0.011

Note. Dependent variable: Country-of-origin Importance

Model 1 Predictors: purchase frequency (PF), income, education, sex, age.

Model 2 Predictors: purchase frequency (PF), income, education, sex, age, country image (CI), consumer ethnocentrism (CE), consumer animosity (CA), product involvement (PI), product experience (PE), uncertainty avoidance (UA), risk avoidance (RA), face consciousness (FC).

H1: Positive country image (CI) directly increases the level of importance attached to COO (COOI) in dairy brand evaluation.

According to the results presented in Table 19, it showed CI was positively related to COOI **(**b=.508, SE=.057, p<0.001), suggesting that a one-unit of change in the CI will increase 0.508 unit of the level of COOI in dairy brand evaluation. In other words, CI can be a significant driving factor for COOI. Therefore, H1 was accepted by this study.

H2: Consumer ethnocentrism (CE) directly increases the level of importance attached to COO (COOI) in dairy brand evaluation.

When it came to CE, the significant relationship between COOI and it was not supported by the results presented in the Table 19. The regression analysis results (b= -.035, SE= .038, p >.05) suggested that the driving effect of CE on COOI was not significant. Therefore, H2 was rejected.

H3: Consumer animosity directly increases the level of importance attached to COO (COOI) in dairy brand evaluation.

Like CE, the results of the regression analysis (b= -.031, SE= .028, p >.05) implied that CA did not directly increase the COOI in dairy brand evaluation. It means CA should not be considered as a driving factor for the COO effects in the Chinese dairy market. Accordingly, H3 was rejected.

H4: Product involvement (PI) directly increases the level of importance attached to COO (COOI) in dairy brand evaluation.

In the case of PI, the results of regression analyses (b= .205, SE= .062, p<0.01) indicated that a one-unit of change in the PI will significantly increase 0.205 unit of the level of COOI in dairy brand evaluation. This identified PI as another driving factor for the COO effects in dairy brand evaluation, which supported H4.

H5: Product experiences (PE) directly increase the level of importance attached to COO (COOI) in dairy brand evaluation.

With respect to PE, the results of regression analyses (b=.110, SE=.048, p< 0.05) presented that a one-unit of change in the PE will significantly increase 0.11 unit of the level of COOI in dairy brand evaluation. This suggested that COOI was directly driven by PE. Thus, H5 was accepted.

H6: Face consciousness (FC) directly increases the level of importance attached to COO (COOI) in dairy brand evaluation.

In relation to FC, the results of the regression analysis (b=.098, SE=.038, $p < 0.05$) also revealed a significant relationship with COOI. Every 1-unit of change in the FC will significantly increase 0.098 unit of the level of COOI in dairy brand evaluation. This suggested that FC was a factor that can directly promote COOI. Accordingly, H6 was supported.

H7: Risk avoidance (RA) directly increases the level of importance attached to COO (COOI) in dairy brand evaluation.

With regards to RA, it can also be identified as a significant driving factor for COOI. The results of the regression analysis (b=.141, SE=.041, $p < 0.01$) showed that a one-unit of change in the PE will directly increase 0.141 unit of the level of COOI in dairy brand evaluation. Therefore, H7 was supported.

H8: Uncertainty avoidance (UA) directly increases the level of importance attached to COO (COOI) in dairy brand evaluation.

Lastly, the results of regression analysis (b= -.017, SE=.061, $p > 0.05$) suggested that UA did not directly increase COOI. Therefore, UA was not a significant driving factor for COOI, and H8 was rejected.

4.6.3 Summary for hypotheses testing results of the 'Impact of COO Effect' model (H1 to H8)

Based on the previous analyses, a summary for hypotheses testing results of H1 to H8 is presented in Table 20.

Table 20 **Testing results for the 'Impact of COO Effect' model (H1 to H8)**

Number	Hypothesis	Result
H1	Positive country image directly increases the level of importance attached to COO in dairy brand evaluation.	Accepted
H2	Consumer ethnocentrism directly increases the level of importance attached to COO in dairy brand evaluation.	Rejected
H3	Consumer animosity directly increases the level of importance attached to COO in dairy brand evaluation.	Rejected
H4	Product involvement directly increases the level of importance attached to COO in dairy brand evaluation.	Accepted
H5	Product experiences directly increase the level of importance attached to COO in dairy brand evaluation.	Accepted
H6	Face consciousness directly increases the level of importance attached to COO in dairy brand evaluation.	Accepted
H7	Risk avoidance directly increases the level of importance attached to COO in dairy brand evaluation.	Accepted
H8	Uncertainty avoidance directly increases the level of importance attached to COO in dairy brand evaluation.	Rejected

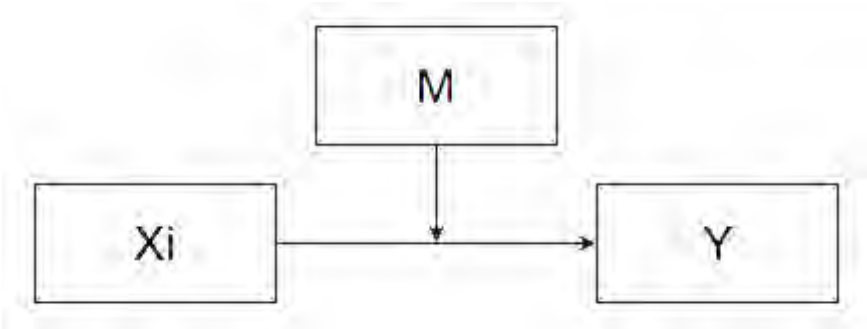
According to Table 19 and Table 20, there are five hypotheses, H1 (β=.359, p<0.001), H4 (β=.152, p<0.01), H5 (β=.099, p< 0.05), H6 (β=.096, p<0.05) and H7 (β=.132, p<0.01) accepted by this study. By contrast, the other three hypotheses were rejected: H2 (β=-.037, p>0.05), H3 (β=-.043, p>0.05) and H8 (β=-.012, p>0.05). This result revealed that CI, PI, PE, FC and RA were the significant factors that drive COOI. In addition, it also showed that CI had the strongest driving impact on COOI, as it had the highest β value among these variables. PI was the second strongest driving factor, which was followed by RA and PE. FC was a weakest factor that significantly drive COOI.

However, CE, CA and UA could not directly increase COOI in dairy brand evaluation, when other moderating variables were controlled.

4.6.4 Hypotheses testing for the 'Impact of COO Effect' model (H9 to H16)

As for H9 to H16, the Hayes' PROCESS was adopted as a bootstrapping method to further estimate the moderator between COOI and its driving factors. Hayes' PROCESS is an important add-on of SPSS due to its validity, advancement and convenience for regression analysis (Hayes, 2013).

The framework for moderating effect is displayed in Figure 12, in which the effect of an independent variable (Xi) on a dependent variable (Y) was moderated by the moderating variable M. In this case, COOI was the dependent variable and CI, CE, CA, PI, PE, FC, RA and UA were the independent variables; PF was the moderating variable.



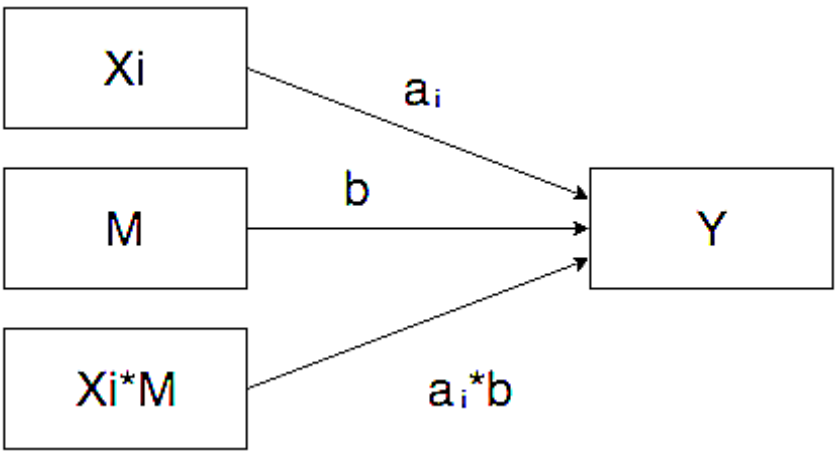
Where Xi: CI, CE, CA, PI, PE, FC, RA and UA

Y: COOI

M: PF

Figure 12 **The framework for moderating effect in the 'Impact of COO Effect' model**

According to the moderation model shown in the Figure 13, "a_i" stands for the direct effect of Xi on the dependent variable Y, while 'b' means the effect of M on Y. and 'c' describes the effect of X on Y via the moderator: $c=a_ib$. When M moderates the relationship between X and Y, 'c' should meet the statistical significance (Hayes, 2013; Hayes & Rockwood, 2016).



Where Xi: CI, CE, CA, PI, PE, FC, RA and UA

Y: COOI

M: PF

Figure 13 **The effect of X on Y via a moderator**

The results of moderation analysis by Hayes' PROCESS are reported in Table 21. All the independent variables and moderating variable were mean-centred for the moderation analysis.

Table 21 **The results of moderation analysis**

Moderating effects		b	SE	P	95% bias corrected confidence intervals	
					Lower-limit	Upper-limit
M1	CI*PF	0.000	0.011	0.991	-0.023	0.022
M2	CE*PF	0.019	0.008	0.014	0.004	0.035
M3	CA*PF	0.019	0.006	0.002	0.007	0.031
M4	PI*PF	-0.007	0.012	0.532	-0.031	0.016
M5	PE*PF	0.010	0.010	0.303	-0.009	0.030
M6	FC*PF	-0.013	0.010	0.180	-0.032	0.006
M7	RA*PF	0.016	0.009	0.062	-0.001	0.033
M8	UA*PF	-0.011	0.013	0.409	-0.037	0.015

H9: Purchase frequency moderates the relationship between country images and the level of importance attached to COO in dairy brand evaluation.

According to the results shown in Table 21, the moderating effect of PF on CI (M1) was b = 0.000, boot SE = 0.011, 95% bias-corrected confidence intervals (BCI) = -0.023 to 0.022. Because the confidence intervals (-0.023 to 0.022) include 0, it indicates that the moderating effect was insignificant. In other words, PF was not a moderator between CI and COOI in dairy brand evaluation, and H9 was rejected.

H10: Purchase frequency moderates the relationship between consumer ethnocentrism and the level of importance attached to COO in dairy brand evaluation.

By contrast, PF significantly promoted the relationship between CE and COOI, according to the moderating effect coefficients of M2: b = 0.019, boot SE = 0.008, 95% BCI = 0.004 to 0.035. Given that confidence intervals were both larger than 0, the moderating effect was confirmed, which supported H10.

The results of the conditional effects of CE on COOI at various values of PF from the PROCESS analysis were shown in Table 22. For low purchase frequency, the effects of CE on COOI were not significant, because the p values were all larger than 0.05. For average purchase frequency, the moderating effect was also insignificant (p> .05). However, for high purchase frequency, it became a significant moderator in the relationship between CE and COOI (P< .05).

In addition, PF= 2.168 (b=.092, SE=.047, p=.05) was the critical point for the moderating effect. It suggested that CE will have significant positive effects on COOI, when consumers purchase dairy products more than 10 times on average every month,

given that the mean value of PF before mean-centred was 8.280. The directions of the moderation effects of PF in the relationship of CE and COOI were shown in Figure 14.

Table 22 **Conditional effects of CE on COOI at values of PF**

Purchase Frequency	b	SE	P	LLCI	ULCI
-5.769	-.061	.061	.317	-.182	.059
0.000	.050	.043	.244	-.034	.134
5.769	.161	.064	.012	.036	.286

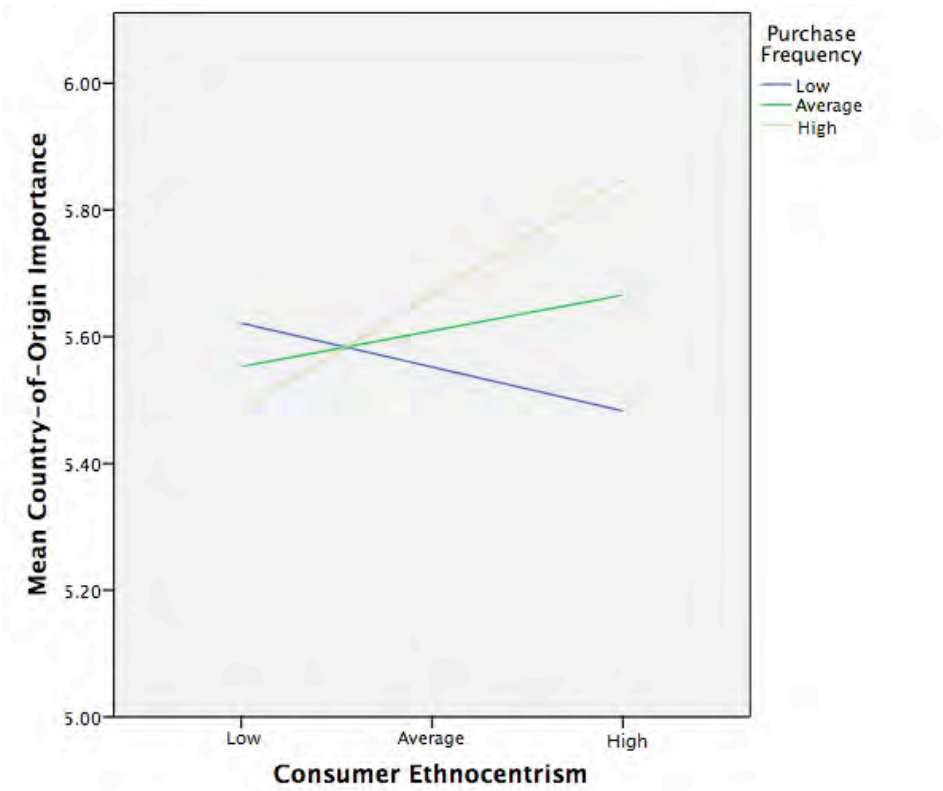


Figure 14 **The directions of the moderation effects of PF in the relationship of CE and COOI**

H11: Purchase frequency moderates the relationship between consumer animosity and the level of importance attached to COO in dairy brand evaluation.

Similarly, PF was also a moderator between CA and COOI in dairy brand evaluation. The moderating effect of PF on CA (M3) was b = 0.019, boot SE = 0.006, 95% BCI= 0.007 to 0.031. The confidence intervals were both larger than 0, therefore H11 was accepted.

The results of the conditional effects of CA on COOI at various values of PF were shown in Table 23. For low purchase frequency, the effects of CE on COOI were not significant, because the p values were all larger than 0.05. For average purchase frequency, the moderating effect was also insignificant (p> .05). However, for high purchase frequency, it became a significant moderator in the relationship between CA and COOI (p< 0.05).

In addition, PF =1.913 (b=.066, SE=.034, p=.05) was the critical point for the moderating effect. It suggested that CA will have significant effects on COOI, when consumers purchase dairy products more than 10 times on average every month, given that the mean value of PF before mean-centred was 8.280.

Table 23 **Conditional effects of CA on COOI at values of PF**

Purchase Frequency	b	SE	p	LLCI	ULCI
-5.769	-.080	.047	.691	-.173	.013

0.000	.030	.032	.350	-.032	.092
5.769	.139	.047	.003	.047	.231

The directions of the moderation effects of PF in the relationship of CA and COOI are shown in the Figure 15.

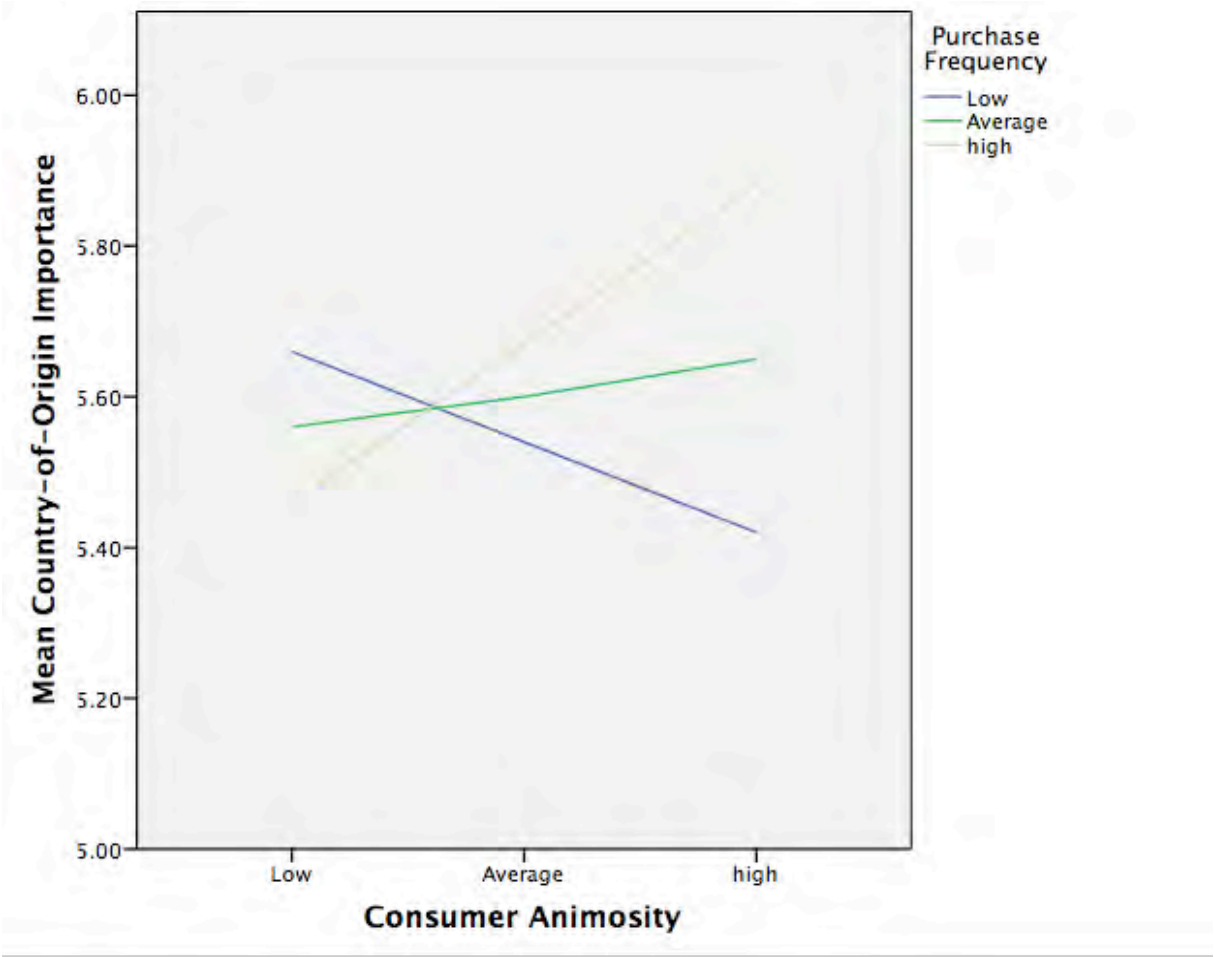


Figure 15 **The directions of the moderation effects of PF in the relationship of CA and COOI**

H12: Purchase frequency moderates the relationship between product involvement and the level of importance attached to COO in dairy brand evaluation.

The moderating effect of PF on PI (M4) was b = -0.007, boot SE = 0.012, 95% BCI =-0.031 to 0.016. Because 0 was included in the confidence intervals (-0.031 to 0.016), it revealed that the moderating effect was not significant. Thus, PF could not be considered as a moderator between PI and COOI in dairy brand evaluation, and H12 was rejected.

H13: Purchase frequency moderates the relationship between product experiences and the level of importance attached to COO in dairy brand evaluation.

Using the same approach, the moderating effect of PF on PE (M5) was also denied, based on the moderating effect coefficients: b = 0.010, boot SE = 0.010, 95% BCI = -0.009 to 0.030. This result confirmed that PF did not act as a moderator between PE and COOI in dairy brand evaluation. Therefore, H13 was rejected by this study.

H14: Purchase frequency moderates the relationship between face consciousness and the level of importance attached to COO in dairy brand evaluation.

As for the moderating effect of PF on FC (M6), the moderating effect coefficients were b = -0.013, boot SE = 0.010, 95% BCI = -0.032 to 0.006. As 0 was included in the confidence intervals (-0.032 to 0.006), it demonstrated that the relationship between FC and COOI was not moderated by PF. Accordingly, H14 was rejected by this study.

H15: Purchase frequency moderates the relationship between risk avoidance and the level of importance attached to COO in dairy brand evaluation.

RA was identified as a factor that could directly drive the COOI by the regression analysis in the previous section. The result from moderation analysis for M7 further

revealed that this driving effect could be enlarged by PF. This is because the moderating effect coefficients were b = 0.016, boot SE = 0.009, 95% BCI = -0.001 to 0.033. Given that the confidence intervals (-0.001 to 0.033) included 0, it suggested that PF did not significantly moderate the effect of RA on COOI in dairy brand evaluation, and H15 was rejected.

H16: Purchase frequency moderates the relationship between uncertainty avoidance and the level of importance attached to COO in dairy brand evaluation.

Lastly, the moderating effect of PF on UA was not significant, according to the coefficients of M8: b = -0.011, boot SE = 0.013, 95% BCI = -0.037 to 0.015. As a result, H16 was rejected.

In conclusion, a summary of the hypotheses for the moderators in the 'Drivers of COO Effects' Model is presented in Table 24.

Table 24 **Results of hypotheses testing for H9 to H16**

Hypotheses		Results
H9	Purchase frequency moderates the relationship between country images and the level of importance attached to COO in dairy brand evaluation	Rejected
H10	Purchase frequency moderates the relationship between consumer ethnocentrism and the level of importance attached to COO in dairy brand evaluation	Accepted
H11	Purchase frequency moderates the relationship between consumer animosity and the level of importance attached to COO in dairy brand evaluation	Accepted
H12	Purchase frequency moderates the relationship between product involvement	Rejected

	and the level of importance attached to COO in dairy brand evaluation	
H13	Purchase frequency moderates the relationship between product experiences and the level of importance attached to COO in dairy brand evaluation	Rejected
H14	Purchase frequency moderates the relationship between face consciousness and the level of importance attached to COO in dairy brand evaluation	Rejected
H15	Purchase frequency moderates the relationship between risk avoidance and the level of importance attached to COO in dairy brand evaluation	Rejected
H16	Purchase frequency moderates the relationship between uncertainty avoidance and the level of importance attached to COO in dairy brand evaluation	Rejected

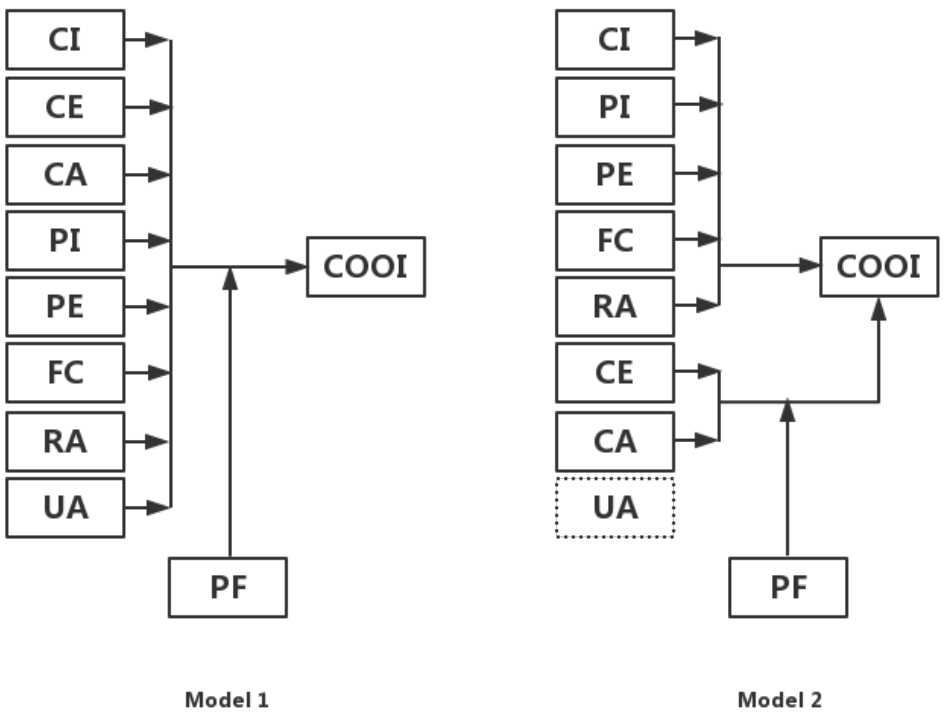
4.6.5 Summary of 'Drivers of COO Effects' model testing

According to the results from the analyses, five variables—CI, PI, PE, FC and RA— out of the proposed eight variables were identified as the driving factors of COO effects. In particular, CI, PI, PE, FC and RA could significantly influence the COOI in dairy evaluation, when other variables, such as PF, were controlled. Actually, PF did not moderate the relationship between these five independent variables and the dependent variable COOI.

On the other hand, the direct driving effects of CE, CA and UA on COOI were initially denied by the regression analyses, when other variables, such as PF, were controlled. However, the results from moderation analyses for PF showed that CE and CA could become the significant factors driving COOI in brand evaluation, when consumers purchase dairy products frequently. By contrast, PF could not moderate the relationship between UA and COOI. In other words, UA would not be a significant factor

that affects COOI in brand evaluation, even if consumers purchase dairy products frequently.

Based on the above findings, an adjusted ‘Drivers of COO effects Model’ is presented in Figure 16.



Note. Model1: the proposed “Drivers of COO effects” Model

Model 2: the adjusted “Drivers of COO effects” Model

CI: Country Image

CE: Consumer Ethnocentrism

CA: Consumer Animosity

PI: Product Involvement

PE: Product Experiences

FC: Face Consciousness

RA: Risk Avoidance

UA: Uncertainty Avoidance

PF: Purchase Frequency

COOI：the level of importance attached to COO in dairy brand evaluation

Figure 16 **The proposed and adjusted 'Drivers of COO effects' models**

4.7 Structural equation modeling and hypotheses testing for the 'Impacts of COO Effects' model

4.7.1 Zero-order correlation analysis

The proposed 'Impacts of COO Effects' Model describes the indirect relationship between COO Importance (COOI) and Brand Equity (BEQ), which is hypothetically mediated by Perceived Quality (PQ), Brand Loyalty (BL), Brand Awareness (BA) and Brand Association (BAS). As a foundation for the SEM model testing, this study examined the mediating role for PQ, BL, BA and BAS in the 'Impacts of COO Effects' Model. According to Jiang (2015), there are four conditions that should be fulfilled to assess mediating effects:

A. The correlations between independent variables and the dependent variables are significant.

B. The correlations between independent variables and the mediating variables are significant.

C. The correlations between dependent variables and the mediating variables are significant.

D. The correlations between the independent and dependent variables become insignificant (full mediation) or apparently weaker (partial mediation), when the mediating variables are introduced.

This study accordingly conducted the analysis for the means, standard deviations and correlational coefficients of the related variables, prior to the stage of SEM models comparison. Based on the results presented in the Table 25, variables such as ‘Age’ and ‘Income’ and ‘Purchase Frequency’ (PF) were identified to be controlled in the SEM analysis, due to the significant correlations between these variables and one or more of COOI, PQ, BL, BA, BAS and BEQ. For instance, ‘Age’ with COOI (**β**= 0.099, P=0.02), with BL (**β**= 0.117, P=0.01), with BA (**β**= 0.136, P=0.00), with BAS (**β**= 0.108, P=0.01) and with BEQ (**β**= 0.111, P=0.01); ‘Income’ with COOI (**β**= 0.145, P=0.00), with BL (**β**= 0.083, P=0.05), with BA (**β**= 0.111, P=0.01) and with BAS (**β**= 0.118, P=0.01); PF with BA (**β**= 0.118, P=0.01). By contrast, ‘Sex’ and ‘Education’ were not significantly correlated to any of COOI, PQ, BL, BA, BAS and BEQ, and therefore not required to be controlled in the SEM analysis.

Table 25 **The correlations of variables in the 'Impacts of COO Effect' model**

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. COOI	5.62	1.06										
2. BL	5.17	0.87	.422**									
3. PQ	5.73	0.85	.419**	.448**								
4. BA	5.14	1.01	.308**	.520**	.423**							
5. BAS	5.35	0.85	.393**	.567**	.654**	.605**						
6. BEQ	5.05	1.01	.356**	.637**	.469**	.555**	.600**					
7. SEX	1.43	0.50	-.060	-0.07	-.040	-.050	.000	-.020				
8. AGE	30.43	6.61	.099*	.117**	.070	.136**	.108*	.111**	-.050			
9. EDUCATION	5.69	0.84	.060	.000	.060	.010	.050	-.010	.040	.040		
10. INCOME	54665.18	55770.70	.145**	.083*	.060	.111**	.118**	.080	.060	.111**	.050	
11. PF	8.28	5.77	.050	.050	.020	.118**	.070	.060	-.113**	.304**	.040	.030

Note. * Correlation is significant at the 0.05 level (2-tailed)；** Correlation is significant at the 0.01 level (2-tailed)

As for the test results for correlational coefficients of COOI, PQ, BL, BA, BAS and BEQ, COOI (independent variable) was significantly and positively related to BEQ (dependent variable), which met the first condition. COOI (independent variable) was also significantly and positively related to the four mediating variables (PQ, BL, BA and BAS). This result was in line with the second condition. The correlations between the independent variable (COOI), four mediating variables (PQ, BL, BA and BAS) and dependent variable (BEQ) were found to be all positive and significant, which satisfied the third condition. Lastly, to test the fourth condition, 'the correlations between the independent and dependent variables become insignificant, or apparently weaker with the addition of the mediating variables', this study will compare the alternative SEM models and discuss the result in the next section.

4.7.2 SEM model comparison

Initially, in order to explore the best-fit model without any insignificant paths, a partial mediation model (Model A) was developed. This partial mediation model assumed the direct relationship between COOI and BEQ. However, this assumption was not supported by the result presented in Table 25, due to the insignificant path between COOI and BEQ (p=0.425). Then, a full mediation model (Model B) was established with the removal of the path between COOI and BEQ from the Model A. After this, another full mediation model (Model C) was formulated with the removal of the path between PQ and BEQ from the Model B, because the path between these two variables was insignificant (p=0.407). Based on this, Model D was established with the removal of the path between BAS and BEQ, because this path was insignificant in the Model C. In Model D, all the

paths reached the significance (P<0.05). This model describes the indirect relationship between COOI and BEQ, which was fully mediated by two variables: BL and BA.

In order to further explore the mediating role of BL and BA, Model E and Model F were created, based on Model D. The path between BA and BEQ was removed in Model E, while the path between BL and BEQ was removed in Model F. In other words, BL was the only mediator in Model E, while BA was the sole mediating variable in Model F. All the results of SEM model comparisons are presented in Table 26.

Table 26 **Results of SEM model comparisons**

Models	Paths	Insignificant Paths	χ^2/df	*df*	CFI	SRMR	RMSEA	AIC
Model A (Partial Mediation)	COOI -> BEQ COOI -> PQ COOI -> BL COOI -> BA COOI -> BAS PQ -> BEQ BL -> BEQ BA -> BEQ BAS -> BEQ	PQ ->BEQ, P=0.865 BA->BEQ, P=0.061 BAS->BEQ, P=0.411 COOI->BEQ, P=0.425	2.880	257.000	0.930	0.061	0.057	875
Model B	COOI -> PQ	PQ->BEQ, P=0.407	2.870	258.000	0.930	0.061	0.057	874

(Full Mediation)	COOI -> BL COOI -> BA COOI -> BAS PQ -> BEQ BL -> BEQ BA -> BEQ BAS -> BEQ	BA->BEQ, P=0.194 BAS->BEQ, P=0.720						
Model C (Full Mediation)	COOI -> PQ COOI -> BL COOI -> BA COOI -> BAS BL -> BEQ BA -> BEQ BAS -> BEQ	BAS->BEQ, P=0.545	2.860	259.000	0.930	0.061	0.057	873
Model D (Full Mediation)	COOI -> PQ COOI -> BL COOI -> BA COOI -> BAS BL -> BEQ BA -> BEQ BAS -> BEQ		2.850	260.000	0.930	0.061	0.057	871

	COOI -> PQ						
	COOI -> BL						
Model E	COOI -> BA						
(Full	COOI -> BAS	2.870	261.000	0.930	0.062	0.057	876
Mediation)	BL -> BEQ						
	BA -> BEQ						
	BAS -> BEQ						
	COOI -> PQ						
Model F	COOI -> BL						
(Full	COOI -> BA	3.320	261.000	0.920	0.075	0.064	996
Mediation)	COOI -> BAS						
	BA -> BEQ						

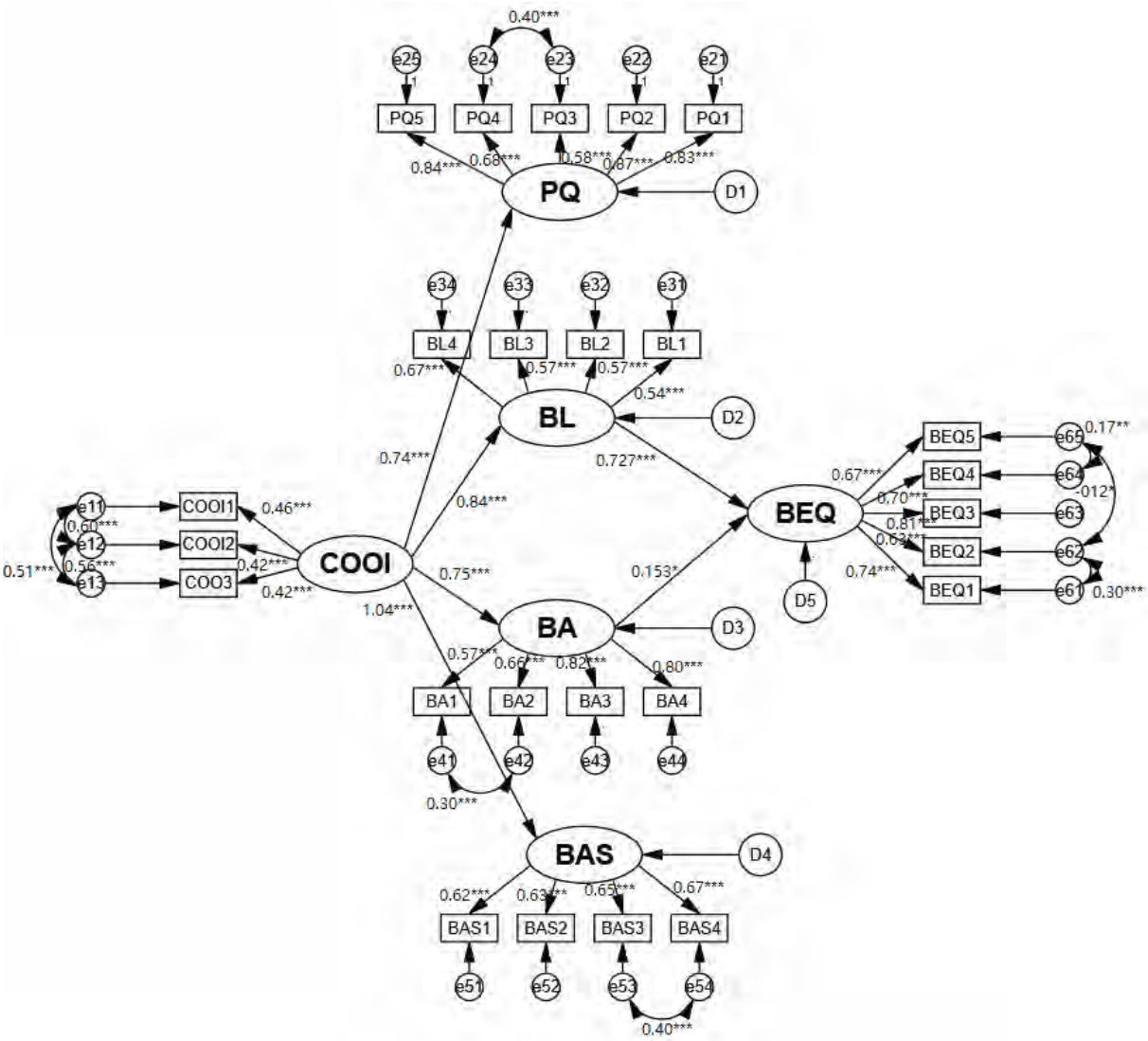
Note. ‘Age’, ‘Income’ and PF were controlled in all SEM models

As presented in Table 26, six models were introduced into the structural model evaluation process. The SEM examined and compared the values for goodness-of-fit, along with the significance of pathways among the observed and latent variables for evaluating these six models’ overall fit. As a result, the best-fit SEM model will be identified (Hair et al., 2010; Pallant, 2016). According to the goodness-of-fit indices, the three full mediation models (Model B, Model C, and Model D) had overall better fit than the partial moderation model (Model A).

When it comes to the comparison among these three full mediation models, Model D achieved the best fit on the basis of the results that all the paths in this model were significant, although the goodness-of-fit indices for these three models all met the

specified criteria for an acceptable model fit. For instance, in the Model B, the paths of PQ->BEQ, BA->BEQ, BAS->BEQ were not significant, because their p values were 0.194, 0.407, and 0.720 respectively, which were greater than 0.05. This result implied that BL and BA were the only two significant mediating variables in the proposed 'Impacts of COO Effect' Model.

As for further exploration for the mediating role of BL and BA, SEM compared the Models D, E, and F. The results in Table 25 indicate that all the paths in these three models were significant. However, Model F was the only model that did not present a good model fit, due to the value of $\chi 2/df$ (=3.32) exceeding 3, which was one of the criteria for a good model fit. In relation to the comparison between Model D and Model E, the former had a better model fit, because the overall values of fit indexes were smaller for this model, in terms of $\chi 2/df$ (Model D=2.85, Model E=2.87), SRMR (Model D=0.061, Model E=0.062), and AIC (Model D=871, Model E=876). In addition, some other indices, for example GFI (0.903), TLI (0.922), NFI (0.900), IFI (0.933),PNFT (0.780) and PCFI (0.808), provided the further confirmation for the satisfactory model fit of Model D. This result suggested that Model D, in which the mediators of BL and BA existed simultaneously, was the best-fit model. Figure 17 presents the standardised estimates for the final structural model (Model D).



Note: “Age” “Income” and “Purchase Frequency” (PF) were controlled in all SEM models

COOI: Country-of-Origin Importance

PQ: Perceived Quality

BL: Brand Loyalty

BA: Brand Awareness

BAS: Brand Association

BEQ: Brand Equity

***p < .001 **p < .01, *p < .05

Figure 17 **The final structural model (Model D) for the ‘Impacts of COO effects’ model**

4.7.3 Hypotheses testing for the 'Impacts of COO Effects' model (H17 to H25)

Based on results of the path analysis in the SEM Model D shown in Figure 17, the hypotheses (H17 to H25) regarding relationships among the latent variables in the proposed impacts of COO effect were tested in terms of their respective standardised regression values and the related significance levels. The SEM results of hypotheses testing for H17 to H24 are shown in Table 27.

Table 27 **SEM results of hypotheses testing for the 'Impacts of COO Effects' model (H17 to H24)**

Number	Hypothesis	Standardised regression weight	Unstandardised regression weight	S.E.	P	Result
H17	The level of importance attached to COO in dairy brand evaluation directly increases brand loyalty	0.84	0.74	0.09	***	Accepted
H18	The level of importance attached to COO in dairy brand evaluation directly increases brand awareness	0.75	0.99	0.12	***	Accepted
H19	The level of importance attached to COO in dairy brand evaluation directly increases brand association	1.04	1.30	0.14	***	Accepted

H20	The level of importance attached to COO in dairy brand evaluation directly increases perceived quality	0.74	1.14	0.12	***	Accepted
H21	Brand loyalty increases brand equity	0.73	1.36	0.16	***	Accepted
H22	Brand awareness increases brand equity	0.15	0.19	0.07	*	Accepted
H23	Brand association increases brand equity	-0.94	-1.24	1.51	0.41	Rejected
H24	Perceived quality increases brand equity	0.02	0.02	0.13	0.87	Rejected

Note. ***p < .001 **p < .01, *p < .05

According to the SEM results, six hypotheses (H17, H18, H19, H20, H21 and H22) were accepted due to the positive path coefficients and statistical significance. These paths include COOI->BL, COOI->BA, COOI->BAS, COOI->PQ, BL->BEQ, and BA->BEQ.

The results indicated that the standardised regression weight of COOI->BL value is 0.84 at p < .001 level, which suggested that the level of importance attached to COO in dairy brand evaluation can directly increase Chinese consumers' loyalty towards the brands from their preferred COO. The current study also found that the level of importance attached to COO in dairy brand evaluation can directly promote the consumers' awareness of the brands from their preferred COO, as the standardised regression weight of COOI->BA value is 0.75 at p < .001 level. Likewise, it is also demonstrated that the level of importance attached to COO in dairy brand evaluation had a direct and positive impact on the consumers' brand association (standardised regression weight= 1.04, at p < .001 level). Lastly, the level of importance attached to COO in dairy brand evaluation had a positive

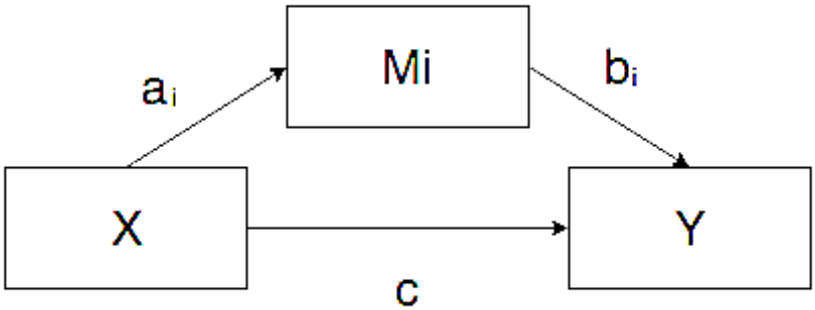
impact on how consumers perceived the quality of the brands from their preferred COO. This was also supported with a standardised regression weight (0.74, at p < .001 level).

However, H23 and H24 were also rejected due to the insignificance of the paths BAS->BEQ (p=0.41) and PQ->BEQ (p=0.87). By contrast, H21 and H22 were supported by the significance of paths BL->BEQ and BA-> BEQ, as their standardised regression weights were significant at (p < .001) and (p <0.05) respectively. These results revealed that brand equity was directly promoted by consumers' brand loyalty and brand awareness, rather than by brand association and perceived quality.

4.7.4 Hypotheses testing for the 'Impacts of COO Effect' model (H25 to H28)

As for H25 to H28, the Hayes' PROCESS was adopted as a bootstrapping method to further estimate the mediators between COOI and BEQ. This study employed the 'unstandardised indirect effects' and 'corresponding 95% bias-corrected confidence intervals' for the mediation analysis, following the recommendations by Hayes (2013).

The mediation model is displayed in Figure 18, in which the effects of an independent variable (X) on a dependent variable (Y) was mediated by a few variables (Mi). In this case, COOI is the independent variable, and BEQ is the dependent variable. BL, BAS, BA and PQ are the M1, M2, M3 and M4 respectively.



Where X: COOI

Mi: BL, BA, BAS and PQ

Y: BEQ

Figure 18 **The direct and indirect effects of X on Y**

According to Hayes (2013) and Hayes and Rockwood (2016), ‘a_i’ stands for the effect of X on the mediator Mi, while ‘b_i’ means the effect of Mi on Y. Accordingly, ‘a_ib_i’ equals the indirect effect of X on Y via Mi, and ‘c’ describes the direct effect of X on Y. When M mediates the relationship between X and Y, the ‘a_i’, ‘b_i’ and ‘a_ib_i’ should simultaneously meet the statistical significance. Based on this, if ‘c’ is significant, it indicates a partial mediation. By contrast, an insignificant ‘c’ manifests a full mediation. The results of mediation analysis using the Hayes’ PROCESS are reported in Table 28.

Table 28 **Indirect and direct effects, and 95% bias-corrected confidence intervals**

	Paths	b	SE	95% bias-corrected confidence intervals	
				Lower-limit	Upper-limit
1	COOI -> BL-> BEQ	0.15	0.02	0.11	0.20
2	COOI -> BAS-> BEQ	0.03	0.02	-0.01	0.06
3	COOI -> BA-> BEQ	0.06	0.02	0.03	0.09
4	COOI ->PQ-> BEQ	0.08	0.02	-0.02	0.04
5	COOI -> BEQ	0.02	0.04	-0.05	0.10

H25: BL mediates the relationship between COOI in dairy brand evaluation and BEQ.

According to the results shown in Table 28, the indirect effect of COOI on BEQ via BL (Path

1) was b =0.15, boot SE =0 .02, 95% bias-corrected CI = 0.11 to 0.20. Because the confidence intervals (0.011 to 0.20) are both greater than 0, we can confirm that the mediating effect was significant. In other words, BL was a mediator between COOI and BEQ, which supported the H25. In addition, the direct effect of COOI on BEQ (Path 5) was insignificant as its confidence interval (-0.05 to 0.10) did include 0. This finding was also supported by the SEM results in Table 26. It indicates that it was a full mediation between COOI and BEQ via BL.

H26: BAS mediates the relationship between COOI in dairy brand evaluation and BEQ.

With the same analysis method, the indirect effect of COOI on BEQ via BAS (Path 2) was b = 0.03, boot SE = 0.02. However, its confidence interval (-0.01 to 0.06) included 0, which suggested the insignificant indirect effect (COOI -> BAS-> BEQ). This can be also supported by the SEM result in Table 26 that the path BAS->BEQ was insignificant. Therefore, H26 was rejected by this study.

H27: BA mediates the relationship between COOI in dairy brand evaluation and BEQ.

As for the indirect effect (Path 3: COOI->BA->BEQ), b = 0.06, boot SE = 0.02, bias-corrected CI = 0.03 to 0.09. Similar to the Path 1 discussed previously, the significant mediating effect of BA between the COOI and BEQ was confirmed. Therefore, H27 was accepted by this study. Also, the BA was a full mediator between COOI and BEQ, as the direct effect of COOI on BEQ (Path 5) was insignificant.

H28: PQ mediates the relationship between COOI in dairy brand evaluation and BEQ.

Lastly, H28 for the indirect effect (COOI ->PQ-> BEQ) was rejected via the similar approach of H26. This is because its confidence interval (-0.02 to 0.04) included 0, although b=0.08 and boot SE= 0.02. It implies that the mediating effect of PQ between COOI and BEQ was not significant. This

finding was also in line with the SEM results in Table 26 that the path PQ->BEQ was insignificant.

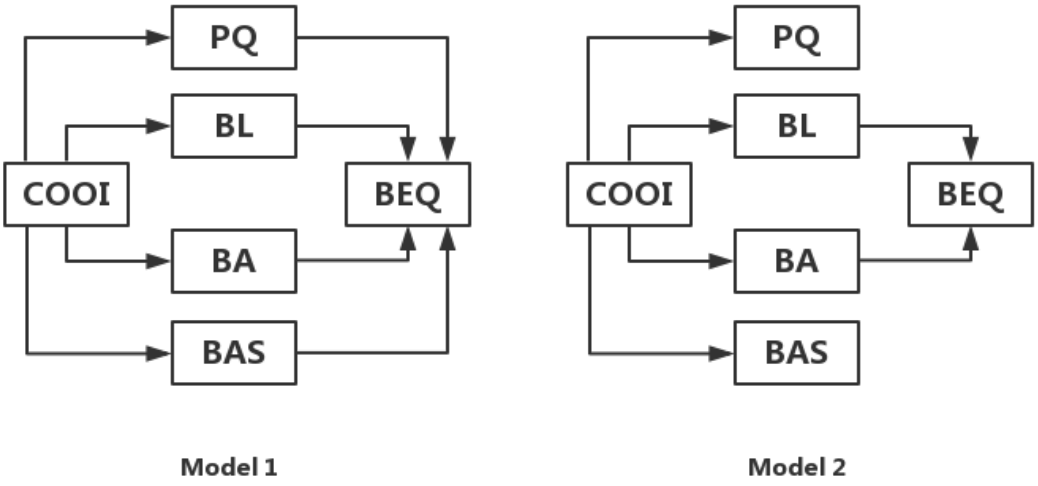
In conclusion, a summary of the hypotheses for the mediators in the 'Impacts of COO Effects' Model is presented in Table 29.

Table 29 **Results of hypotheses testing for the 'Impact of COO Effects' model (H34 to H37)**

Hypotheses		Results
H25	Brand loyalty mediates the relationship between the level of importance attached to COO in dairy brand evaluation and brand equity	Accepted
H25	Brand association mediates the relationship between the level of importance attached to COO in dairy brand evaluation and brand equity	Rejected
H26	Brand awareness mediates the relationship between the level of importance attached to COO in dairy brand evaluation and brand equity	Accepted
H28	Perceived quality mediates the relationship between the level of importance attached to COO in dairy brand evaluation and brand equity	Rejected

4.7.5 Summary of 'Impacts of COO Effects' model testing

The findings from SEM analysis evidenced that COOI has direct impacts on BL, BAS, BA and BQ. However, the impact of COOI on BEQ was not direct, which was mediated by BL and BA. By contrast, BAS and PQ did not act as mediators in the relationship between COOI and BEQ. Based on these findings, an adjusted 'Impacts of COO Effects' Model was presented in Figure 19.



Where Model1: the proposed “Impacts of COO effects” Model

Model 2: the adjusted “Impacts of COO effects” Model

COOI：the level of importance attached to COO in dairy brand evaluation

PQ: Perceived Quality

BL: Brand Loyalty

BA: Brand Awareness

BAS: Brand Association

BEQ: Brand Equity

Figure 19 **The proposed and adjusted ‘Impacts of COO Effects’ model**

4.8 Chapter summary

The current chapter provided the details of various statistical analyses for testing the ‘Drivers of COO Effects’ model and the ‘Impact of COO Effects’ model. There were 573 responses entered for this study after the data preparation. The demographic information of these responses was then presented, including age, sex, education, income level and purchase frequency of dairy products.

This chapter then confirmed the reliability and validity of the key variables for analysis. In

addition, the CFA analyses proved that the proposed two models had the best fit to describe the COO effects in dairy purchase.

As for the hypotheses testing, this study conducted a regression analysis to assess the effects of the proposed driving factors (CI, CE, CA, PI, PE, FC, RA and UA) on COOI. The Hayes' PROCESS Analysis was employed to test the moderating effect of PF between the driving factors and COOI. After this, the indirect effects of COOI on BEQ were evaluated by SEM model comparisons. The Hayes' PROCESS Analysis was utilised again to identify the significant mediators between COOI and BEQ.

In summary, two adjusted models were created, which were based on the outcomes of data analyses. The key findings of this study and their implications will be detailed in the next chapter.

CHAPTER 5: RESEARCH FINDINGS AND CONCLUSION

5.1 Introduction

The current study aimed to explore and examine the country-of-origin effects in the Chinese dairy market. Accordingly, a theoretical framework including two sub models was proposed to describe the drivers and impacts of the COO effects. The initial 'Drivers of COO Effects' model assumed that the COO effects in the Chinese dairy market were driven by a few factors, which included country image (CI), consumer ethnocentrism (CE), consumer animosity (CA), product involvement (PI), product experiences (PE), face consciousness (FC), risk avoidance (RA) and uncertainty avoidance (UA). The relationship between these factors and the level of importance attached to COO in dairy brand evaluation could be moderated by the frequency of consumers purchasing dairy products (PF). The initial 'Impacts of COO Effects' model hypothesised that COO effects could indirectly impact on brand equity (BEQ) via four mediators, which were brand loyalty (BL), brand awareness (BA), brand association (BAS) and perceived quality (PQ).

Based on the proposed models, this study utilised regression method to evaluate the driving factors of COO effects, and employed SEM to test the impacts of COO effects by exploring interrelationships among COO importance, brand equity, brand loyalty, brand awareness, brand association and perceived quality. According to the results from data analysis, the adjusted 'Drivers of COO Effects' model and 'Impacts of COO Effects' model were confirmed. The findings of this study provide significant implications for the theories and practices in international marketing and other related fields.

As the final part of this thesis, this chapter consists of the following sections: Section 5.2 concludes the research findings of the current study; Sections 5.3 and 5.4 respectively expound the various implications and contributions of this study; Section 5.5 presents the limitations of this thesis and directions for further studies in the future.

5.2 Research findings

Initially, this thesis proposed a new theoretical framework based on the literature review to display the COO effects. This framework provided an insight into the drivers and influences of the importance attached to COO in dairy brand evaluation by Chinese consumers. The current study utilised three items to measure the level of importance attached to COO in dairy brand evaluation. In addition, a total of 8 constructs (CI, CE, CA, PI, PE, FC, RA and UA) with 37 measurement items were analysed in this study to investigate the driving factors of COO effects in the Chinese dairy market. As for evaluating the impacts of COO effects, 4 constructs (BL, BA, BAS, PQ and BEQ) with 22 measurement items were employed. All these measurement items were designed with the seven-point Likert scales, in which 1 stood for 'Strongly Disagree', 4 represented 'Neutral' and 7 meant 'Strongly Agree'.

According to the mean values of the constructs, Chinese consumers generally believed COO was important in dairy brand evaluation (COOI mean=5.62). In particular, the COO of manufacture and COO of brand were both important (COOI2 mean=5.57; COOI3 mean=5.54). The respondents tended to have positive country image of the

preferred COO (CI mean=5.93). Chinese consumers had slight animosity (CA mean=4.47) towards the countries which were considered as unfavourable COOs for dairy products. However, consumers did not present evident ethnocentrism for Chinese dairy products (CE mean=3.89). In addition, the respondents reported that they had a high level of involvement (PI mean=5.79) with dairy products. In other words, they believed purchasing and consuming dairy products was important to them (PI1 mean=5.96; PI2 mean=5.8). They would try to find the most appropriate place to purchase dairy products (PI4=6.2). The participants also reported their direct or indirect experiences (PE mean=5.00) related to dairy products. Particularly, their indirect experiences could be linked to reading news about the related countries (PE6 mean=5.46), their interests in visiting the related destinations (PE7 mean=5.46), and their family members and friends' visits in these nations (PE5 mean= 4.71). As for cultural values, Chinese consumers showed evident risk avoidance (RA mean=5.42) and uncertainty avoidance (UA mean=6.06). They also presented slight face consciousness for choosing dairy products (FC mean=4.64).

Regarding the dairy brands from the consumers' preferred COOs, respondents believed these brands had good quality (PQ mean=5.73). Chinese consumers also showed evident awareness (BA mean=5.14), association (BAS mean=5.35) and loyalty (BL mean=5.17) towards these brands. Accordingly, these brands enjoyed positive consumer-based brand equity (BEQ mean= 5.05).

Based on the results of regression analysis, country image (b= .508, SE=.057, $p<0.001$), product involvement (b= .205, SE= .062, $p<0.01$), product experiences (b=.110, SE=.048, $p< 0.05$), face consciousness (b=.098, SE=.038, $p< 0.05$) and risk avoidance (b=.141, SE=.041, $p< 0.01$) were identified as the factors that can directly increase the level of importance attached to COO in dairy brand evaluation. Particularly, country

image (β=.359, p<0.001) had the strongest driving impact on the level of importance attached to COO in dairy brand evaluation. Product involvement (β=.152, p<0.01) was the second strongest driving factor, which was followed by risk avoidance (β=.132, p<0.01) and product experiences (β=.099, p< 0.05). Face consciousness (β=.096, p<0.05) was identified as the weakest factor significantly driving COO effects. By contract, consumer ethnocentrism (b= -.035, SE= .038, p >.05), consumer animosity (b= -.031, SE= .028, p >.05) and uncertainty avoidance (b= -.017, SE=.061, p> 0.05) did not directly influence the COO effects.

This study then employed Hayes' PROCESS to test the moderation effect of purchase frequency between the COO effects and the driving factors. The results showed that the driving effects of consumer ethnocentrism (b=.019, SE=.008, p= <.05) and consumer animosity (b=.019, SE=.006, p=<.01) on COO effects became significant when purchase frequency was introduced as a moderator. However, this moderating effect was not significant for uncertainty avoidance (b=- .011, SE=.013, p= >.05). In addition, this moderator could not significantly adjust the relationship between COO effects and other driving factors, which included country image (b= .000, SE=.011, p= >.05), product involvement (b=-.007, SE=.012, p= >.05), product experiences (b=.010, SE=.010, p= >.05) and face consciousness (b= .016, SE=.009, p= >.05).

When it came to SEM analysis, the results showed that COO effects could directly impact on brand loyalty, brand awareness, brand association and perceived quality (p<0.001). However, the direct relationship between COO effects and brand equity was not supported (p=0.43). Furthermore, brand equity could be directly increased by brand loyalty (p<0.001) and brand awareness (p<0.05), rather than brand association (p=0.41) and perceived quality (p=0.87). With the comparison of standardised regression weights of brand loyalty (β= .73) and brand awareness (β= .15), it could confirm that the former

construct had more significant influence on COO effects.

The results of Hayes' PROCESS analyses provided a further support to the finding that the impact on COO effects on brand equity was indirect (b= .02, SE= .04, lower-limit=-0.05, upper-limit=0.10). They also demonstrated that this indirect impact was mediated by brand loyalty (b= .15, SE= .02, lower-limit=0.11, upper-limit=0.20) and brand awareness (b= .06, SE= .02, lower-limit=0.03, upper-limit=0.09), rather than brand association (b= .03, SE= .02, lower-limit=-0.01, upper-limit=0.06) or perceived quality (b= .08, SE= .02, lower-limit=-0.02, upper-limit=0.04).

To sum up, an adjusted theoretical framework for the COO effects in the Chinese dairy market can be developed with the integration of the above findings. This new theoretical framework is shown in Figure 20.

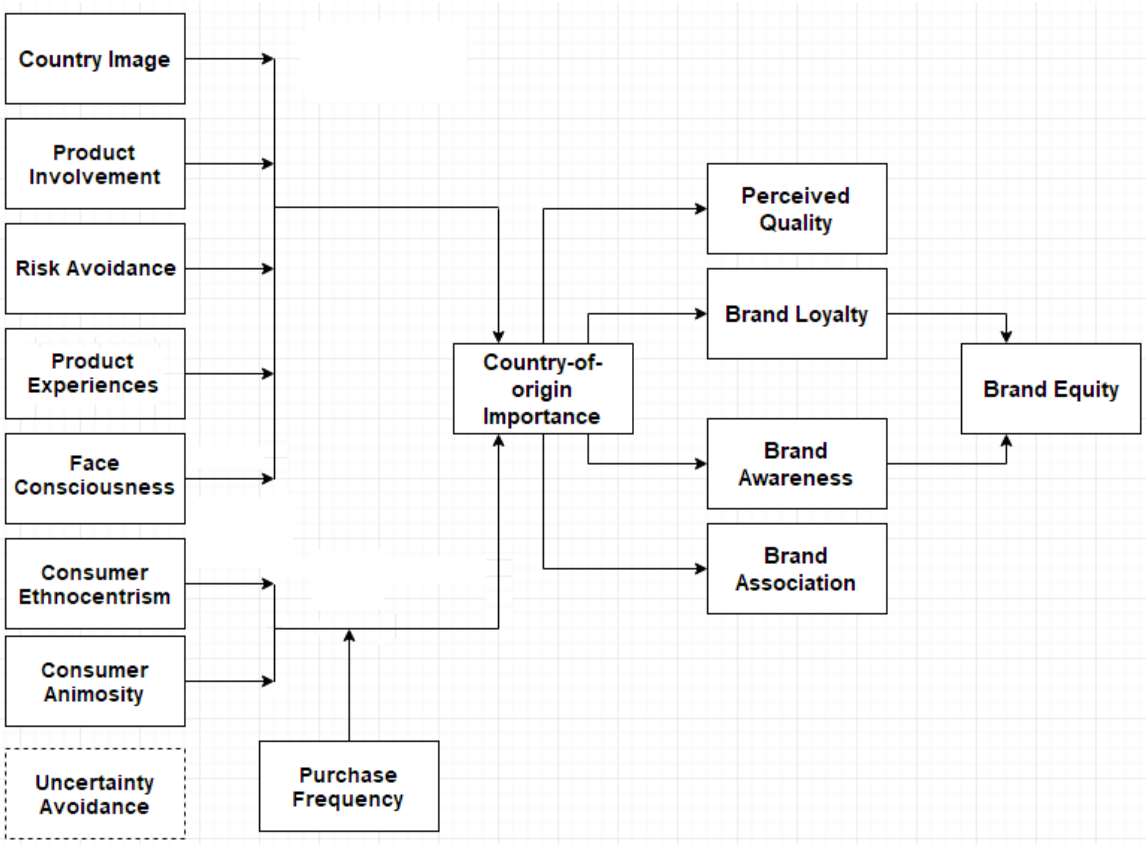


Figure 20 **An adjusted theoretical framework for the COO effects in the Chinese**

dairy market

5.3 Research implications

5.3.1 Theoretical implications

First, this study developed a more comprehensive theoretical framework with the integration of various constructs, which included the driving factors and impacts of the COO effects. Although country image, consumer ethnocentrism, consumer animosity, product involvement, product experiences, face consciousness, risk avoidance and uncertainty avoidance had been individually discussed by various studies on the driving factors of COO effects, this thesis is the first record of research that included and analysed all these factors within a single study. Accordingly, this study was able to compare and evaluate the more extensive factors that drive the COO effects in the Chinese dairy market. The findings of this study could contribute to the progress of COO effects research, which is one of the important theories in international marketing. In addition, this study is also the first research that developed the three items for measuring the level of importance attached to COO in consumers' dairy brand evaluation.

Second, in line with the previous studies, this thesis demonstrated the significant impact of country image on the COO effects (Balestrini & Gamble, 2006; Costa et al., 2016; O'Shaughnessy & O' Shaughnessy, 2000). Actually, this study identified country image as the most prominent factor driving the COO effects. According to findings from the studies conducted by Paul and Dasgupta (2010) and Yasin et al. (2007), country image was commonly considered in the general impression in consumers' perception, such as the advancement or prestige of the country. However, the current study argues that the

country image can also be presented at a more micro level, which is linked with the relevant product. In the context of dairy products, the country image can be also considered as the environment and production standards in a specific country. Accordingly, this study provided the improved five-items measurement for testing country image at both macro and micro levels.

Third, this thesis provides a new insight into the research on consumer ethnocentrism and consumer animosity, which are important concepts in sociology and marketing. Previous studies mainly focused on the impacts of consumer ethnocentrism and consumer animosity on their attitudes towards foreign brands. In those studies, the researchers claimed that consumers' product preference could be influenced by consumer ethnocentrism (Balabanis & Diamantopoulos, 2004; Evanschitzky et al., 2008; Makanyeza & Du, 2017; Shimp and Sharma, 1987; Watson & Wright, 2000) or consumer animosity (De Nisco et al., 2016; Jung et al., 2002; Klein et al., 1998; Leong et al., 2008; Nijssen and Douglas, 2004; Shimp et al., 2004; Shin, 2001; Shoham & Gavish, 2016; Tian & Pasadeos, 2008). However, the current study identified a gap existing in these research papers. They did not discuss the relationship between the level of importance attached to COO in brand evaluation and consumer ethnocentrism/consumer animosity. The findings of the current study prove that the level of importance attached to COO in brand evaluation could not be driven by consumer ethnocentrism or consumer animosity without the moderation by purchase frequency. In other words, this thesis provides the evidence that consumer ethnocentrism and consumer animosity are important only when consumers purchase the related product frequently. Thus, this study is the first research that introduces an important moderator, purchase frequency, for future study in consumer ethnocentrism, consumer animosity and COO effects. Moreover, although previous studies have revised the original CETSCALE from fourteen items to ten or six items, the

thesis further reduces CETSCALE (four items) for measuring consumer ethnocentrism for dairy products. The results of this study demonstrated that CETSCALE could be further reduced to four items with satisfactory reliability and validity.

Fourth, researchers have not reached an agreement on how COO effects can be influenced by consumers' product involvement. While some studies showed that COO effects were more significant for those who are purchasing lower-involvement products (Han, 1989; Gurhan-Canli & Maheswaran, 2000; Maheswaran, 1994; Verlegh et al., 2005), other researchers, such as Ahmed & D'astous (2004), demonstrated the COO effects on the high involvement products. The current study supports the argument of Ahmed & D'astous (2004) by providing empirical evidence that product involvement increases the level of importance attached to COO in dairy brand evaluation. In addition, this study improves the measurement for consumers' product involvement by introducing two items. These two items test intensity of information search and the importance that consumers attach to seeking for appropriate purchasing channels. Therefore, this study can contribute to the improvement for outcomes of future studies on product involvement.

Fifth, this thesis also contributes to the knowledge in consumer psychology and behaviour. The existing literature shows a tendency in consumer studies for risk avoidance and uncertainty avoidance to be considered as similar concepts. For instance, in the studies by Ha (2002) and Wu and Wu (2016), these two concepts were analysed as an integrated cultural factor. This actually assumed that these two constructs should have the same impact on consumer behaviour. However, the findings of this study evidence the significant differences between risk avoidance and uncertainty avoidance in terms of their different impacts on COO effects. The research findings suggest that risk avoidance is also a significant driving factor for COO effect, which is in accord with the research findings by McCarthy and Henson (2004) and Newman et al (2014). By contrast, the

relationship between uncertainty avoidance and COO effects was insignificant. This outcome is actually contrary to the findings of the studies by Domzal et al. (1995) and Lee et al. (2007). Therefore, it suggests the necessity to distinguish these two concepts in future studies on consumer psychology and behaviour.

Sixth, the COO effects are more significant when a consumer has a more direct experience with a specific product. This finding supported the arguments by Hamilton and Thompson (2007), Hoch (2002) and Schmitt and Zarantonello (2013). In addition, the current study also underlined the role of indirect product experiences. These experiences include two aspects, the information, such as advertisements or news, about dairy products and their related countries-of-origin, and the travelling intention or experience in the related destination country. Many previous studies focused on the experience of tourism in the wine industry (Bowe, 2013; Kolyesnikova & Dodd, 2008). However, this thesis indicates that indirect product experience should also be important for other product categories, such as dairy products. These indirect experiences were linked to the consumers' intention to visit the relevant country of destination, and their friends' and family members' travel experiences in these countries. Thus, this study presents the feasibility of product tourism in a new field, the dairy industry. In addition, this study improves the measurement for product experiences, which covers both direct and indirect product experiences.

Lastly, previous researchers suggested that COO effects can influence consumer-based brand equity with the mediating effects of perceived quality, brand loyalty, brand awareness and brand association (Aaker, 1991; Pappu & Quester, 2017; Paul & Dasgupta, 2010). However, the field study in the dairy industry was absent. This thesis provided empirical support to the significant relationship between COO effects and brand equity. COO effects have direct impact on brand loyalty, brand awareness, brand

association and perceived quality, and an indirect impact on brand equity in the Chinese dairy market. This outcome agrees with findings by Paul and Dasgupta (2010). However, while researchers believed brand equity is driven by brand loyalty, brand awareness, brand association and perceived quality (Pappu et al., 2006; Paul & Dasgupta, 2010), the findings of the current study corroborates that the relationship between brand equity and brand association or perceived quality are not significant. Therefore, it suggests that the indirect effect between COO effects and brand equity is only mediated by brand loyalty and brand awareness. Accordingly, the research outcome provides a new viewpoint that brand equity is not necessarily driven by consumers' brand association and perceived quality. Thus, the findings of this study contribute to improving the theories in brand management.

5.3.2 Managerial implications

There are several important managerial implications based on the findings of this study. The current study underlined the importance of the COO effects for brand management. Accordingly, this thesis provides the dairy industry and its authorities with the following recommendations.

First, Chinese consumers attribute a high level of importance to country-of-origin in dairy brand evaluation. They believe that country-of-manufacture and country-of-brand are both important. These findings indicate that dairy practitioners should utilise marketing tools to communicate and underline the country-of-origin messages to Chinese consumers. These tools include the 'Made in ...' labels, the trademarks, packages and

advertisements with country-of-origin reference. In addition, to succeed in the Chinese market, businesses should insure the manufacture and brand of dairy products are both from consumers' preferred countries.

Second, country image was found to have a significant role in consumers' perception. When the governments of China's trading partner countries communicate their country's economic advance to Chinese residents, it will not only promote the national reputation and prestige in Chinese people's perceptions, but also assist the dairy business in their market performance. Moreover, this study also recommends that the dairy marketers should highlight the related country's high production standards and great environment for dairy products in order to promote their dairy brands in the Chinese market.

Third, although consumer ethnocentrism does not influence the COO effects on all Chinese dairy consumers, it can still affect those who purchase dairy products frequently. When a Chinese dairy company targets frequent buyers in the domestic market, it should take advantage of their ethnocentric attitude toward domestic dairy products, as this consumer group attaches a high level of importance to the country-of-origin. Therefore, for these frequent buyers, the Chinese dairy companies should highlight the significance of supporting domestic dairy products; for example, it can contribute to employment growth in China.

Similarly, consumer animosity does not have strong impacts on Chinese dairy consumers in general. However, its effects on frequent buyers are significant. The level of animosity increases when Chinese consumers feel anger toward a country, sense the potential threats from this country to their home nation, or disagree with the political attitude or decision-making of this country. Therefore, for a company to succeed in the Chinese dairy market, it does not only depend on its business strategies, but also on the

policies made by overseas governments and authorities to build and maintain positive political and economic relationships with China.

Fifth, as COO effects can be driven by consumers' level of product involvement, it is necessary for marketers to communicate the importance of dairy consumption, such as the significant role of dairy products in clinical nutrition (Zemel, 2004). The present study also found that consumers tend to search for the most appropriate places to purchase dairy products, when they are highly involved. Thus, it is important for dairy companies to understand the consumers' preferred places of purchase, and ensure the availability of their products in such places.

Sixth, another important finding of this study is the impact of consumers' indirect experiences with dairy products on COO effects. These indirect experiences do not only come from news and messages from the countries, but also are relevant to consumers' intention to visit the related country, or their friends and family members' travel experiences in these countries. Therefore, in order to achieve better market performance in China, the dairy industry should cooperate with the tourism sector to provide tours of dairy farms.

Lastly, this study also recommends that businesses need to highlight the importance of the country-of-origin of dairy products in their market communication programs in terms of face consciousness and risk avoidance. Thus, these market communication programs should underline benefits of increasing the sense of prestige and reducing the potential risk by choosing dairy brands from superior country-of-origins.

Moreover, one of the practical contributions of the current study was demonstration of the significance of COO effects for promoting consumer-based brand equity. In practice, the research findings in this thesis provide a new approach for dairy marketers to

develop effective strategies for their business in China by taking advantage of the COO effects on consumers' brand evaluation. In addition, this study can help dairy businesses to have a better understanding of the importance of brand loyalty and brand awareness for building brand equity. Therefore, these recommendations can be adopted by business practitioners to improve their relevant marketing campaigns for brand management.

To sum up, the research findings in this thesis can enhance the relevant dairy industries and authorities' comprehension of the driving factors of COO effects. Thus, the dairy companies will be able to improve their business by emphasising the COO effects to their target customers. Besides, this study clarified the roles of country image, consumer ethnocentrism and consumer animosity in COO effects. The research findings can therefore be referenced by the relevant authorities or governments for their policy making in order to enhance the market performance of the dairy industry. The current study also builds the potential partnership between the dairy business and tourism industry. The cooperation of these two industries does not only enrich the tools for developing business strategies, but also introduces the emerging markets of dairy tourism.

5.4 Limitations and future research

This study has a few limitations. Firstly, the current study employed online questionnaires for quantitative data collection. The online questionnaires were only available to the participants who were able to access the internet, and this sample base therefore did not necessarily represent the entire population in China. Accordingly, some researchers recommended that a combination of internet-based and traditional mail

surveys could improve the quality of sampling for future study, if time and finance permit (Ilieva et al., 2002; Wright, 2005). In addition, although data were collected from various provinces in China, this study did not cover all the cities. Therefore, the findings still have the limitation in terms of generalisation.

Secondly, in its descriptive stage, this study utilised cross-sectional surveys, which relied on the participants' memories of their experiences of dairy purchase within the past twelve month. The research results of this study were possibly affected by the participants' memory bias, including memory loss (Evans & Leighton, 1995). According to some literature in behavioural studies, future studies can reduce the time interval between the participants' purchase and the time of surveys, in order to minimise the memory loss (Hassan, 2006). Thus, a more recent time frame of dairy purchase as a criterion for participating in the survey is recommended future studies. Future studies can also employ some longitudinal methods, such as repeated observations from true panels which collect date from a fixed sample within a certain time frame (Goldfarb, 1960; Mäkinen et al., 2013). These methods can optimise the future study in terms of more accurate measurements and more precise research outcomes.

Thirdly, the data for the qualitative and quantitative studies for this thesis were collected from the People's Republic of China. Although China is the largest market for dairy imports, the Chinese participants in this study do not necessarily represent the consumers in other countries. A few studies argued that nationality can influence consumer behaviour in terms of brand perception (Kamineni, 2005) and COO preferences (Amine & Shin, 2002). Therefore, the findings of this study can only reflect the COO effects on Chinese consumers. This suggests a direction for future studies in comparing COO effects on consumers. In addition, this research only discusses the three dimensions of culture differences (risk avoidance, uncertainty avoidance and face consciousness) that

are commonly adopted by previous COO studies. Therefore, it is recommended to explore other dimensions of culture differences (such as Individualism vs. collectivism, low vs. high power distance, masculinity vs. femininity) in future COO studies.

Lastly, this study focused on dairy products. Despite the significance of dairy products in international markets, the COO effects existing in the consumers' choices of dairy brands may be not constant for other products. Some researchers argued that COO effects could vary in different product categories (Chryssochoidis et al., 2007). This thesis explored the COO effects in dairy products, however it did not demonstrate the generalisability of these findings for other product categories. It is necessary to develop further studies in the future to test whether the findings in this thesis can be replicated in other product categories.

5.5 Conclusion

Milk is ranked third by total output and is the top agricultural product in value terms. The demand for dairy products in China is growing with rising incomes, population growth, urbanisation and changes in diets. China has become a significant market of dairy products. However, after the Chinese dairy scandal in 2008, Chinese consumers showed an increasing interest in foreign dairy products, which promoted the leap of foreign dairy brands purchase. With the Chinese people shifting their attitude to foreign dairy products, it is important to study how products' COO affects consumers' perceptions and behaviours. The focus of this study was to explore and examine the country-of-origin effects in the Chinese dairy market. In particular, the present studies aimed to demonstrate what drives the country-of-origin effects, and how country-of-origin effects influence consumer behaviour in the Chinese dairy market.

Based on the literature review, this study identified a few potential factors that might be the sources of Country-of-Origin effects in the Chinese market. These potential factors included country image, consumer ethnocentrism, consumer animosity, product involvement, product experiences, face consciousness, risk avoidance and uncertainty avoidance. Purchase frequency was assumed as a moderator between these factors and the importance attached to COO in dairy brand evaluation by Chinese consumers. In addition, the current study also hypothesised the indirect relationship between the importance attached to COO in dairy brand evaluation by Chinese consumers and brand equity, which were mediated by brand loyalty, brand awareness, brand association and perceived quality.

This thesis utilised pluralistic approaches, qualitative and quantitative methods, for data collection and analysis. The qualitative study explored the Chinese consumers' views

on the country-of-origin of dairy products, and then developed a few additional measurement items for the subsequent quantitative study.

In the first part of the quantitative study, the results of regression analysis confirmed that country image had the strongest driving impact on COO effects in the Chinese dairy market. Product involvement was the second strongest driving factor, which was followed by risk avoidance, product experiences and face consciousness. Consumer ethnocentrism, animosity and uncertainty avoidance were found to have insignificant driving effects on the importance attached to COO in dairy brand evaluation by the Chinese consumers. However, according to the results of PROCESS analysis, the relationship between consumer ethnocentrism/animosity and country-of-origin effects become significant when purchase frequency was introduced as a moderator. Then, the quantitative study employed structural equation modelling (SEM) and PROCESS to examine the country-of-origin effects on brand equity. The results confirmed that country-of-origin effects had direct impacts on brand loyalty, brand awareness, brand association and perceived quality. In addition, COO effects have an indirect impact on brand equity, which was mediated by brand loyalty and brand awareness.

This empirical study has value because it developed a more comprehensive framework of country-of-origin effects. This new theoretical framework contributes to the advancements of the studies and practices in international marketing. In particular, the research outcome of the present study underlined the significant role of country image, product involvement, risk avoidance, product experiences and face consciousness in country-of-origin effects. It also provided new directions for future studies on the relevant concepts including consumer ethnocentrism/animosity, direct/indirect product

experiences, uncertainty/risk avoidance, moderating effects of purchase frequency, and the mediators in the country-of-origin effects on brand equity. In addition, the findings of this study also build an empirical foundation for the relevant businesses to develop successful strategies in the Chinese dairy market.

Given the limitations of the current research in the data collection methods and the generalisation of nationalities and product categories, it is recommended that the future studies should reduce the time interval between the participants' purchase and the time of surveys to minimise the memory loss, and use longitudinal methods to improve the accuracy of measurements. It also suggests that future studies should examine the outcomes of current research in different countries and product categories to demonstrate the generalisation.

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Appendix A: The Online Questionnaire

Information Sheet

What is this research about?

The aim of this research project is to explore the country-of-origin effects in the Chinese dairy market. Your participation in this project will help to generate valuable insights and contribute in the improvement of the country-of-origin theory and marketing practices in the Chinese dairy market.

Ethics Committee Clearance

This project has been approved by the Committee for Ethics in Human Research of the CQUniversity. The approval no. is H16/10-279.

Who can participate in this survey?

In general, the persons (over 18 years of age) who have purchased dairy products in the last 12 months are eligible to participate in this valuable research project.

How can I participate in this survey?

The informants are asked about their experiences and perceptions related to dairy products purchases. All of the informants are encouraged to express from an independent viewpoint. There are no right or wrong answers.

How does this research maintain respondents' confidentiality/anonymity?

Since this survey does not ask your name and other personal identifications, your identity remains completely unknown. All the information provided by participants will be kept confidential.

What are your rights?

Your participation is completely voluntary. You are free to withdraw from participating in this survey at any time. Any participant experiencing distress arising from this survey is encouraged to withdraw from participation.

Data Storage

The information will be stored in a locked filing cabinet in the researcher's office. Any computer storage will be on a password computer. This information will be kept for a minimum of 5 years and then destroyed.

Who to contact for more information?

If you have any query about this research project, please contact:

Researcher: Mr Rongbin YANG

E–mail: rongbin.yang@cqumail.com

For local contact:

Prof Huayuan Jiang

E-mail: Jianghuayuan203@sohu.com

For lodging a complaint:

E-mail: ethics@cqu.edu.au

CONSENT FORM

I consent to participation in this research project and agree that:

1. An Information Sheet has been provided to me that I have read and understood,

2. I understand that I have the right to withdraw from the survey at any time without penalty,

3. I understand that all the information provided will be kept confidential. This survey will produce only total results since it does not ask my name and other personal identifications,

4. I agree that I am providing informed consent to participate in this project.

Signature:

Date:

CQUHREC clearance number: H16/10-279

Section A

1. Have you bought any dairy products in the past 12 months?

	select
YES	
NO	

If no -> end of questionnaire

2. How many times (on average) do you purchase dairy products every month?

Please type a number here:____

3. What types of dairy products do you normally purchase? Please indicate the percentage of each product that makes up your normal dairy purchase, totalling 100%.

	Percentage (%)
Liquid Milk	
Yoghurt	
(Adult)Milk Powder	
Baby formula	

Cheese	
Cream	
Butter	
Ice-cream	
other types, please specify: ____	

4. Where do you normally purchase dairy products?

	select
Small retail shop	
Chain supermarkets	
Department stores	
Dairy specialist retailers	
Local online shopping sites	
Pharmacies	
Daigou (buy overseas)	
Others, please specify _____	

Section B

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
5. Country-of-origin of dairy products is very important when I evaluate dairy products.							

6. When I purchase dairy products, I care about in which country they are made							
7. When I choose dairy products, I care about which country the brands are from							

8. When I purchase dairy products, I **prefer** those from this country (region) the most.

	select
China	
Japan	
USA	
India	
Middle-eastern countries	
African countries	
UK	
Germany	
Netherland	
Australia	
New Zealand	
Switzerland	
Korea	
Canada	
Singapore	
France	
Hongkong	
Taiwan	

Other, please specify_____	

Referring to the country you chose in Question 8 above

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
9. It is a country that has an image of an advanced country							
10. It is a country that has a nice environment for dairy products							
11. It is a country that has high dairy production standards							
12. It is a country that has high quality dairy products							
13. It is a country that is prestigious.							

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
14. A Chinese citizen should always buy Chinese dairy products.							
15. Chinese should not buy foreign dairy products, because this hurts Chinese business and causes unemployment							
16. It may cost me in the long-run but I prefer to support Chinese dairy products.							

17. We should give priority to Chinese dairy products							
18. Only those products that are unavailable in China should be imported. ***This item is removed after the pre-testing)***							
19. It is not right to purchase foreign products, because it puts Chinese out of jobs. ***This item is removed after the pre-testing)***							
20. Purchasing foreign-made products is un-Chinese. ***This item is removed after the pre-testing)***							
21. We should purchase products manufactured in China instead of letting other countries get rich off us. ***This item is removed after the pre-testing)***							
22. We should buy from foreign countries only those products that we cannot obtain within our own country. ***This item is removed after the pre-testing)***							
23. Chinese consumers who purchase products made in other countries are responsible for putting their fellow							

Chinese out of work. ***This item is removed after the pre-testing)***							

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
24. Consuming milk products is very important to me.							
25. Purchasing milk products is very important to me							
26. I pay a lot attention to dairy products information (e.g. AD, from internet, other people's comments)							
27. I try to find the most appropriate place to purchase when I buy dairy products.							
28. I pay a lot attention to dairy products							

Referring to the country you chose in Question 8 above, answer the following questions:

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
29. I know a lot about dairy products.							
30. I am quite familiar with dairy products from this country.							
31. I consume dairy products from this country all the time.							
32. I have many experiences (touring/ studying/ working/ living) in this country:							
33. I have friends or family members who have many experiences (touring/							

studying/ working/ living) in this country.							
34. I have read a lot of news about this country online or elsewhere (e.g., newspapers).							
35. I would like to visit this country in the next 24 months if there is an opportunity.							

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
36. It is important for me to have product instructions spelled out in detail so that I always know what I am expected to do.							
37. It is important for me to closely follow instructions and procedures.							
38. Production rules and regulations are important because they inform me what the sellers do.							
39.Standard production procedures are helpful to me.							

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
40. I would rather be safe than sorry.							
41. I avoid risky things.							
42. I want to be sure before I purchase anything.							

	Strongly	Disagree	Somewhat	Neutral	Somewhat	Agree	Strongly

	Disagree		Disagree		Agree		Agree
43. It is important that others like the products and brands I buy.							
44. Sometimes I buy a product because my friends do so.							
45. Name-brand purchase is a good way to distinguish people from others.							
46. Name products and brands purchase can bring me a sense of prestige.							

47. When I purchase dairy products, I **dislike** those from this country (region) the most.

	select
China	
Japan	
India	
Middle-eastern countries	
African countries	
USA	
UK	
Germany	
Netherland	
Australia	
New Zealand	
Switzerland	
Korea	
Canada	
Singapore	

France	
Hongkong	
Taiwan	
Other, please specify_____	

Referring to the country you choose above, answer the following questions:

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
48. I dislike this country.							
49. I feel anger towards this country (due to the invasion or war)							
50. I feel this country is a potential threat to our country.							
51. I often disagree with the political attitude or decision of this country.							
52. Personally, I have had a bad experience with this country or people from this country.							

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
53. It is a country that has an image of an advanced country.							
54. It is a country that has a nice environment for dairy products.							
55. It is a country that has high dairy production standards.							

56. It is a country that has high quality dairy products.							
57. It is a country that is prestigious.							

Referring to Question 8 above, answer the following questions:

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
58. I would love to recommend the dairy brands from my preferred country-of-origin. to my friends.							
59. I will not buy others if the dairy brands from my preferred country-of-origin are available for purchase							
60. I will think twice to buy other brands even if they are almost the same with the dairy brand from my preferred country-of-origin.							
61. I make my purchase selection according to my favourite dairy brand's country-of-origin, regardless of price.							

Referring to Question8 above, answer the following questions:

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
62. The Dairy products from my preferred country-of-origin are of very good quality.							
63. The dairy products from my preferred country-of-origin are safe.							
64. The dairy products from my preferred							

country-of-origin taste good.							
65. The dairy products from my preferred country-of-origin are nutritious.							
66. The dairy products from my preferred country-of-origin are trustable.							

Referring to Question8 above, answer the following questions:

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
67. I can recognize the dairy brands from my preferred country-of-origin among other competing brands.							
68. I am aware of the dairy brands from my preferred country-of-origin.							
69. Some of the characteristics of the dairy brands from my preferred country-of-origin come to my mind quickly.							
70. I can quickly recall the dairy brands' logo or symbols from my preferred country-of-origin.							

Referring to Question8 above, answer the following questions:

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
71. There is a reason to buy the dairy brands from my preferred country-of-origin over others.							

72. I have a clear image of the type of person who would use the dairy brands from my preferred country-of-origin.							
73. I trust the dairy companies which are from my preferred country-of-origin.							
74. The dairy brands from my preferred country-of-origin are good value for money							

Referring to Question8 above, answer the following questions:

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
75. Even if another brand has the same features as my brand, I would still prefer to buy the dairy brands from my preferred country-of-origin							
76. If another brand is not different from the dairy brands from my preferred country-of-origin in any way, it still seems smarter to purchase my brand.							
77. Even if there is another brand as good as my brand, I would still prefer to buy my brand.							
78. Compared to other dairy products that have similar features, I am willing to pay a higher price for the dairy brands from my preferred country-of-origin.							
79. The dairy brands from my preferred country-of-origin are different from other							

brands.							

Section C

80. Your Gender

	select
Female	
Male	

81. Your Age:

	select
18-29	
30-39	
40-49	
50-59	
60 and more	

82. Your education background

	select
Primary	
Secondary (Junior)	
Secondary (senior/vocational)	
Diploma	
Bachelor	
Master	
Doctorate	

83. Your annual household income (per capita) before tax (RMB):_____

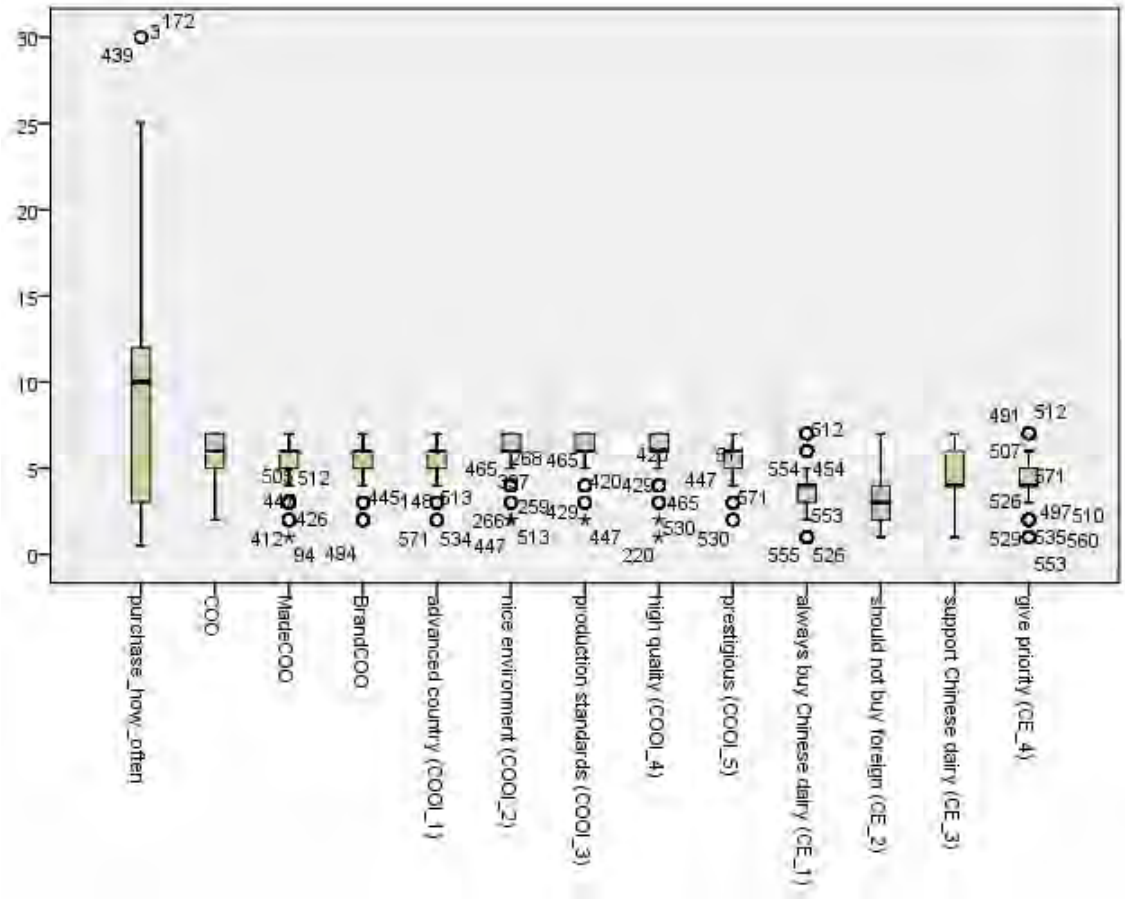
	select
12999 or less	
13000 - 24999	
25000 - 39999	
40000 - 69999	
70000 and more	

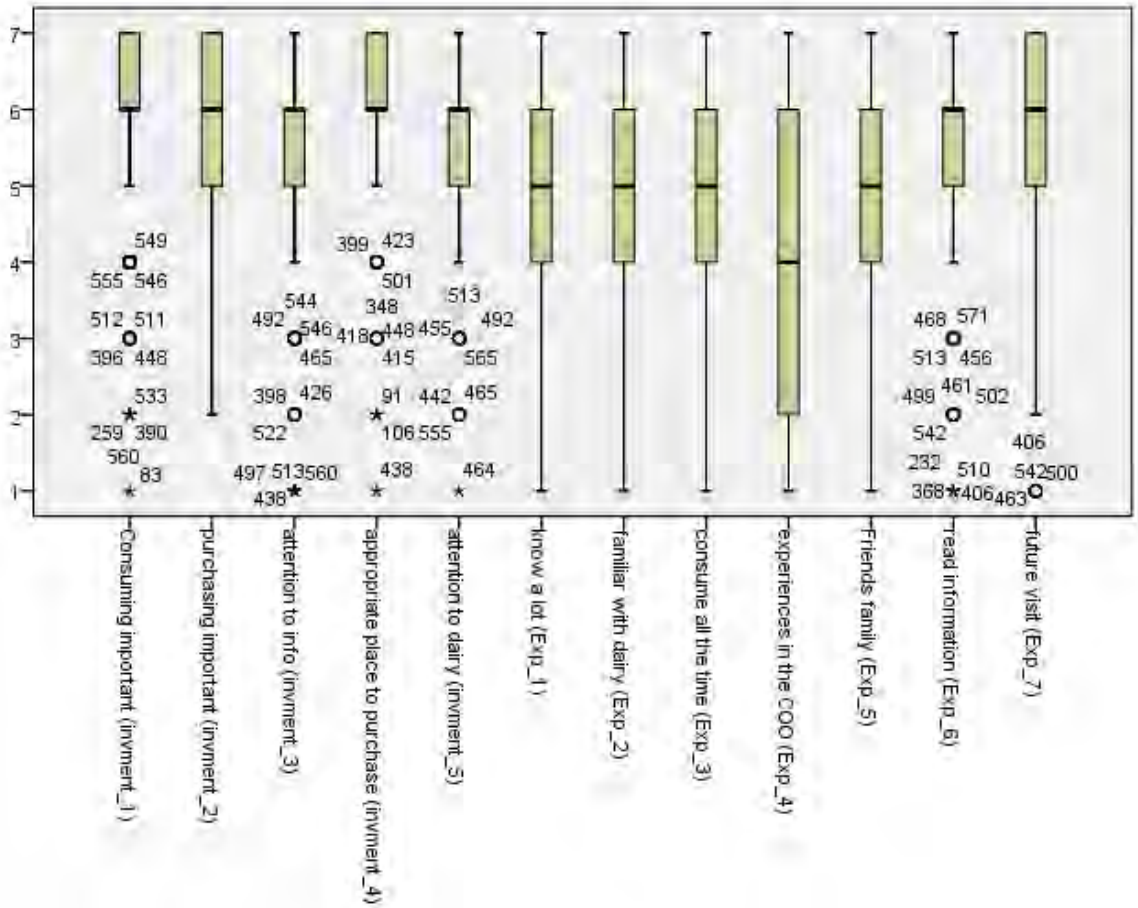
84. How many infants or toddlers (AGE<6) do you have in your family: _____

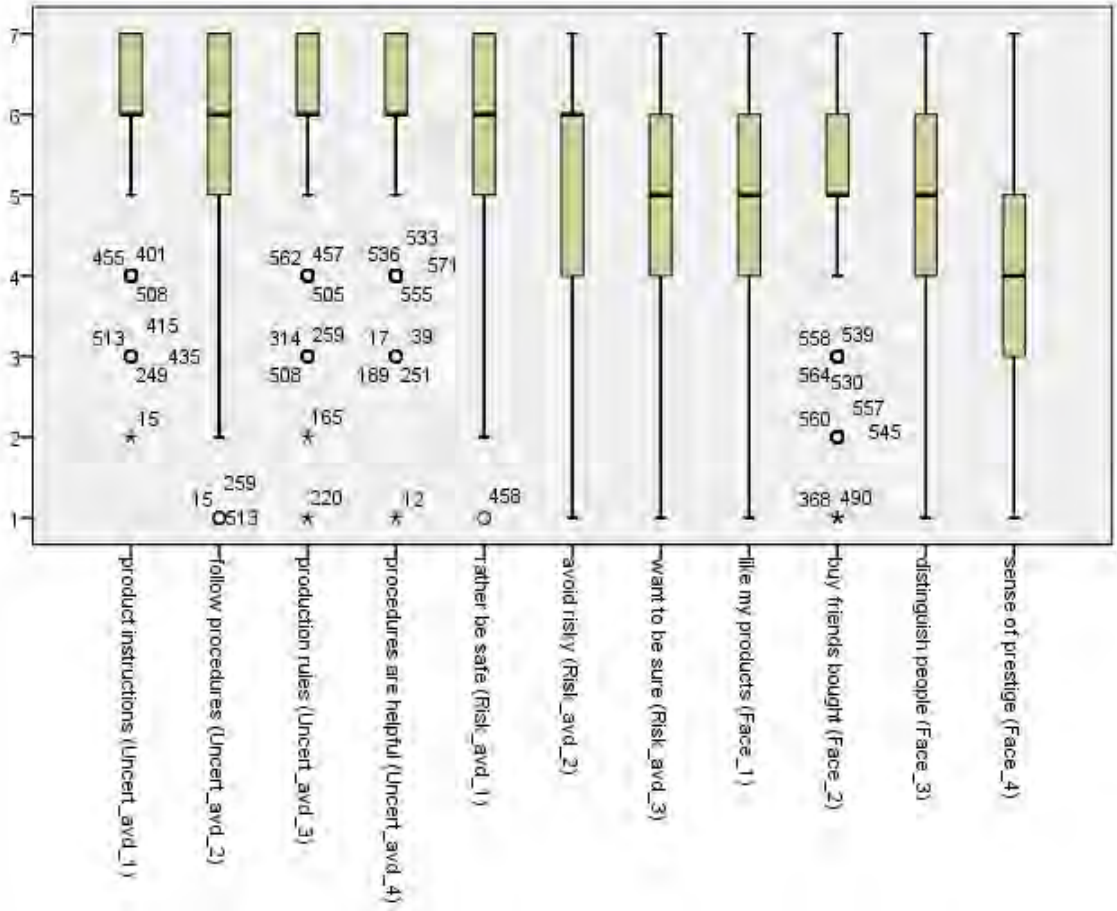
	select
0	
1	
2 or more	

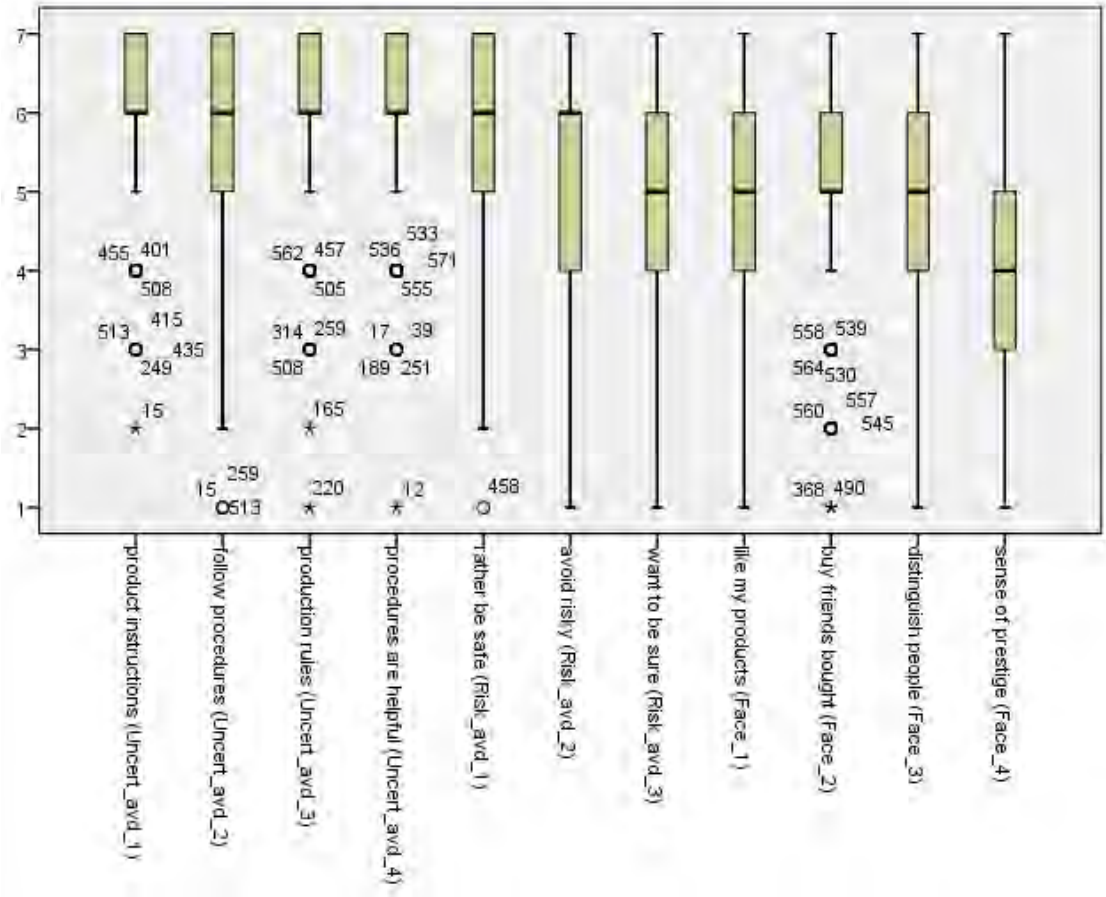
85. You live in ____ (city name)

Appendix B: The results of the boxplot analyses for outliers




future visit (Exp_7)
read information (Exp_6)
Friends family (Exp_5)
experiences in the COO (Exp_4)
consume all the time (Exp_3)
familiar with dairy (Exp_2)
know a lot (Exp_1)
attention to dairy (invment_5)
appropriate place to purchase (invment_4)
attention to info (invment_3)
purchasing important (invment_2)
Consuming important (invment_1)


sense of prestige (Face_4)
distinguish people (Face_3)
buy friends bought (Face_2)
like my products (Face_1)
want to be sure (Risk_avd_3)
avoid risky (Risk_avd_2)
rather be safe (Risk_avd_1)
procedures are helpful (Uncert_avd_4)
production rules (Uncert_avd_3)
follow procedures (Uncert_avd_2)
product instructions (Uncert_avd_1)


sense of prestige (Face_4)
distinguish people (Face_3)
buy friends bought (Face_2)
like my products (Face_1)
want to be sure (Risk_avd_3)
avoid risky (Risk_avd_2)
rather be safe (Risk_avd_1)
procedures are helpful (Uncert_avd_4)
production rules (Uncert_avd_3)
follow procedures (Uncert_avd_2)
product instructions (Uncert_avd_1)
7
6
5
4
3
2
1
455 401
508
513 415
435
249
15
15 259
513
562 457
505
314 259
508
165
220
536 533
571
555
17 39
189 251
12
458
558 539
564 530
560 557
545
368 490

Appendix C: Skewness and Kurtosis Test Results

Variables	N	Mean	Std. Deviation	Skewness		Kurtosis	
				Statistic	Std. Error	Statistic	Std. Error
COO	573	5.624	1.062	-0.831	0.102	0.315	0.204
CI	573	5.932	0.752	-1.029	0.102	1.248	0.204
CE	573	3.890	1.131	-0.018	0.102	0.175	0.204
CA	573	4.472	1.507	-0.512	0.102	-0.460	0.204
PI	573	5.790	0.786	-0.700	0.102	0.250	0.204
PE	573	5.000	0.957	-0.331	0.102	-0.158	0.204
UA	573	6.060	0.727	-0.938	0.102	1.128	0.204
RA	573	5.422	0.990	-0.804	0.102	0.772	0.204
FC	573	4.641	1.039	-0.382	0.102	-0.111	0.204
BL	573	5.168	0.874	-0.242	0.102	-0.107	0.204
PQ	573	5.734	0.852	-0.695	0.102	0.250	0.204
BA	573	5.142	1.007	-0.639	0.102	0.742	0.204
BAS	573	5.352	0.845	-0.442	0.102	0.269	0.204
BEQ	573	5.051	1.008	-0.391	0.102	-0.107	0.204
PF	573	8.280	5.769	0.578	0.102	0.029	0.204

Note. The skewness and kurtosis test results include the following variables:

CI: Country Image, CE: Consumer Ethnocentrism, CA: Consumer Animosity, PI: Product Involvement, PE: Product Experiences, FC: Face Consciousness, RA: Risk Avoidance, UA: Uncertainty Avoidance, PF: Purchase Frequency, COOI: Country-of-Origin Importance, PQ: Perceived Quality, BL: Brand Loyalty, BA: Brand Awareness, BAS: Brand Association, BEQ: Brand Equity

Appendix D: Interview Protocol

The country-of-origin effects in the Chinese dairy market

Information Sheet

What is this research about?

The aim of this research project is to explore the country-of-origin effects in the Chinese dairy market. Your participation in this project will help to generate valuable insights and contribute in the improvement of the country-of-origin theory and marketing practices in the Chinese dairy market.

Ethics Committee Clearance

This project has been approved by the Committee for Ethics in Human Research of the CQUniversity. The approval no. is H115/12-278.

Who can participate in individual in-depth interviews?

In general, the persons (over 18 years of age) who have purchased dairy products in the last 12 months are eligible to participate in this valuable research project.

How can I participate in individual in-depth interviews?

The informants are asked about their experiences and perceptions related to dairy products purchases. All of the informants are encouraged to express from an independent viewpoint. There are no right or wrong answers.

How does this research maintain respondents' confidentiality/anonymity?

Since this interview does not ask your name and other personal identifications, your identity remains completely unknown. All the information provided by participants will be kept confidential.

What are your rights?

Your participation is completely voluntary. You are free to withdraw from participating in this interview at any time. Any participant experiencing distress arising from this interview is encouraged to withdraw from participation. You are free to express your interest in the overall results of interviews and the information of subsequent studies in this research project

Data Storage

The information will be stored in a locked filing cabinet in the researcher's office. Any computer storage will be on a password computer. This information will be kept for a minimum of 5 years and then destroyed.

Who to contact for more information?

If you have any query about this research project, please contact:

Researcher: Mr Rongbin YANG
E–mail: rongbin.yang@cqumail.com

For local contact:
Prof Huayuan Jiang
E-mail: Jianghuayuan203@sohu.com

For lodging a complaint:
E-mail: ethics@cqu.edu.au

CONSENT FORM

I consent to participation in this research project and agree that:

1. An Information Sheet has been provided to me that I have read and understood,

2. I understand that I have the right to withdraw from the survey at any time without penalty,

3. I understand that all the information provided will be kept confidential. This survey will produce only total results since this interview does not ask my name and other personal identifications,

4. I agree that I am providing informed consent to participate in this project.

Signature:

Date:

CQUHREC clearance number:H115/12-278

Appendix E: Published or Accepted Journal Papers Related to This Thesis

Received: 7 December 2016 | Revised: 25 September 2017 | Accepted: 8 October 2017
DOI: 10.1111/ijcs.12403

ORIGINAL ARTICLE

WILEY International Journal of Consumer Studies

An investigation into the perceptions of Chinese consumers towards the country-of-origin of dairy products

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Abstract

The dairy incident in 2008 influenced Chinese residents' attitudes towards domestic and foreign brands in the market. This paper highlights the strong consumer perceptions existing in the Chinese dairy market towards the country of origin of dairy products. Chinese residents generally believe dairy products from foreign countries are superior than those from China. A new theoretical framework is developed to explore the driving factors of country-of-effects and its corresponding impacts. Consumers' image of different countries and national stereotypes, consumer ethnocentrism and animosity, product familiarity and experience, product involvement and some cultural value differences were found to drive country-of-origin effects. These effects directly impact on consumer's perceived quality, brand awareness, brand association and loyalty towards the related goods in the market, then influence the brand equity of products from different countries. This study provides a better understanding of country-of-origin effects on consumer behaviour, and will help relevant domestic and foreign firms improve their business strategies in China.

KEYWORDS
baby formula scandal, consumer behaviour, China, country-of-origin effects, dairy market brand

1 | INTRODUCTION

Dairy is one of the main foods for human beings. In China, the growth in resident income and population, urbanisation, changes in diets, the development of a modern dairy industry and the progress of modern retailing channels have been promoting the consumption of dairy products. Dairy consumption in China enjoyed a dramatic leap from less than 5 kg per capita to over 20 kg per capita from 1990 to 2006 (Zhang, Bai, Lohmar, & Huang, 2010).

Although the Chinese dairy industry has progressed in terms of branding, establishment of modern marketing channels and the proper certification by various government safety programs, Chinese dairy products were not as reliable as they appeared (Zhang et al., 2010). In August 2008, Chinese dairy consumers were shocked that melamine (an industrial chemical) was detected in various domestic dairy products after kidney diseases were linked to dairy consumption. As a result, an estimated 300,000 Chinese residents were involved in this incident, which include over 54,000 hospitalisations and six infant deaths (Qiao, Guo, & Klein, 2010; Zhang et al., 2010).

Nevertheless, the dairy scandal was only one of a series of food safety issues that scandalised China in recent years. These include food poisoning, risky dyes and additives in food commodities, fraudulent products and sales of food beyond the expiration date (Qiao et al., 2010). The Chinese consumers' confidence in the domestic dairy industry plunged and consumption of Chinese dairy products dropped after the scandal. This resulted in significant financial losses in the Chinese domestic dairy industry in 2008 (Qiao et al., 2010). In contrast, the trend of Chinese consumers favouring foreign dairy products became more evident. In recent years, global media reported the continual shortage of dairy products in retailers of some particular developed countries and regions including Australia, New Zealand, Europe and Hong Kong, due to family and friends living overseas sending dairy products to China. This phenomenon resulted in the laws and acts for the restriction of dairy product purchase in some regions (Hong Kong Customs and Excise Department, 2013).

A few studies have been conducted on the change in Chinese consumers' decision-making for dairy products after the melamine scandal in 2008. Most of the studies conducted in the years immediately after 2008. Some found that the Chinese consumers' preference on domestic dairy brands recovered, while other researchers emphasised that the Chinese dairy consumers are still concerned about the safety of Chinese milk products (Qiao et al., 2010; Wang, Mao, & Gale, 2008;

Zhang et al., 2010). These studies did not reach agreement on how Chinese consumers perceive dairy products with domestic or foreign country-of-origin.

Previous studies have demonstrated that country-of-origin (COO) is an important factor for consumers to evaluate product quality in their purchase decision-making process (Li, Yang, Wang, & Lei, 2012; Yu, Lin, & Chen, 2013). The application of COO studies is not only found in developed countries such as Spain (Jiménez & San Martín, 2010), France, Germany and USA (Hoffmann, Mai, & Smirnova, 2011), but also in developing countries such as Turkey (Cilingir & Basfirinci, 2014) and China (Li et al., 2012). From the Chinese market perspective, the COO effects have been discussed in various product categories such as cars (Wang & Yang, 2008), clothes (Wu & Delong, 2006; Zhang, 1996) and household electrical appliances (Zhang, 1996). However, there is an absence of research on the COO impact on Chinese dairy consumers. Moreover, previous COO studies tended to limit on partial factors (for example, consumer ethnocentrism) which can drive the COO effect (Ang et al., 2004; Klein, 2002; Shimp, Dunn, & Klein, 2004; Shin, 2001). Other studies have tested partial impacts of COO effects (for example perceived quality) on consumer behaviour (Insch & Mcbride, 2004).

This paper aims to develop a more comprehensive model to explore the key variables explaining the importance attributed to COO and brand equity in the Chinese dairy market.

2 | LITERATURE REVIEW

2.1 | Definition of country-of-origin

A product's COO is a type of crucial information cue, which can affect consumers' perceptions, product evaluation and preference to foreign products, thereby influencing their acceptance of imported products (Ahmed & d'Astous, 2001; Roth & Romeo, 1992; Schooler, 1965). Despite the wide range of debate on the precise definition of COO, the meaningful COO of a product depends on how the company communicates it and how consumers perceive it. A product's COO can be communicated in various approaches. For example, it can be communicated through the use of labels such as 'Made in ...' or to the use of brand or trademark name that contains a geographic reference. This communication strategy can influence consumers' perception of a product's COO. Therefore, a more practical approach to study on COO effect should analyse the COO from the consumers' perception perspective (perceived COO) rather than the product perspective.

2.2 | The effects of country-of-origin

Researchers have defined COO effects from various perspectives and the concept of the COO effect effectively explains why some consumers believe some products from a specific country are superior to those from other countries (Yang, Ramsaran, & Wibowo, 2016). Several researchers underline the effect of COO on consumers' product evaluations by the use of COO as a cognitive information cue (Frewer, Risvik, & Schifferstein, 2013). These studies suggest that COO has an effect on consumers' purchase intention.

However, Paul and Dasgupta (2010) argue that this effect may be indirect. They conducted a study to identify the effect of COO image (COOI) as an antecedent to brand equity. The study showed that can indirectly influence the overall brand equity of the related products. The indirect impacts are mediated by four factors namely 'brand loyalty', 'brand association', 'brand awareness' and 'perceived quality' respectively.

> Brand loyalty refers to 'a deeply held commitment to re-buy a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour' (Paul & Dasgupta, 2010).
>
> Brand association means 'anything linked in memory to a brand' (Aaker, 1996; Paul & Dasgupta, 2010).
>
> Brand awareness is considered as 'the strength of a brand's presence in the consumer's mind from recognition to recall to top of mind to dominant' (Aaker, 1996; Paul & Dasgupta, 2010).
>
> Perceived quality can be defined as 'the consumer's subjective judgment about a product's overall excellence or superiority' (Paul & Dasgupta, 2010; Zeithaml, 1988).
>
> Brand equity can be concluded as 'the value that is added by the brand's name and/or other intangible attributes of the product, which can act as drivers of consumer choice of products' (Aaker, 1996; Paul & Dasgupta, 2010).

Accordingly, Paul and Dasgupta (2010) introduced a conceptual model to illustrate the indirect impacts of COOI on brand equity. This is shown in Figure 1. F1

2.3 | The drivers of country-of-origin effects

2.3.1 | Country image and national stereotypes

The conceptual model developed by Paul and Dasgupta (2010) shows that country image is an important driver of COO effect. The image and stereotypes in individuals' perceptions work can be a cognitive factor affecting their preference in brand evaluation, particularly when the country is superior in the related product categories. For instance, consumers' preference for American products outweighs Chinese products

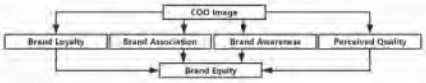

FIGURE 1 A conceptual model of indirect impacts of COOI on brand equity (Paul & Dasgupta, 2010)

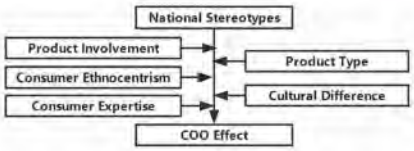

FIGURE 2 The conceptual framework of the relationship between 'national stereotypes' and COO effect (Chattalas et al., 2008)

when they hold positive images of USA and negative stereotypes of China (Diamantopoulos, Schlegelmilch, & Palihawadana, 2011). For food products, the perceived COO may be highly related to risk perceptions. Consumers are not likely to feed their infants with food products which come from a country with an unknown brand (Frewer et al., 2013).

Chattalas, Kramer, and Takada (2008) developed a model which explains the relationship between 'national stereotypes' and COO effect. It shows that the COO effect is initiated by national stereotypes, conjointly with other factors, which include 'product type', 'consumer expertise', 'cultural difference', 'product involvement' and 'consumer ethnocentrism'. The conceptual framework is shown in Figure 2.

2.3.2 | Consumer ethnocentrism

Shimp and Sharma (1987) identified consumer ethnocentrism (CE) as the views held by consumers about the adequacy and morality of purchasing any products from other countries. This concept is referred to as a phenomenon whereby some consumers are ethnocentric, and prone to discriminate products from the 'out-groups' (foreign COO) and to avoid buying foreign products considering it as inappropriate, anti-patriotism or has a potential threat to their domestic economy. As a consequence, consumers with high ethnocentrism tend to have a negative perception of the quality of foreign commodities and prefer to buy domestic products (Shimp & Sharma, 1987).

Various studies have tested the relationship between CE and COO among various countries (Evanschitzky, V. Wangenheim, Woisetschläger, & Blut, 2008; Watson & Wright, 2000; ~~Ping et al., 2012~~). Considering product types, the examination of consumers' preferences between domestic and foreign products was undertaken among a wide range of categories such as automobile, foods, TV sets and fashion wears. The conclusions of the linkage between CE and consumer preferences vary across those product categories. These studies suggest the effects of CE are product and country specific, that the CE effect for one country and one product category cannot necessarily transfer to other countries and categories.

2.4 | Product involvement

Day (1970) defined product involvement (PI) as 'the general level of interest in the object or the centrality of the object to the person's ego structure'. In Chattalas et al. (2008)'s framework, consumers' involvement and expertise are other important factors affecting COO effect. This argument was also supported by Cilingir and Basfirinci (2014), who concluded that consumers' product high involvement and

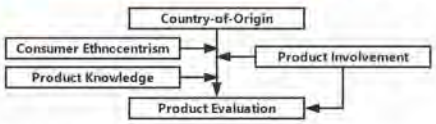

FIGURE 3 A framework of COO effect in product evaluation (Cilingir & Basfirinci, 2014)

knowledge, associated with CE, moderate the COO effect in product evaluation. This framework is presented in Figure 3.

There is a debate about how PI influences COO importance. A few studies on COO (~~Han, 1989;~~ Maheswaran, 1994) show that COO information is more important to those who are buying lower-involvement products, as COO is a more salient and comprehensible reference for a purchase decision (such as the 'MADE IN AUSTRALIA' label on packages) (~~Han, 1989;~~ Maheswaran, 1994). The negative correlation between PI and COO importance is supported by ~~Gürhan-Canli and Maheswaran (2000) and~~ Verlegh, Steenkamp, and Meulenberg (2005) who concluded that 'country of origin has a greater impact on product evaluations when consumers are less motivated to process available information; for example with low involvement'. However, other researchers provided an opposite viewpoint that consumers who have higher involvement with a product would search, utilise and pay more attention to information cues of the product, such as COO (Ahmed & d'Astous, 2001; Celsi & Olson, 1988).

2.5 | Consumers' cultural difference: Collectivism/individualism

Previous studies found that COO effects can be different across various countries and different consumers' cultural values (Chattalas et al., 2008; Narayana, 1981). These cultural values may differ in terms of collectivism/individualism. Generally, consumers with higher collectivism (lower individualism) tend to consistently prefer domestic to foreign products (Chattalas et al., 2008; Gürhan-Canli & Maheswaran, 2000). By contrast, a more collectivistic consumer's self-construal tends to be interdependent. The independence with others is valued and it is believed that the in-group interests are less important than personal goals (Shavitt, Lalwani, Zhang, & Torelli, 2006). The above studies focused on collectivism/individualism as the dimension for examining consumers' cultural differences. However, other studies suggested that consumers' cultural difference can be tested with other concepts, for example face consciousness (Lin, Xi, and Lueptow, 2013; Qian, Abdur Razzaque, and Ah Keng, 2007; Zhou & Hui 2003), risk and uncertainty avoidance (Lim, Hu, Maynard, & Goddard, 2014; Vogt & Fesenmaier, 1998).

2.6 | Consumers' cultural difference: Face consciousness

Batra, Ramaswamy, Alden, Steenkamp, and Ramachander (2000) argue that the 'western' COO has a remarkably positive impact on brand attitudes. This is because consumers in developing countries consider

Western products as being 'modern' and 'successful'. For example, consumers in China prefer international brands to domestic brands to express their social status, social conformity and wealth (Batra et al. 2000; Wang & Yang, 2008). Qian et al. (2007) and Lin et al. (2013) describe this phenomenon as the 'Mianzi' or 'Face-gaining' purchase, particularly when the product is consumed publicly or given as a gift. Face-gaining is 'the social esteem obtained from others; or the public image allowed and permitted by others'. Compared with Western consumers, Chinese people pay more attentions to others' views and the social effects caused by their own consumption, and the so-called 'face' is the manifestations of such social effect (Shi, Wen, & Fan, 2012).

2.7 | Consumers' cultural difference: Risk and uncertainty avoidance

COO effects can vary when individuals have different attitudes towards risk and uncertainty. Those who are averse to risk and uncertainty tend to engage in risk and uncertainty reducing strategies, such as looking for quality assurance (Sweeney, Soutar, & Johnson, 1999) and searching extensively for information (Vogt & Fesenmaier, 1998). Risk and uncertainty are different concepts in terms of the probabilities of their outcomes. In some cases, individuals with higher uncertainty avoidance may engage in a higher risk choice in order to reduce the perceived uncertainty (Lee, Garbarino, & Lerman, 2007).

According to Rogers (1995: p. 6), 'uncertainty implies a lack of predictability, of structure, of information'. When a consumer encounters a new product or brand, they may be faced with some level of uncertainty where they may use COO information in two ways to reduce the perceived uncertainty. One is to choose domestic products as these tend to seem more familiar. The other is to purchase products with favourable COO image. By contrast, people of low uncertainty avoidance are relatively more likely to tolerate the ambiguity and pursue novelty and convenience (Lee et al., 2007).

2.8 | Consumer's product knowledge: Direct experience

When consumers have limited direct knowledge of a product, they tend to use COO information as an indirect aid to evaluate a product's performance (~~Laroche, Tomiuk, Bergeron, & Barbaro-Forleo, 2002~~). For example, a consumer may be unfamiliar with a particular dairy product from Australia, but have a perception that Australian products generally have high quality. Therefore, based on the COO and the consumer's belief that a general feature of Australian products is their greater quality, the consumer is likely to make a positive evaluation of the unfamiliar Australian dairy product. This viewpoint is also supported by Johansson, Douglas, and Nonaka (1985), Wu and Shaffer (1987), Insch and Mcbride (2004), ~~Thompson (2005)~~ and Phau and Suntornnond (2006).

Consumers experience also provides product knowledge. Physical interactions with a product create direct experience while external presentations (such as advertisements) provide indirect experience (Hoch & Ha, 1986; Kempf & Smith, 1998). Obviously, product usage experience is one type of direct experience that involves tangible and intrinsic messages of product attributes. A study conducted by Wu and Shaffer (1987) provided the evidence that direct experience develops sturdier, more comprehensible brand attitudes and builds stronger links between present and future purchase behaviour. For instance, when a consumer has a trial of a product, such as food, they tend to show a higher level confidence on the product than from reading advertisements (Hamilton & Thompson, 2007).

2.9 | Consumer's product knowledge: Indirect experience

Although previous studies were inclined to emphasise the direct product experiences, indirect product experiences, such as reading advertisements or seeing product displays or comments, can also play a great role in consumers' product choice. For example, wine tours demonstrated the positive influences of wine tourism experience on consumers' products' COO preference and purchase intention. In addition, Bowe (2013) believed that tourists who have winery experiences in Australia are prone to choose Australia as a more preferential COO for wines and seafood than the other nations compared to those who have not visited. The findings of the study suggest that consumers' familiarity with a country can contribute to their positive evaluation of products from that country. These studies generally examine the consumers who have actually visited country. However, the halo effect of COO image may also affect those who does not have any actual experience in the related country (Yang et al., 2016). For instance, Lee and Lockshin (2011) demonstrated that the tourism destination image can indirectly influence consumer's COO preference via their product COO beliefs whereby the positive tourism destination image can come from the word-of-mouth of the consumers' friends and/or family members who have visited the related country.

2.10 | Consumer animosity

In the studies conducted by Chattalas et al. (2008) and Cilingir and Basfirinci (2014), the impact of consumer animosity (CA) on COO effects was not considered. However, a large number of researches have demonstrated that this concept should be applied in consumer studies. The concept of CA was initially introduced and defined by Klein, Ettenson, and Morris (1998). Recently, this construct received more attention in consumer behaviour studies in both intra-national and international marketing settings (Klein et al., 1998; Leong et al., 2008; Tian & Pasadeos, 2012). Consumers animosity can influence consumers' attitude towards all products from a particular country despite perceived quality. Thus, consumers who hold any animosity would avoid purchasing any products related to an offending nation, even though the quality of products with that origin was not undervalued. This argument was also supported by Buss (1961) and ~~Spielberger (1991)~~. Likewise, Shoham, Davidow, Klein, and Ruvio (2006) suggested that CA negatively influences consumer's behaviour in terms of both willingness to purchase and judgments of product quality.

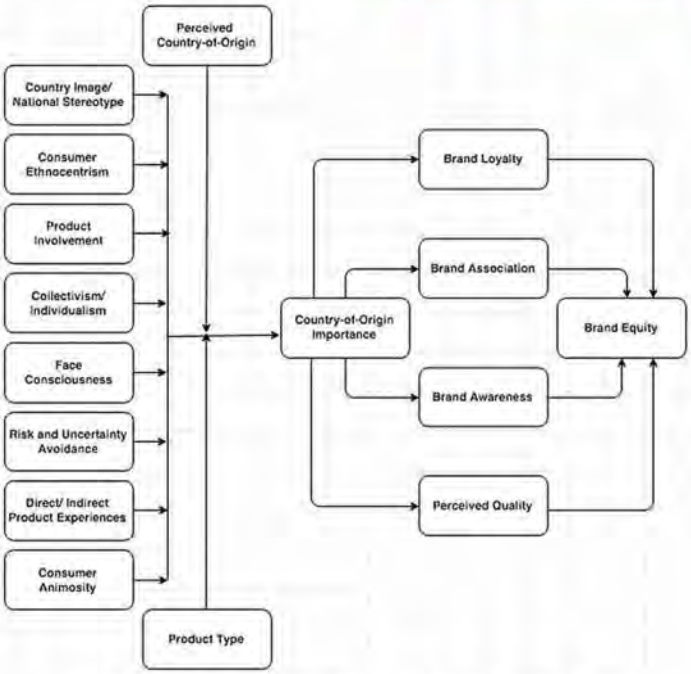

FIGURE 4 A proposed new conceptual framework for the COO effects

3 | METHODOLOGY

This study introduced a few new driving factors: consumer animosity, cultural difference (face consciousness, risk and uncertainty avoidance) and expanded product knowledge into two groups (direct knowledge and indirect knowledge). Although, each individual driving factor and impact of the COO effects has been examined in various product categories and countries by previous studies, there is still an absence of a comprehensive model for this concept. A new conceptual framework is created in this study for exploring COO effects, which is shown in Figure 4.

Based on this framework, a few interview questions were developed for conducting an empirical study to explore the key variables of COO effects, which are shown in Table 1. This study employed an exploratory approach in order to explore the driving factors and effects of COO, and the proposed model by using in-depth interviews. As a qualitative approach, in-depth interviews are considered to be an appropriate research method because they not only bring a deeper understanding of complex behaviour, but are practical when the key variables are not available to examine (Walsh, 2003).

The in-depth interviews were conducted in a three-week period in April 2016 with 55 residents in China who had purchased dairy products in the past 12 months. The interviewees were recruited in various locations in China, including larger-size cities (Beijing Tianjin, Nanjing and Shanghai), smaller-size cities (Hangzhou, Xiamen, Fuzhou Yangzhou and Quanzhou) and a few towns/villages near those cities. The sample size of 55 was adequate for qualitative research since 20 in-depth interviews are considered to be sufficient for qualitative research (Roller & Lavrakas, 2015; Travers, 2001). In exploratory study, a greater quantity of interviews does not consequentially provide a better understanding of related phenomena (Gaskell & Bauer, 2000). These interviews were around 60 min in length and were limited to Mandarin-speaking participants to avoid bias and loss of authenticity of meaning through translation out of other mother tongues or dialects.

The interviewer adopted a systematic random sampling method by inviting every third person passing by the reception at shopping centres. Residents of different age groups (18 and above), gender and education levels were interviewed throughout different regional levels. A summary of the demographic characteristics is presented as the Supporting Information Table S1–S7 in Appendix 1. This diversity provided

TABLE 1 Findings from in-depth interviews

Key constructs	Interview questions	Findings	Quotes from interviews
Importance of COO	Is COO an important reference for you when you choose a dairy product?	46 out of 55 (84%) interviewees agreed that COO is important when they are evaluating a dairy product.	'Yes. Because good COO means good quality of the dairy products.' (Informant 3) 'Yes. Because the Chinese dairy products are not safe.' (Informant 9) 'Yes. I prefer dairy products from a COO with better environment, such as nice grassland. They are better.' (Informant 25) 'Yes. I prefer dairy products come from developed countries. I trust them more.' (Informant 42)
Dairy product evaluation criteria	What are your concerns when purchasing milk products besides COO?	More than half interviewees claimed that safety, nutrition and taste of dairy products were important criteria.	'Safety is the most essential attribute for food products.' (Informant 22) 'My baby is willing to drink the baby formula only if it is tasty.' (Informant 8) 'Nutrition is important for health.' (Informant 5)
Country image	Which countries do you think are nice countries?	The top five countries were: Australia, US, China, UK and New Zealand.	'I like New Zealand because they are so clean!' (Informant 2) 'I like Australia because they have nice environment. US is also a great country for their advanced economy and technology.' (Informant 4) 'I like UK as they are a developed country.' (Informant 37) 'Of course China, because it is my country!' (Informant 34)
	Which countries do you think makes good products?	22 out of 55 (40%) interviewees chose Germany, followed by Australia, Japan and US.	'I think it is Germany, because German people are rigorous and precise.' (Informant 33) 'Australia and Japan. I think they have better supervision systems for production.' (Informant 22) 'I think Germany and USA companies have better quality control management.' (Informant 3)
Consumer ethnocentrism	Do you think we should give priority to domestic products when we make purchases?	21 out of 55 (38%) interviewees agreed, while 17 (31%) interviewees said no and another 17 interviewees thought 'it depends'.	'Yes, some of Chinese products are world class.' (Informant 52) 'Not really. I don't think they are reliable.' (Informant 31) 'Yes, Chinese should buy Chinese products.' (Informant 26) 'It depends on the type of product and the quality. I will not buy Chinese baby formula, they are too risky.' (Informant 44)
	Do you think China produces good dairy products?	Only 8 out of 55 (15%) informants thought Chinese dairy products are good.	'I guess they are not as good as foreign ones. You know about the scandal, right?' (Informant 52) 'I don't think so. Chinese dairy manufacturers use bad standards of production, they just want profits.' (Informant 26) 'No! Because of the bad milk source, polluted air and too many additives.' (Informant 40)
Consumer animosity	Do you have any countries in mind that you dislike?	25 of 55 (45%) interviewees claimed they did not have any. 14 of 55 (25%) interviewees disliked Japan. African and Middle Eastern countries were disliked by 5 (9%) interviewees.	'Japan, because they were, are and will always be our enemy.' (Informant 37) 'Japan, because they invaded us before.' (Informant 33) 'I don't like African countries as I think they are poor. I don't like Middle Eastern either sincethey are having wars.' (Informant 16) 'Those are in Africa, because I think they have a dirty environment.' (Informant 42)
	Do you try to avoid purchasing products from those countries? For what kind of products?	30 out of 55 (55%) of informants reported that they will try to avoid buying products from the disliked countries.	'I will avoid buying Japanese products.' (Informant 33) 'I won't buy food and cosmetic products from those countries as their environment is dirty.' (Informant 42) 'I won't purchase any products from Japan as long as I know they are made in Japan.' (Informant 28)

(Continues)

TABLE 1 (Continued)

Key constructs	Interview questions	Findings	Quotes from interviews
	Do you think milk products are very important in your everyday life?	32 out of 55 (58%) of informants agreed.	'I think dairy products are important because they are my family's staple food and they are important for health.' (Informant 3) 'They are very important because my baby has milk everyday.' (Informant 14) 'I think milk is more important for infants and children, not for me.' (Informant 16)
Product Involvement	What things would you do if you want to find good milk products?	As for what people will do when they are highly involved with dairy products, most of them believed in finding the proper channels or buying directly from overseas (Daigou). Checking brands and COO, and looking for more information from the internet or word-of-mouth were also reported.	'I will try to find a good Daigou, and look for good brands.' (Informant 10) 'I will try to buy foreign dairy products.' (Informant 30) 'I will buy from big supermarkets I trust or Daigou from my family members who live in Australia.' (Informant 28) 'I will look for the information and comments on the producer from the internet and other people.' (Informant 50)
	Do you think you know about milk products?	Only 9 of 55 (16%) informants reported they knew about milk products.	'I do not have much knowledge about dairy products as I only just started purchasing dairy products since I had my baby.' (Informant 27) 'I don't think I know about dairy products much, I started drinking milk a couple years ago.' (Informant 54) 'I guess I know little about dairy products, I started buying them since my child was born.' Informant 50) '
Product knowledge and experience	Have you visited any foreign countries? Do you have any friends and/or family members who visited overseas countries before?	We found people are more likely to favour the products from a country which they (or even if their friends or family) had visited.	'I visited Australia and Singapore before. One of my family members is studying in Australiaat the moment.' 'I think dairy products from Australia and New Zealand are good.' (Informant 53) 'I haven't visited any foreign countries yet, but my uncle used to work in the USA and Japan.' 'I think American and European products are better.' (Informant 48) 'I recently visited New Zealand, Australia and Hongkong.' 'I prefer dairy products from New Zealand.' (Informant 2)
Cultural differences (Collectivism)	Will you try to buy the brands that people around you normally buy?	29 out of 55 (53%) informants agreed, and 9 (17%) informants reported 'It depends'.	'Yes. I prefer to follow other people's choices. They are more reliable.' (Informant 16) 'Yes. Word-of-mouth is important.' (Informant 34) 'It depends. For example, if I purchase expensive or important products, I rely on other people's opinions.' (Informant 55)
Cultural differences (Risk avoidance)	Would you purchase a product with potential risk?	The majority of informants (40 out of 55 or 73%) reported they prefer to avoid risks.	'I don't like risks because the cost can be huge.' (Informant 20) 'No. I want to avoid the loss.' (Informant 32) 'It depends. I won't buy risky products if they are important or expensive.' (Informant 30)
Cultural differences (Uncertainty avoidance)	Would you want to be sure before you purchase anything?	The majority of informants (38 out of 55 or 69%) did not like uncertainty.	'Yes. I will try to look for more information and references.' (Informant 32) 'It depends on how important and expensive the product is.' (Informant 54) 'Yes. I will ask for other people's recommendation.' (Informant 37)
Cultural differences (Face-gaining/saving/mianzi)	Do you think 'Face Saving/Face Giving' is very important when you are choosing products?	The majority of informants (43 out of 55 or 78%) disagreed that 'Face saving/Face Giving' was important when choosing products.	'No. I care about quality.' (Informant 40) 'No. Quality is more important for dairy products.' (Informant 52) 'No. Mianzi is not related to good dairy products.' (Informant 10)
Country-of-origin preference	Is there any country-of-origin that you prefer when you are choosing milk products?	The top COOs reported by informants were Australia (18/55 or 33%), New Zealand (15/55 or 27%), Germany (9/55 or 16%), Netherland (8/55 or 14.5%) and US (8/55 or 14.5%).	'Normally I prefer dairy products made in Australia and New Zealand.' (Informant 4) 'I trust dairy products from US, Germany, New Zealand.' (Informant 17) 'I prefer Australia and New Zealand.' (Informant 55) 'I like those made in Australia and Netherlands.' (Informant 9)

(Continues)

TABLE 1 (Continued)

Key constructs	Interview questions	Findings	Quotes from interviews
Brand Association	When thinking about milk products, which country do you have in your mind?	The most frequently reported answers from informants were: New Zealand (22/55 or 40%), Australia (19/55 or 35%), Netherlands (10/55 or 18%), Germany (6/55 or 11%) and US (5/55 or 9%).	'I will say New Zealand and Australia because of the beautiful grassland in these countries.' (Informant 7) 'New Zealand, Australia, Netherland, Germany, they have a good environment and provide quality products.' (Informant 3) 'Germany and US. They are more reliable.' (Informant 17)
Brand Awareness	Can you name some milk brands from your preferred COO?	34 out of 55 (or 62%) interviewees were able to provide examples of dairy brands from their preferred COO.	'Devondale is a famous Australian brand.' (Informant 54) 'I like the milk powder from New Zealand and I know Fonterra is a very famous manufacturer in this country.' (Informant 2) 'I know HIPP and Aptamil are brands made in Germany.' (Informant 29)
Brand Loyalty	Will you buy other dairy brands if dairy brands from your preferred country-of-origin are available for purchase?	The majority of informants (40/55 or 73%) claimed they did repeat purchase of particular brands and stayed loyal to a brand.	'I will keep buying brands I trust and it is not necessary for me to try other brands.' (Informant 21) 'If I am able to have a channel to buy the dairy products from a reputable country, I will keep on buying it.' (Informant 26) 'I only buy baby formula from Australia and New Zealand because my baby consumes milk and I want to give her the best.' (Informant 51)
Perceived quality	Which countries do you think produces good dairy products?	The most frequent answers were Australia (15/55 or 27%), New Zealand (15/55 or 27%) and Germany (10/55 or 18%).	'I think German and Australian dairy products are good.' (Informant 45) 'Australian dairy products are famous.' (Informant 49) 'New Zealand makes very good baby formula.' (Informant 50)
Brand Equity	If another brand has the same features as your brand, would you prefer to buy the dairy brands from your preferred country-of-origin, if even they are more expensive?	The majority of informants (43/55 or 78%) claimed they were willing to pay at least 10% additional price for their preferred COO.	'I guess I will pay 50% additional price, because drinking safe milk is very important for health.' (Informant 22) 'Yes 10% because they have better milk source.' (Informant 8) 'Yes, about 20% I think because they are more reliable.' (Informant 21)

the researchers with various insights into the views of the dairy consumers.

To analyse the data obtained from the in-depth interviews, this study utilised the iterative processing method developed by Long (1993). The coding and labelling procedures were used to verify and obtain a well-grounded interpretation of this study. The data were then compared with the information found in the literature on COO effects to check whether they confirmed the existing literature (Long, 1993; Gerrish & Lacey, 2010; Ban & Ramsaran 2017).

4 | FINDINGS

The outcome of interviews shows that the majority of informants purchased yogurt, liquid milk and baby formula from Supermarket/department store and/or buy directly from overseas (Daigou). Most of them normally purchased one or two types of dairy products and less frequently than once a week. 46 out of 55 (84%) interviewees claimed that the COO is an important reference when choosing a dairy product. Besides COO, more than half of the interviewees claimed safety, nutrition and taste of dairy products were important criteria.

The result obtained from the interviews suggested that COO was an important factor in dairy purchasing behaviour. Interviewees selected Australia, US, China, UK and New Zealand as their top five favourite countries. 22 out of 55 (40%) interviewees agreed that Germany, Australia, Japan and USA are the countries that produce quality products. As for the preferred COO for dairy products, the top COOs reported by informants were all developed countries, such as Australia (18/55 or 33%), New Zealand (15/55 or 27%), Germany (9/55 or 16%), Netherland (8/55 or 15%) and US (8/55 or 15%). This shows the correlation between country image and consumer's COO preference.

Second, Chinese consumers' preference for dairy products from developed countries was also supported by the absence of consumer ethnocentrism in the Chinese dairy market. Thirty-eight percent of informants agreed that Chinese consumers should give priority to domestic products when they make purchases, while 31% disagreed and another 31% answered 'it depends'. However, only 8 out of 55 (15%) informants thought Chinese dairy products are good. Some of those who claimed they want to support Chinese products in the last question however felt negative towards Chinese dairy products.

Third, in relation to consumer animosity, 14 of 55 (25.5%) interviewees disliked Japan. African and Middle Eastern countries were also disliked by 10% of interviewees. More than half (30/55) of informants reported that they will try to avoid buying products from the disliked countries. This is consistent with the finding that these countries were

not reported as consumer's preferred COO. Therefore, consumer animosity was found to influence consumers' COO preference and purchase decision.

Fourth, 32 out of 55 (58.2%) of informants claimed milk products are very important in their everyday life. This implies the high level of consumer involvement for dairy products. As for what Chinese consumers will do when they are highly involved with dairy products, most of them believed in finding appropriate channels or buying directly from overseas (Daigou). In terms of the interviewees' knowledge and direct experience of dairy products, only 9 of 55 (16%) informants reported they were familiar with milk products. As for indirect experience, consumers were more likely to favour products from a country which they or their friends/family had visited.

Lastly, more than half of informants (29/55 or 53%) would try to purchase the brands other people around them normally buy. The majority of informants (40/55 or 73%) reported they would not purchase products with a potential risk. 38 out of 55 (69%) of dairy consumers want to be confident before they make a purchase. This explains why Chinese consumers check brands and COO to confirm the quality of dairy products. They also claimed that they did not care about 'saving face or honour' when purchasing dairy products. Therefore, Chinese consumers were found to be higher in collectivism than individualism. They portrayed a have high level of risk avoidance and uncertainty avoidance. As for 'saving face or honour,' this was not a reason why Chinese consumers preferred dairy products with foreign COO.

As for the brand association, interviewees were asked 'when thinking about milk products, which country would you have in your mind?' The most frequently reported answers informants were: New Zealand (22/55 or 40%), Australia (19/55 or 35%), Netherlands (10/55 or 18%), Germany (6/55 or 11%) and US (5/55 or 9%). This showed a consistency with the preferred COO question. Moreover, 34 out of 55 (62%) interviewees were able to provide examples of dairy brands from their preferred COO. In other words, Chinese consumers have a significant awareness of dairy brands from their preferred COO.

In addition, the majority of informants (40/55 or 73%) claimed they did repeat purchase of particular brands and stayed loyal to a brand. When interviewees were asked 'Which countries do you think makes quality dairy products?' the most popular answers were Australia (15/55 or 27%), New Zealand (15/55 or 27%) and Germany (10/55 or 18%). This was consistent with the answers reported for preferred COO. Lastly, the majority of informants (43/55 or 78%) claimed they were willing to pay at least 10% additional price for dairy products from their preferred COO. This means that brand equity was enhanced through a willingness to pay a price premium to own a brand of preferred COO.

To sum up, the outcome of the interviews highlights the COO's significant role in Chinese consumers' evaluation for dairy products. The COO effects can contribute to enhanced brand loyalty, brand association, brand awareness and perceived quality. Accordingly, it promotes customer-based brand equity. Theoretical saturation was reached after 55 interviews and for each location.

A summary of in-depth interview findings is presented in Table 1.

5 | CONCLUSION AND IMPLICATIONS

This study developed a new theoretical framework of COO effects, and conducted in-depth interviews in China. According to the qualitative analysis, COO effects were found in the Chinese dairy market. Respondents considered COO as an important criterion for choosing dairy products because of the quality and safety implications. In general, Chinese residents had a preference towards dairy products from foreign countries, particularly Australia, New Zealand, Germany, Netherlands and USA.

COO preference can firstly be attributed to country image or stereotypes in Chinese people's perceptions. The preferred COO can be linked to positive country image, such as economic, technological and environmental advantages. However, a positive country image of production is not necessarily linked to the COO preference as it can be also influenced by other factors, such as consumer animosity.

Second, consumer ethnocentrism is a factor influencing COO preference. The interviewees reported they will give priority to Chinese products, however, their attitudes were negative when it concerned dairy product purchase, because the baby formula scandal destroyed Chinese people's confidence on domestic dairy products.

Third, the high involvement of Chinese consumers to dairy products also affects COO preference, as they believe these products are important for health and an essential food for children. As a result, they will try to find proper channels (such as big retailers and 'daigou' from overseas), choose better brands and COO and look for more references when they make a purchase decision.

Fourth, Chinese consumers do not believe they have enough knowledge about dairy products. Many of them never purchased dairy products until recent years when their offspring was born. The lack of knowledge and direct experience with dairy products influences consumers to look for positive word of mouth and reviews to judge product quality. In other words, indirect product experiences can impact on COO effects.

Lastly, as for cultural differences, Chinese tend to be risk averse and uncertainty avoiders. They try to collect more information about the product in order to reduce uncertainty and avoid risks. Chinese are a collectivistic group; they believe the products purchased by other people are more reliable. However, buying western COO dairy products seem to be about safety or quality rather than the symbolic value or 'Mianzi'. This finding disagrees with previous studies which underlined the importance of 'Mianzi' for buying of western products in China.

This study found that the influence of food safety incident on the society is profound that Chinese residents lack confidence in domestic dairy industry, and prefer foreign dairy products in terms of higher brand loyalty, brand association, brand awareness and perceived quality. It also indicates that COO effects should be a significant factor, which should be considered when domestic and foreign firms develop business strategies to enhance their brand equity in China.

The current study has two main limitations. Firstly, as a qualitative research, this study has identified the various driving factors of COO effects but did not statistically examine the influence of these factors

on COO. Likewise, this study did not investigate the extent of COO's effects on consumer behaviour. In addition, the interviews were limited to the Chinese dairy market. Therefore, this study only suggests the applicability of a proposed theoretical model for the COO effects in the Chinese dairy market. Further quantitative research is required in the future to test the model. Moreover, the proposed theoretical framework for the COO effects needs further testing in other product categories and markets.

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SUPPORTING INFORMATION

Additional Supporting Information may be found online in the supporting information tab for this article. AQ6

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The consumers' country-of-origin importance and ethnocentrism in brand evaluation after the Chinese dairy scandal

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Abstract

This paper explores the impacts of the country-of-origin (COO) importance and ethnocentrism (CE) on the dairy brand evaluation by the consumers with various demographic backgrounds. The relationship between the consumers' country-of-origin importance and ethnocentrism is also examined. A sample of 573 Chinese dairy consumers was surveyed over a two-month period through a structured online questionnaire. This study finds that even if consumers report their ethnocentrism for domestic product, they do not attach importance to COO when they evaluate brands. In fact, COO importance significantly influences consumers' brand awareness, brand association, perceived quality and brand loyalty of the products from their preferred COO, which is linked to an indirect effect on the consumer-based brand equity. Therefore, a higher level CE does not necessarily contribute to the consumers' actual brand evaluation. Since previous studies on CE did not link CE with COO importance, this study suggests that future research on CE should consider the impact of COO importance to obtain more practical findings.

1. Introduction

Dairy is one of the main product categories in the food industry. The consumption of dairy products in China enjoyed a rapid promotion due to the growth in resident income and population, urbanisation, changes in diets, the development of a modern dairy industry and the progress of modern retailing channels. Specifically, dairy consumption in China soared from less than 5 kg per capita to over 20 kg per capita from 1990 to 2006 (Zhang et al., 2010). China's dairy market size reached 24.67 billion Chinese Yuan in 2014, which presented a five-fold growth since 2001 (Ministry of Commerce of China, 2015; Woolsey et al., 2010). China, in 2014, absorbed 22.2 per cent (2.051 million tonnes) of global dairy imports compared to 9.4 per cent in 2009 (Australian Dairy Industry Council 2015).

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However, this quick consumption development concealed flaws in the Chinese dairy industry, such as the reliability of Chinese dairy products. In August 2008, various Chinese domestic dairy products were detected with melamine, an industrial chemical, which was linked to the kidney diseases after dairy consumption. Consequently, this incident affected estimated three hundred thousand Chinese consumers, which included more than fifty thousand hospitalisations as well as six infant deaths (Qiao et al., 2010; Zhang et al., 2010).

In fact, this dairy incident was only one of a series of food scandals that shocked the Chinese consumers since the 21 century. These included food poisoning, risky dyes and additives in food commodities, fraudulent products and sales of food beyond the expiration date (Qiao et al., 2010). As a result, the Chinese consumers' confidence in the domestic dairy industry and consumption of Chinese dairy products dropped dramatically. This caused a remarkable financial loss in the Chinese domestic dairy industry in 2008 (Qiao et al., 2010). By contrast, the phenomenon that Chinese consumers tend to favour foreign dairy products became more obvious. In recent years, it witnessed a consistent shortage of milk products in the retailers of some particular developed countries and regions (such as Australia, New Zealand, Europe, and Hong Kong), due to the "Daigou" (an overseas person purchases the dairy products for customers in mainland China).

The Chinese consumers' enthusiasm for milk products from particular foreign origins has attracted attention. A few researchers have studied the change in Chinese consumers' dairy purchases after the melamine incident in 2008. Most of these studies were in the years immediately after 2008. The outcomes of some studies reported that the Chinese consumers' confidence on domestic dairy brands has recovered, while other studies suggested that the Chinese dairy consumers' concern about the safety of Chinese milk products are still significant (Qiao et al., 2010; Wang et al., 2008; Zhang et al., 2010). Therefore, there is still a debate on how Chinese consumers evaluate the dairy products with different country-of-origins.

Many studies have provided evidence that country-of-origin (COO) and consumer ethnocentrism (CE) play important roles in consumers' brand evaluation process. (Li et al., 2012; Ramsaran-Fowdar; Yu et al., 2013). The application of these concepts are found in developed countries such as Spain (Jiménez & San Martin, 2010), France, Germany and USA (Hoffmann et al., 2011), as well as in some developing countries such as Turkey (Cilingir & Basfirinci, 2014) and China (Li et al., 2012). In the Chinese market, the effects of COO and CE have been explored in various product categories, which include cars (Wang & Yang, 2008), clothes (Wu & Delong, 2006; Zhang, 1996) and household electrical appliances (Zhang, 1996). However, there is lack of research on the effects of COO and CE on the Chinese dairy consumers with different demographic backgrounds.

This paper aims to explore the demographic impacts on consumers' country-of-origin preference and ethnocentrism after the Chinese dairy scandal.

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2. Literature Review

2.1 Country-of-origin

A product's COO plays a role as a crucial information cue in process of purchase decision making. It can affect consumers' perceptions, product evaluations and preferences for foreign products, then accordingly influence their acceptance of imported products (Ahmed & d'Astous, 2001; Chinen et al., 2000; Schooler, 1965).

The term "origin" was understood broadly in various studies on COO. Initially, researchers limited COO to "the country where the products were manufactured or assembled" (Bilkey & Nes, 1982). Accordingly, they defined the product's as 'Country of Manufacture' (COM) or 'Country of Assembly' (COA). This definition has been adopted by a few later studies (Ahmed & d'Astous, 2001; Han & Terpstra, 1988). This definition suggests a dairy product should be considered as an Australian product as long as it was produced in Australia, even if the owner of the business is a Chinese company. Nevertheless, other studies believe that a product's origin depends on in which country the headquarters of that product's company operates (Johansson et al., 1985). According to this definition, even if a British dairy company expands a branch plant in Shanghai, its products manufactured in China will still be considered as a British product. However, there is an increasing number of multinational companies that relocate their factories in various foreign countries for cost control, due to the development of globalisation. This makes it more difficult to define a product's exact COO.

Although there is a lack of agreement on the exact definition of COO, a product's meaningful COO actually relies on how the business communicates it and how consumers perceive it. Companies utilise various methods to communicate the products' COO. The usage of labels such as "Made in …" is one the most transparent methods. Another strategy to present a product's COO is to utilise brands or trademark names that contain geographic references, for example, "UKbaby" baby formula. In addition, COO references can be also communicated whereby packaging and advertising, either via slogans (for example, "A taste of China") or via graphical elements (for example, the maple leaf mark on the package can imply that the product was made in Canada). These various communication strategies can influence a consumer's perception of a product's COO. This perception can be subjective. For instance, consumer's perception of whether a brand is domestic or foreign can be manipulated by the localisation or globalisation of packaging styles (Saran & Gupta, 2012). Therefore, a product's meaningful COO should be based on what consumers actually perceive.

Some researchers attribute the phenomenon that some consumers believe products from a specific country are superior to those from other countries because of the COO effect (Yang et al., 2016). For instance, France is often believed as a better wine origin. From this perspective, the researchers believe COO, as a cognitive information cue, has a direct influence on consumers' brand evaluations, especially when the essential motivation or ability is not adequate for a consumer to make a straightforward judgement of the product's quality (Frewer et al., 2001). These studies imply that COO effect on consumers' purchase decision is direct.

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However, some other studies report that this effect can be indirect. Paul and Dasgupta (2010) 's study provides the evidence that COO image (COOI) in a consumer's perception has important connotations in their purchase decision making in terms of an indirect impact on brand equity. The results of their study provides the evidence that COOI can have influences on the overall brand equity of the related products whereby four factors: "brand loyalty", "brand association", "brand awareness" and "perceived quality". These four factors build the overall brand equity of those products.

Brand loyalty refers to "a deeply held commitment to re-buy a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour" (Paul & Dasgupta, 2010).

Brand association means "anything linked in memory to a brand" (Aaker, 1996; Paul & Dasgupta, 2010)

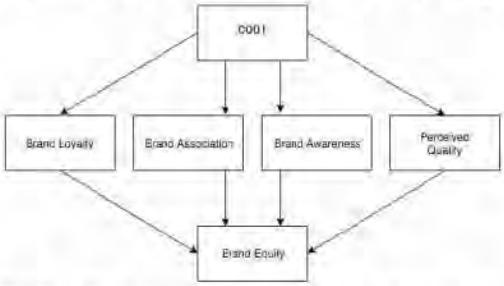
Brand awareness is considered as "The strength of a brand's presence in the consumer's mind from recognition to recall to top of mind to dominant"(Aaker, 1996; Paul & Dasgupta, 2010)

Perceived quality can be defined as "The consumer's subjective judgment about a product's overall excellence or superiority" (Paul & Dasgupta, 2010; Zeithaml, 1988)

Consumer-Based Brand equity can be concluded as "The value that is added by the brand's name and/or other intangible attributes of the product, which can act as drivers of consumer choice of products" (Aaker, 1996; Paul & Dasgupta, 2010)

Accordingly, Paul and Dasgupta (2010) introduced a conceptual framework to illustrate the indirect impacts of COO image on brand equity. This is shown in Figure 1.

Figure 1: A framework of indirect impacts of COO image on brand equity



Furthermore, COO effects on consumer's brand evaluation are not constant throughout different product types. Specifically, even though a particular COO have a positive impact on a consumer's evaluation of one product category, it may negatively influence the evaluation of another. Also, COO can play an important role in evaluation of one product, while this importance may not be significant for another product. This inconsistency depends upon the product categories and consumption scenarios of the products. For instance, for wine consumption, the COO can be the most crucial criteria for product choice, which can be even more significant than brand name or grape variety (Koewn & Casey, 1995). However, COO does not show the same importance when consumers are choosing snack foods (Zbib et al., 2010).

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2.2 Consumer Ethnocentrism

According to the definition of consumer ethnocentrism (CE) by Shimp and Sharma (1987), this concept refers to the views held by people about the adequacy and morality of purchasing products and services from foreign countries. CE was further utilised to explain the phenomena that some consumers refuse to purchase foreign products. They consider it is more appropriate, patriotic, and possibly even moral as they believe it avoids a potential threat to their domestic economy. Accordingly consumers with high ethnocentrism tend to have a negative evaluation of the quality of a foreign commodity and prefer to buy domestics (Shimp & Sharma, 1987).

The relationship between CE and COO has been studied in various countries, including China, UK, USA, France, Germany, Japan and Italy (Balabanis & Diamantopoulos, 2004; Evanschitzky et al., 2008; Ping et al., 2012; Shimp & Sharma, 1987; Watson & Wright, 2000). As for the application of CE in different product categories, the comparisons of consumers' preferences between domestic and foreign products were undertaken among a wide range of varieties including automobile, foods, TV sets, toiletries, fashion wears, toys, DIY equipment, and furniture (Balabanis & Diamantopoulos, 2004; Evanschitzky et al., 2008; Ping et al., 2012; Shimp & Sharma, 1987; Watson & Wright, 2000). The finds of the CE's impact on consumers' attitudes towards domestic and foreign COOs were not consistent across those product categories. Moreover, there was an absence of checking the importance of COO in consumers' brand evaluation in those studies.

2.3 Demographic factors of consumers

Demographic factors are defined as the socioeconomic characteristics of consumers which can be expressed statistically, for example, age, sex, education level, income level, marital status, occupation, religion, and family size.

Researchers have consistently debated on how demographic characteristics impact on consumers' preference of COO. Wall et al. (1988) argued that age factor influences consumers' evaluations of products. To be specific, younger people showed more favourable attitudes towards imports/foreign products in comparison to older groups. This was also supported by McLain and Sternquist (1991). The findings in their research suggested that in the connection between age and ethnocentrism, that the older groups had more ethnocentric consumers than the younger groups. The study conducted by Han (1988) provided some evidence that there is a correlation between gender of the consumers and COO preference. Female consumers have less likelihood to choose foreign products/imports. However, Ramsaran-Fowdar (2010) reported that male and elderly consumers have higher level of consumer ethnocentrism and tend to favour domestic products. As for household incomes, consumers with higher income tend to favour the products with foreign COO, particularly those from developed countries (Jap et al. 2009; Wall & Heslop, 1986). In addition, consumers show a higher level of ethnocentrism for domestic products when they have lower education level (McLain and Sternquist 1991; Meeusen et al. 2013).

The following research hypotheses were developed based on the above discussion.

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H1a: There is a significant relationship between the level of household income and the level of consumer ethnocentrism;
H1b: There is a significant relationship between the level of household income and the level of importance attributed to COO in dairy brand evaluation;
H2a: There is a significant relationship between age and the level of consumer ethnocentrism;
H2b: There is a significant relationship between age and the level of importance attributed to COO in dairy brand evaluation;
H3a: There is a significant relationship between the level of education backgrounds and the level of consumer ethnocentrism;
H3b: There is a significant relationship between the level of education backgrounds and the level of importance attributed to COO in dairy brand evaluation;
H4a: There is a significant relationship between having young family members (aged less than 6) and the level of consumer ethnocentrism;
H4b: There is a significant relationship between having young family members (aged less than 6) and the level of importance attributed to COO in dairy brand evaluation;
H5a: There is a significant relationship between dairy purchase frequency and the level of consumer ethnocentrism;
H5b: There is a significant relationship between dairy purchase frequency and the level of importance attributed to COO in dairy brand evaluation
H6a: There is a significant relationship between place of residence and level of consumer ethnocentrism;
H6b: There is a significant relationship between place of residence and the level of importance attributed to COO in dairy brand evaluation;
H7a: There is a significant relationship between gender and the level of consumer ethnocentrism;
H7b: There is a significant relationship between gender and the level of recognition of COO importance in dairy brand evaluation;
H8: There is a significant relationship between the level of consumer ethnocentrism and the level of importance attributed to COO in dairy brand evaluation.
H9a: There is a significant relationship between the level of importance attributed to COO in dairy brand evaluation and the level of brand loyalty for their preferred COO.
H9b: There is a significant relationship between the level of importance attributed to COO in dairy brand evaluation and the level of brand association for their preferred COO.
H9c: There is a significant relationship between the level of importance attributed to COO in dairy brand evaluation and the level of brand awareness for their preferred COO.
H9d: There is a significant relationship between the level of importance attributed to COO in dairy brand evaluation and the level of perceived quality for their preferred COO.
H10a: There is a significant relationship between brand loyalty for consumers' preferred COO and consumer-based brand equity;
H10b: There is a significant relationship between the brand association for consumers' preferred COO and consumer-based brand equity;
H10c: There is a significant relationship between the level of brand awareness for consumers' preferred COO and consumer-based brand equity;
H10d: There is a significant relationship between the perceived quality for consumers' preferred COO and consumer-based brand equity.

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3. Methodology

The data for this study was collected via an online panel. To be detailed, a structured questionnaire was presented on an online-survey website (Witmart) in China. The online survey method has been utilised by a few researchers in their studies related to COO effects, for example Kwak et al. (2006).There were three sections in the questionnaires. Firstly, participants were asked with questions regarding their general purchase behaviour including the location, frequency and product types of their dairy purchase. In addition, participants were also required to report their favourite COO for dairy product.

Secondly, the questionnaire utilised three questions to check the COO importance for dairy purchase. Then four items were adapted from the CETSCALE (Shimp and Sharma, 1987) as the measurement for consumer behaviour. These four items were chosen as they are more relevant to dairy purchase. The questionnaire also modified these items to fit the Chinese context. As for the measurements for Perceived Quality, Brand Loyalty, Brand awareness, Brand Association and Brand Equity, the items were adapted from the study by Paul & Dasgupta (2010). All the questions in the second part of questionnaire utilised a seven-point Likert scale where 1 is "Strongly Disagree" and 7 is "Strongly Agree".

The last part of this questionnaire surveyed the participants' demographic backgrounds in terms of gender, age, education, location, annual household income and the number of family members that are aged less than 6.

The questionnaire was initially developed in English then interpreted into simplified Chinese, which was checked with the Back Translation method (Brislin 1970). The data collection was conducted from December 2016 to February 2017, and the sample size was 700 Chinese residents who were aged 18 or more and purchased dairy products in the past 12 months. 573 valid responses were collected, representing a response rate of 81.9%.

4. Findings/Discussion

The demographic features of the sample in this study are displayed in Table 2. The locations of participants in this study covered all the 34 provincial regions in China except Qinghai (青海), Tibet (西藏), Hongkong (香港) and Macau(澳门). Most respondents lived in the cities (59.5%). 44% of the respondents were male and 56% were female consumers. The majority of the participants (49.4%) were in the age group 30-39 years old followed by those in the age group 18-29 years old (43.8%). The majority of participants (42.2%) had a gross annual household per capita between 20001-49999 Yuan. 58.3% of the respondents held bachelor degrees, while 20.9% had completed diplomas. 51.8% of the respondents had at least one young family member (aged less than 6).

As for the type of dairy products that the Chinese consumers purchased, 41.9% of the respondents reported that they normally purchased liquid milk, followed by yoghurt (37.0%) and baby formula (11.8%). 51.7% of the respondents purchased dairy products more than 10 times per month, while 23.0% of the sample purchased

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dairy products less than 3 times. Chinese consumer tend to purchase dairy products in chain supermarkets (74.9%), department stores (52.2%), small groceries shops (45.6%), dairy specialist retailers (36.1%) and domestic online shopping websites (25.5%). In addition, Australia (30.7%) and New Zealand (27.8%) were considered by the respondents as the favourite COO, while Japan was the COO that was disliked by the most respondents (47.29%).

Table 2: Demographic Variables (n = 573)

Demographic Variables	Percentage (%)
(a) Gender	
Female	56
Male	44
(b) Age	
18-29	43.8
30-39	49.4
40-49	5.4
50/more	1.4
(c) Education	
Not educated	0.0
Primary	0.0
Junior secondary	1.7
Senior secondary	8.4
Diploma	20.9
Bachelor	58.3
Masters	9.9
Doctorates	0.7
(d) Region	
City	59.5
County	20.2
Town	13.3
Village	7.0
(e) Annual family income per capita (before tax)	
20000/ less	19.9
20001-49999	42.2
50000-99999	19.5
100000-199999	13.4
200000 /more	4.9
(f) Number of young family members (aged<6)	
0	48.2
1	81.8

4.1 Reliability analysis of measurements

The importance of COO was measured by three items: "The Country-of-origin of dairy products is very important when I evaluate dairy products" (COOimp_1), "When I purchase dairy products, I care about in which country they are made" (COOimp_2), and "When I choose dairy products, I care about which country the brands are from" (COOimp_3) with a Likert scale where '1' meant "Strongly Disagree", '7' stood for "Strongly Agree" and '4' represented "Neither Agree nor Disagree". The average mean score of all these items as presented in Table 2 was 5.62, which indicated the considerable importance of COO in Chinese consumers' dairy brand evaluation. The mean of each item was higher than 5.5, the standard deviation scores of these items all exceeded 1, which suggests the widely shared opinions. As for the reliability analysis for these items, the Cronbach's alpha was 0.841, implying high internal reliability since this score was greater than 0.50 recommended by Sharma (1995).

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Table 3: Means and Standard Deviations (SD) of COO importance items (N=573)

Item	Mean	Std. Deviation
COOimp_1	5.76	1.152
COOimp_2	5.57	1.236
COOimp_3	5.54	1.266
Average Mean Score	5.62	

Consumer ethnocentrism was measured by four items: "A Chinese citizen should always buy Chinese dairy products."(CE_1), "Chinese should not buy foreign dairy products, because this hurts Chinese business and causes unemployment" (CE_2), "It may cost me in the long-run but I prefer to support Chinese dairy products" (CE_3), and "We should give priority to Chinese dairy products."(CE_4). The same Likert scale was applied in these items. The average mean scores of each item as presented in Table 4 was 3.9, which indicated low consumer ethnocentrism for dairy products in the Chinese consumers. The mean of each item was from 3.11 to 4.4, the standard deviations of these statements were all above 1. The Cronbach's alpha value for these items was 0.836, which suggests a high internal reliability

Table 4: Means and Standard Deviations (SD) of consumer ethnocentrism (N=573)

Items	Mean	Std. Deviation
CE_1	3.57	1.412
CE_2	3.11	1.301
CE_3	4.49	1.404
CE_4	4.40	1.405
Average Mean Score	3.89	

Likewise, as for the measurements for brand loyalty, brand association, brand awareness, perceived quality, and brand equity, the means and SD scores of these items are shown in the Table 5. Cronbach's alpha scores for these measurements were 0.877, 0.747, 0.819, 0.667 and 0.861 respectively, which confirmed the high internal reliability.

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Table 5: Means and Standard Deviations (SD) of Brand Loyalty, Perceived Quality, Brand Awareness, Brand Association and Brand Equity (N=573)

concept	Item	Mean	Std. Deviation
Brand Loyalty	I would love to recommend the dairy brands from my preferred country-of-origin to my friends	6.02	0.874
	I will not buy others if the dairy brands from my preferred country-of-origin are available for purchase	4.35	1.478
	I will think twice to buy other brands even if they are almost the same with the dairy brand from my preferred country-of-origin	5.20	1.148
	I make my purchase selection according to my favourite dairy brand's country-of-origin, regardless of price	4.90	1.356
	Average Mean Score	**5.17**	
Perceived Quality	The Dairy products from my preferred country-of-origin are of very good quality	5.86	0.997
	The dairy products from my preferred country-of-origin are safe	5.91	0.965
	The dairy products from my preferred country-of-origin taste good	5.54	1.086
	The dairy products from my preferred country-of-origin are nutritious	5.50	1.126
	The dairy products from my preferred country-of-origin are trustable	5.67	1.021
	Average Mean Score	**5.74**	
Brand Awareness	I can recognize the dairy brands from my preferred country-of-origin among other competing brands	5.03	1.255
	I am aware of the dairy brands from my preferred country-of-origin	5.13	1.262
	Some of the characteristics of the dairy brands from my preferred country-of-origin come to my mind quickly	5.19	1.231
	I can quickly recall the dairy brands' logo or symbols from my preferred country-of-origin	5.21	1.26
	Average Mean Score	**5.14**	
Brand Association	There is a reason to buy the dairy brands from my preferred country-of-origin over others	5.42	1.082
	I have a clear image of the type of person who would use the dairy brands from my preferred country-of-origin	4.73	1.362
	I trust the dairy companies which are from my preferred country-of-origin	5.63	1.035
	The dairy brands from my preferred country-of-origin are good value for money	5.62	0.962
	Average Mean Score	**5.35**	
Brand Equity	Even if another brand has the same features as my brand, I would still prefer to buy the dairy brands from my preferred country-of-origin	5.32	1.189
	If another brand is not different from the dairy brands from my preferred country-of-origin in any way, it still seems smarter to purchase my brand	5.08	1.253
	Even if there is another brand as good as my brand, I would still prefer to buy my brand	5.14	1.239
	Compared to other dairy products that have similar features, I am willing to pay a higher price for the dairy brands from my preferred country-of-origin	4.72	1.399
	The dairy brands from my preferred country-of-origin are different from other brands	4.99	1.197
	Average Mean Score	**5.05**	

4.2 The impacts of demographic factors on Consumer Ethnocentrism and COO Importance

Unary linear regression analyses were conducted to explore the impact of demographic factors on Consumer Ethnocentrism and COO importance. The statistics are shown in the Table 6 and Table 7.

Table 6: Regression analysis 1 (dependent variable: consumer ethnocentrism)

Independent Variable	Sum of Squares	df	Durbin-Waston	F	t	Sig.	B
Income	2.028	1	1.816	1.593	1.262	0.207	0.530
Age	19.744	1	1.857	15.901	13.781	0.000	0.165
Education	13.42	1	1.796	10.712	-3.273	0.001	-0.136
No.of young family members	2.022	1	1.824	1.589	1.260	0.208	0.530
Purcahse Frequency	10.412	1	1.87	8.240	2.870	0.004	0.119
Location	4.375	1	1.831	3.448	3.448	0.064	-0.093
Male	4.885	1	1.839	3.853	-1.963	0.050	-0.082

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Table 7: Regression analysis 2 (dependent variable: COO Importance)

Independent Variable	Sum of Squares	df	Durbin-Waston	F	t	Sig.	B
Income	13.613	1	2.048	12.270	3.503	0.000	0.145
Age	6.371	1	2.065	5.677	2.383	0.018	0.990
Education	2.145	1	2.067	1.899	1.378	0.169	0.058
No.of young family members	8.045	1	2.087	7.188	2.681	0.008	0.112
Purcahse Frequency	1.588	1	2.076	1.409	1.187	0.236	0.050
Location	9.629	1	2.064	8.625	2.937	0.003	0.122
Male	2.602	1	2.084	2.305	-1.518	0.130	-0.064

H1a0: There is no significant relationship between the level of income and the level of consumer ethnocentrism;
H1a1: There is a significant relationship between the level of income and the level of consumer ethnocentrism;
H1b0: There is no significant relationship between the level of income and the level of importance attributed to COO in dairy brand evaluation;
H1b1: There is a significant relationship between the level of income and the level of importance attributed to COO in dairy brand evaluation.

According to the Table 6 and Table 7, the significant levels of the impact of income on consumer ethnocentrism and COO importance were 0.207 and 0. The B coefficients were 0.53 and 0.145 respectively. Therefore, null hypothesis H1a0 was accepted while H1b0 was rejected implying that consumers income level did not have a significant relationship with the level of consumer ethnocentrism, while higher income level predicted the higher level of COO importance in dairy brand evaluation.

H2a0: There is no significant relationship between age and the level of consumer ethnocentrism;
H2a1: There is a significant relationship between age and the level of consumer ethnocentrism;
H2b0: There is no significant relationship between age and the level of importance attributed to COO in dairy brand evaluation;
H2b1: There is a significant relationship between age and the level of importance attributed to COO in dairy brand evaluation.

The significant levels of the impact of age on consumer ethnocentrism and COO importance were 0 and 0.018. The B coefficients were 0.165 and 0.99 respectively. It indicated that H2a1 and H2b1 were accepted. Older consumers had higher level of recognition of CE and attributed more importance to COO when evaluating dairy brands.

H3a0: There is no significant relationship between the level of education backgrounds and the level of consumer ethnocentrism;
H3a1: There is a significant relationship between the level of education backgrounds and the level of consumer ethnocentrism;
H3b0: There is no significant relationship between the level of education backgrounds and the level of recognition of COO importance in dairy brand evaluation;
H3b1: There is a significant relationship between the level of education backgrounds and the level of recognition of COO importance in dairy brand evaluation;

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The significant levels of the impact of education on consumer ethnocentrism and COO importance were 0.001 and 0.169. The B coefficients were -0.136 and 0.058 respectively. Therefore, H3a0 was rejected while H3b0 was accepted. It implies that consumers with higher education backgrounds do not have significant impact on the level of recognition of COO importance in dairy brand evaluation. However, consumers with higher education background had significantly lower level of consumer ethnocentrism.

H4a0: There is no significant relationship between having young family members (aged less than 6) and the level of consumer ethnocentrism;
H4a1: There is a significant relationship between having young family members (aged less than 6) and the level of consumer ethnocentrism;
H4b0: There is no significant relationship between having young family members (aged less than 6) and the level of importance attributed to COO in dairy brand evaluation;
H4b1: There is a significant relationship between having young family members (aged less than 6) and the level of importance attributed to COO in dairy brand evaluation;

The significant levels of the impact of young family members on consumer ethnocentrism and COO importance were 0.208 and 0.008. The B coefficients were -0.53 and 0.112 respectively. Therefore, H4a0 was accepted while H4b0 was rejected, implying that the young family members did not significantly influence the level of consumer ethnocentrism, however attributed higher level of COO importance in dairy brand evaluation.

H5a0: There is no significant relationship between dairy purchase frequency and the level of consumer ethnocentrism;
H5a1: There is a significant relationship between higher dairy purchase frequency and the level of consumer ethnocentrism;
H5b0: There is no significant relationship between dairy purchase frequency and the level of importance attributed to COO in dairy brand evaluation;
H5b1: There is a significant relationship between dairy purchase frequency and the level of importance attributed to COO in dairy brand evaluation

The significant levels of the impact of purchase frequency on consumer ethnocentrism and COO importance were 0.004 and 0.236. The B coefficients were 0.119 and 0.05 respectively. Therefore, H5a0 was rejected while H5b0 was accepted implying that consumers with higher purchase frequency had a higher level of consumer ethnocentrism but did not have significant distinction in terms of the level of importance attributed to COO in dairy brand evaluation.

H6a0: There is no significant relationship between place of residence and the level of consumer ethnocentrism;
H6a1: There is a significant relationship between place of residence and the level of consumer ethnocentrism;
H6b0: There is no significant relationship between place of residence and the level of importance attributed to COO in dairy brand evaluation;

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H6b1: There is a significant relationship between place of residence and the level of importance attributed to COO in dairy brand evaluation;

The significant levels of the impact of place of residence on consumer ethnocentrism and COO importance were 0.064 and 0.003. The B coefficients were -0.093 and 0.122 respectively. Therefore, H5a0 was accepted while H5b0 was accepted. It suggests that there was no significant relationship between place of residence and the level of consumer ethnocentrism. However, when consumer lived in urban regions, they had significant higher level of importance attributed to COO in dairy brand evaluation.

H7a0: There is no a significant relationship between gender and the level of consumer ethnocentrism;
H7a1: There is a significant relationship between gender and the level of consumer ethnocentrism;
H7b0: There is no a significant relationship between gender and the level of importance attributed to COO in dairy brand evaluation;
H7b1: There is no a significant relationship between gender and the level of importance attributed to COO in dairy brand evaluation;
The significant levels of the impact of gender on consumer ethnocentrism and COO importance were 0.05 and 0.13. Therefore, H7a0 and H7b0 were both rejected. It means there was no significant relationship between gender and the level of consumer ethnocentrism or importance attributed to COO in dairy brand evaluation.

4.3 The relationship between consumer ethnocentrism and COO importance

H8_0: There is no significant relationship between the level of consumer ethnocentrism and the level of recognition of COO importance in dairy brand evaluation.
H8_1: There is a significant relationship between the level of consumer ethnocentrism and the level of recognition of COO importance in dairy brand evaluation.
Another unary linear regression analysis was conducted to explore the relationship between CE and COO importance. According to Table 7, the means of COO importance and CE were 5.62 and 3.9 respectively. This suggests that the Chinese consumers do not have a high level of ethnocentrism or anti-ethnocentrism for dairy products, while the COO of those products have a considerable importance in their purchase. In addition, the significant level of the impacts of CE on COO importance was 0.174, which implies the absent significant relationship between CE and COO importance. As a result, the hypothesis was accepted.

Table 8 Regression analysis 3 (dependent variable: COO Importance)

	Mean	Std. Deviation
COO importance	5.6242	1.06214
CE	3.8901	1.13121

Independent Variable	Sum of Squares	df	Durbin-Waston	F	t	Sig.	B
Consumer Ethnocentrism	2.086	1	2.071	1.852	1.361	0.174	0.037

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4.4 The relationship between COO importance and Brand Loyalty/ Brand Association/ Brand Awareness/ Perceived Quality

H9a0: There is no significant relationship between the level of recognition of COO importance in dairy brand evaluation and the level of brand loyalty for their preferred COO.
H9a1: There is a significant relationship between the level of recognition of COO importance in dairy brand evaluation and the level of brand loyalty for their preferred COO.
H9b0: There is no significant relationship between the level recognition of COO importance in dairy brand evaluation and the level of brand association for their preferred COO.
H9b1: There is a significant relationship between the level recognition of COO importance in dairy brand evaluation and the level of brand association for their preferred COO.
H9c0: There is no significant relationship between the level recognition of COO importance in dairy brand evaluation and the level of brand awareness for their preferred COO.
H9c1: There is a significant relationship between the level recognition of COO importance in dairy brand evaluation and the level of brand awareness for their preferred COO.
H9d0: There is no significant relationship between the level recognition of COO importance in dairy brand evaluation and the level of perceived quality for their preferred COO.
H9d1: There is a significant relationship between the level recognition of COO importance in dairy brand evaluation and the level of perceived quality for their preferred COO.

Four unary linear regression analyses were conducted respectively to explore the relationship between COO importance (independent variable) and Brand Loyalty/ Brand Association/ Brand Awareness/ Perceived Quality (dependent variables), which is presented in the Table 8. The significant levels of COO importance on Brand Loyalty, Brand Association, Brand Awareness and Perceived Quality were all 0. The B coefficients were 0.422, 0.393, 0.308 and 0.419 respectively. Therefore H9a1, H9b1, H9c1 and H9d1 were all accepted, which implies that the higher level of COO importance in dairy brand evaluation will significantly and positively impact on Brand Awareness, Brand Association, Perceived Quality and Brand Loyalty

Table 9 Regression analysis 4 (independent variable: COO Importance)

Dependent Variable	Sum of Squares	df	Durbin-Waston	F	t	Sig.	B
Brand Loyalty	77.867	1	2.083	123.790	11.126	0.000	0.422
Brand Association	62.962	1	2.040	103.999	10.198	0.000	0.393
Brand Awareness	55.235	1	2.054	60.041	7.749	0.000	0.308
Perceived Quality	72.873	1	1.929	121.624	11.028	0.000	0.419

4.5 The impact of Brand Loyalty/ Brand Association/ Brand Awareness/ Perceived Quality on Brand Equity

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H10a0: There is no significant relationship between the level of brand loyalty for consumers' preferred COO and consumer-based brand equity;
H10a1: There is a significant relationship between the level of brand loyalty for consumers' preferred COO and consumer-based brand equity;
H10b0: There is no significant relationship between the brand association for consumers' preferred COO and consumer-based brand equity;
H10b1: There is a significant relationship between the brand association for consumers' preferred COO and consumer-based brand equity;
H10c0: There is no significant relationship between the brand awareness for consumers' preferred COO and consumer-based brand equity;
H10c1: There is a significant relationship between the brand awareness for consumers' preferred COO and consumer-based brand equity;
H10d0: There is no significant relationship between perceived quality for consumers' preferred COO and consumer-based brand equity;
H10d1: There is a significant relationship between perceived quality for consumers' preferred COO and consumer-based brand equity;

A multivariable linear regression analysis was conducted to understand how Brand Equity was influenced by Brand Awareness, Brand Association, Perceived Quality, and Brand Loyalty, associated with COO importance. According to the Table 9, the R Square score was 0.516 and the overall significant level was 0. As for each individual independent variable, the significant level of the impacts of Brand Awareness, Brand Association, Perceived Quality, Brand Loyalty, and COO importance to Brand Equity were 0, 0.09, 0, 0, 0.45, and the related B coefficients were 0.37, 0.07, 0.19, 0.22 and 0.03 respectively. It implies that Brand Loyalty, Brand Awareness, Brand Association had the significant and positive impacts on Brand Equity, while the effects of Perceived Quality on Brand Equity were not significant. The result also showed that the COO impact on Brand Equity was indirect. Therefore, H10a0, H10b0 and H10c0 were rejected, while H10d0 was accepted.

Table 10 Regression analysis 5 (dependent variable: Brand Equity)

R	R Sq	Adjusted R Sq	Std. Error of the Est	F	df1	df2	Sig.	Sum of Sq	Mean Sq	Durbin-Watson
0.718	0.516	0.511	0.7046	120.658	5	567	0	299.515	59.903	1.988

Independent Variable	t	Sig.	B	VIF
Brand Loyalty	9.76	0.00	0.37	1.70
Perceived Quality	1.71	0.09	0.07	1.85
Brand Awareness	5.06	0.00	0.19	1.70
Brand Association	4.77	0.00	0.22	2.44
COO Importance	0.75	0.45	0.03	1.33

5. Conclusion and Implications

The demographic factors have various effects on consumer ethnocentrism in the Chinese consumers' dairy products purchase after the scandal. Specifically, this study finds that income level has a positive impact on CE, which is consistent with the findings from the studies by Jap et al. (2009) and Wall & Heslop (1986); Higher level of education decreased the level of CE, which provides a further evidence for the findings in McLain & Sternquist (1991) and Meeusen et al. (2013)'s studies; When Chinese consumers are older, they tend to have a higher level of CE. This

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finding supports the studies by Wall et al. (1988) and McLain & Sternquist (1991). However, gender did not show a significant relationship with CE in this study. This finding does not agree with Han (1988)'s study.

The previous studies did not link CE with COO importance. Actually, this study finds a weak relationship between CE and COO importance in dairy brand evaluation. For example, although the consumers with higher purchase frequency have higher level of CE, COO does not have significant importance in their brand evaluation. In fact, COO importance can significantly influence consumers' brand awareness, brand association, perceived quality and brand loyalty of the products from their preferred COO, which is linked to an indirect effect on consumer-based brand equity. This implies that even if consumers report their ethnocentrism for domestic product, they may not indeed consider the COO factors when they purchase. In other words, a higher level of CE does not necessarily contribute to the consumers' actual brand evaluation. It also shows that CE is not a source for COO importance. For instance, the dairy products' COO has a significant importance when consumers have higher levels of income, or have young family members, or live in urban regions. However, these consumers did not report a high level of CE. Therefore, this study suggests that future research on CE should consider the impact of COO importance to obtain more practical findings.

This study also provides further evidence for the direct effects of consumers' brand awareness, brand association and brand loyalty on consumer-based brand equity, which was presented in Paul and Dasgupta (2010)'s study. However, the perceived quality did not have the direct impact on consumer-based brand equity.

The findings in this study shows that the Chinese dairy consumers do not present a high level of ethnocentrism for domestic products after the scandal. A marketing implication is that trying to raise consumer ethnocentrism is not an effective marketing strategy for dairy domestic companies to enhance their equity after food safety incidents. This study also suggests that foreign dairy companies should underline the COO information in their marketing communications activities for the Chinese consumers, particularly when targeting those who have higher income levels, reside in cities, or have young family members, as these consumers tend to attach importance to the products' COO.

This study explores the Chinese consumer ethnocentrism and COO importance in dairy brand evaluation. Further research is required to examine whether the findings in this this study are applicable in other products categories and countries.

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A CONCEPTUAL MODEL FOR COUNTRY-OF-ORIGIN EFFECTS

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Abstract

A product's country-of-origin can directly influence brand loyalty, brand association, brand awareness and perceived quality respectively and therefore have an indirect impact on brand equity. This study proposes a conceptual model for evaluating the country-of-origin effect. An extensive review of the literature on country-of-origin effects and the potential drivers of country-of-origin perceptions is conducted. The country-of-origin effect can be driven by various factors including country image/national stereotypes, consumer ethnocentrism & animosity, involvement, consumers' product familiarity and experience, and cultural difference. The limitation of this study is that it is based on a conceptual conclusion. Empirical evidence is needed to verify the proposed propositions. This conceptual model of country-of-origin can significantly add value in international marketing and brand management.

Keywords: Country-of-origin, Brand equity, Consumer - animosity, Consumers' knowledge, Cultural differences.

1. Introduction

Understanding how products' country-of-origin can influence consumers' purchase behaviour hasbeen of great interest to marketers and academics since the 1960s (Schooler, 1965). This is because the country -of-origin effect can perform as an intangible barrier for foreign products when entering new overseas markets due to the consumers' bias toward imports. Consumers can also utilise products' country-of-origin as a type of information cues for their product evaluation (Schooler, 1965; Roth & Romeo, 1992; Samli, 1995; Chinen et al., 2000; Ahmed & D'astous, 2001). In fact, some studies have found the country-of-origin effect can play an important role in products' brand image, which indirectly impact on consumers' purchase (Hsieh et al., 2004; Esch et al., 2006; Diamantopoulos et al., 2011). Therefore, researching on the country-of-origin effect can make a significant contribution to international companies' product marketing and branding.

Previous studies focused on some partial factors (for example, consumer ethnocentrism and animosity) which can drive the country-of-origin effect (Shin, 2001; Klein, 2002; Ang

et al., 2004; Nijssen & Douglas, 2004; Shimp et al., 2004). Other studies have tested the country-of-origin's partial impacts (for example perceived quality) on consumer behaviour (Inschand Mcbride, 2004). The purpose of this study is to develop a more comprehensive model for studying the country-of-origin effect. This conceptual model will illustrate the various drivers of country-of-origin effects, and its various direct effects and indirect effects.

2. Literature Review

2.1 The concept of Country-of-origin

2.1.1 Definition of Country-of-origin

The concept of country-of-origin (COO) and its effect has been discussed in several studies, however, there is an active debate on how to define this concept. Some consider COO effect as an intangible barrier for foreign products when entering new overseas markets in terms of the consumers' bias toward imports; others define COO as a type of information cues that form consumers' attitude and perception (Schooler, 1965; Roth & Romeo, 1992; Samli, 1995; Chinen et al., 2000; Ahmed & D'astous, 2001). Essentially, those previous studies agreed that the product's COO is a crucial information cue, which can affect consumers' perceptions, product evaluation and willingness to purchase foreign products thereby influencing imported products' acceptance by consumers in a new market.

A number of researchers attempted to clarify and examine the effects of COO. Samli (1995) argued that COO is an essential information cue, which plays a major part in the acceptance of products in a new market. Roth and Romeo (1992) defined the COO effect as how buyers perceive imports from a specific country. The COO effect was referred by Papadopoulos (1993) as a process where the imported product's origin impacts on how consumers perceive a product and evaluate its attributes. Chinen et al. (2000) considered COO effects as consumers' beliefs in COO information in their evaluation of the quality of goods from different countries and subsequent decision-making of purchase. Other researchers underlined how country images in products' origins affect consumers' perceptions and evaluations. To be specific, the country image of the product effects can be summarised as the generalisations and perceptions about a country in consumer perception and accordingly impact on their evaluation of products from that country (Nebenzahl et al., 1997; Stone, 2002).

Researchers have defined COO effects using various perspectives. The concept of the COO effect successfully explains why some consumers believe some products from a specific country have the superiority to those from other countries. For example, wine from France are assumed to have better taste than wine made in South America, German automobiles have greater quality than cars made in China, and Italian clothes are more fashionable than those from East Asia. The positive country images in respective

categories benefits the related products from these countries. In other words, when people hold a favourable attitude to a country image in a product category, they will show a preference for the product country of origin which is presented as superior.

2.1.2 The effect of Country-of-origin

The previous studies have demonstrated that COO may have the effect on consumers' purchase intention. However, some other researchers argue that this effect may be indirect rather than direct. These studies discover that COO, reflected both in country image (CI) and product category image (PCATI) perceptions, does not pose direct influence on consumers' purchase intention (PI) to the focal brands. Actually, the COO concept has an indirect impact. To be specific, when people find a new brand of Australian cheese for example, the positive CI of Australia (e.g. Australia is a developed country) and PACTI (e.g. Australia dairy products are good) will promote this brand's image to the consumers, accordingly enhance their purchase intention, due to the positive brand image (Hsieh et al., 2004; Esch et al., 2006; Diamantopoulos et al., 2011). Diamantopoulos et al. (2011) concluded this effect into a framework, which is shown in Figure 1.

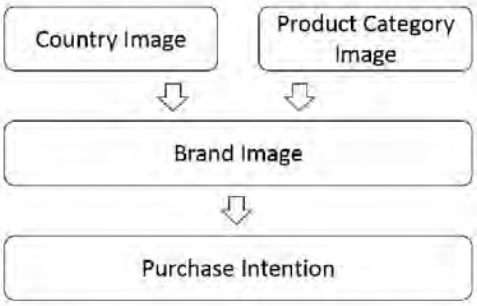

Figure 1:A model of the indirect impact of COO on purchase intention through brand image

Similarly, Paul and Dasgupta (2010) conducted a study to identify the effect of COO image (COOI) as an antecedent to brand equity, which is defined as a brand's incremental value (for example, profit margin or market share) due to its brand name. The study showed that COO image has important connotations in consumers' purchase decision making. For example, COOI is an important factor when Indian consumers are making a purchase decision for mobile phones and automobile brands (Paul & Dasgupta, 2010). The result in their study showed three important findings: Firstly, COOI can significantly influence the overall brand equity of mobile phones and automobile products. Secondly, there are four factors namely "brand loyalty", "brand association", "brand awareness" and "perceived quality" respectively that significantly and directly influence the formation of overall brand equity of those products. Finally, it showed that

the effects of those four factors are significant on overall brand equity, while the impact of COOI on overall brand equity is not. This implies that the COOI effect on overall brand equity should be indirect and mediated through those four factors. Accordingly, Paul and Dasgupta (2010) formed a conceptual model to illustrate the indirect impacts of COO image on brand equity, which is shown in Figure 2.

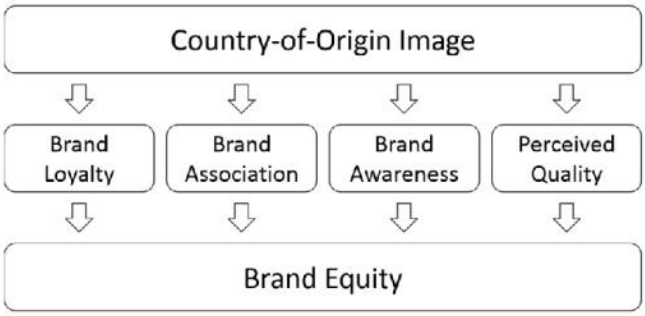

Figure 2: A conceptual model of indirect impacts of COO image on brand equity

2.2 The drivers of COO effects

2.2.1 Country image and national stereotypes

Previous research on COO effects also examined the impacts of the country's image and consumers' stereotypes. According to the Stereotype Content Model (SCM), consumers' stereotypes can be grouped into two dimensions: 'warmth' and 'competence' (Fiske et al., 2002). It argues that dimensions of stereotypes can be predicted by two variables 'status' and 'competition'. Actually the 'warmth' and 'competence' perform jointly, rather than work alone, to develop various types of stereotypes. Based on this model, Chattalas et al. (2008) developed a model which explains the relationship between "national stereotypes" and COO effect. It shows the COO effect process is initiated by national stereotypes. National stereotypes perform conjointly with other factors, which include "product type", "consumer expertise", "culture", "product involvement" and "consumer ethnocentrism", to cause the COO effect. The model is shown in Figure 3.

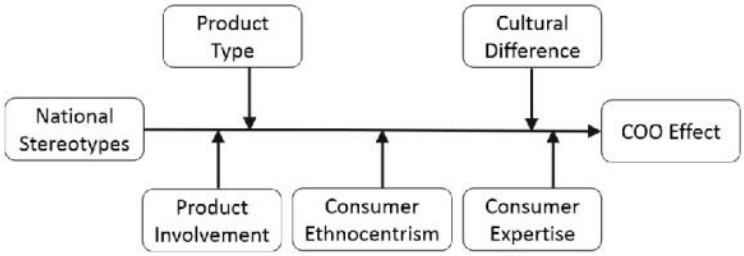

Figure 3: The conceptual framework of the relationship between 'national stereotypes' and COO effect

2.2.2 Consumer ethnocentrism (CE) and animosity(CA)

As one of the factors forming a COO effect in the conceptual framework (Chattalas et al., 2008), consumer ethnocentrism (CE) roots in "ethnocentrism" that is a more general psychological concept that can be found most domains of inter-group relationships (Lewis, 1976; Shimp & Sharma, 1987). Ethnocentrism was initially defined by Sumner (1906) as a tendency that people believed their own group to be superior to others and therefore, perform a rejection to other groups which are dissimilar while showing the accreditation to similar ones. Based on a general framework, Shimp and Sharma (1987) identified CE as the views held by people about the adequacy and morality of buying commodities from other countries. This concept has been further referred as to a phenomenon that some consumers are ethnocentric and tend to discriminate products from the 'in-group' (domestics) and from 'out-groups' (foreigners) and to avoid purchasing foreign products as they consider it as inappropriateness, anti-patriotism, and possibly even immorality due to the potential threat to their domestic economy. As a consequence, consumers with high ethnocentrism tend to have a negative evaluation of foreign commodities' quality and prefer to buy domestics (Shimp & Sharma, 1987). Additionally, in their study, they also developed and validated the CETSCALE (Consumer Ethnocentric Tendencies Scale) as a measurement for the scale of CE.

Various studies have tested the relationship between CE and COO among various product categories and countries. For example, consumers in UK, USA, France, Germany, Japan and Italy were selected as the foreign COOs in the researches undertaken by Balabanis and Diamantopoulos (2004), Evanschitzky et al. (2008), Shimp and Sharma (1987), and Watson and Wright (2000). Considering product types, the examination of consumers' preferences between domestic and foreign products was undertaken among a wide range of categories such as automobile, foods, TV sets, toiletries, fashion wears, toys, DIY equipment, and furniture. The CETSCALE was widely applied in those studies because the reliability and validity of the CETSCALE were strongly supported by cross-national studies (Shimp & Sharma, 1987; Watson & Wright, 2000; Balabanis & Diamantopoulos,

2004; Evanschitzky et al., 2008). However, it was reduced from seventeen items to ten items. The conclusions of the linkage between CE and consumer preferences vary across those product categories. They imply the effects of CE are product and country specific, that the CE effect for one country and one product category cannot necessarily transfer to other countries and categories.

Another concept which is similar to CE, the general concept of animosity can also be applied in the consumer behaviour, which is defined as 'consumer animosity' (CA) (Klein et al., 1998). Initially, animosity is considered as a concept that is attitudinal and exists in individuals' minds. Buss (1961) referred the concept of animosity to an attitude of the dislike and negative evaluation of others. Furthermore, Spielberger (1988) argued that animosity should be "a complex set of feelings and attitudes that motivate aggressive and often vindictive behaviour". The concept of consumer animosity was initially introduced and defined by Klein et al. (1998) as the "remnants of antipathy related to previous or ongoing military, political, or economic events". Recently, this construct paid more attention in the studies of consumer behaviour in both intra-national and international marketing settings (Klein et al., 1998; Shin, 2001; Jung et al., 2002; Nijssen & Douglas, 2004; Shimp et al., 2004; Leong et al., 2008; Tian & Pasadeos, 2008). Those studies conceptually differentiated the constructs of consumer animosity and COO effect. For example, the COO can influence people's perception of the quality of some particular goods from a particular country. However, consumer animosity can impact on consumers' attitude to all products from a particular country despite of perceived quality. Accordingly, consumers who hold any animosity would refuse to purchase any products related to an offending nation, even though the quality of products with that origin was not undervalued. This argument was supported in the study by Klein et al. (1998). Based on the background of the 'Nanjing Massacre' which refers to the historical fact that 300,000 citizens in China were slaughtered by Japanese army in 1937, the Chinese consumers showed anger towards Japan. The authors discovered that consumers' purchase decisions were negatively influenced by the animosity without product quality evaluations. Other studies gave further support for CA effects on consumer behaviour in various countries or different groups in specific country (Shin, 2001; Klein, 2002; Ang et al., 2004; Nijssen & Douglas, 2004; Shimp et al., 2004). Nevertheless, there are some inconsistent findings among the literature. While the initial research by Klein et al. (1998) and some further studies by other authors presented that CA is not linked to product judgments, Ettenson and Klein (2005) argued that CA could affect product judgments in long term. Likewise, findings from Shoham et al.'s (2006) study showed that CA negatively influence consumer's behaviour in terms of both willingness to purchase and judgments of product quality. Shoham et al. (2006) attribute their findings to the presence of the "cognitive consistency" (Festinger, 1957). This finding was also shown in other studies of consumers with high levels of animosity (Tian & Pasadeos, 2008). It indicates that it would be possible that when the Chinese consumers witness some events (e.g. Australia's attempt to be involved in the dispute of the South China Sea), the aroused or enhanced animosity would cause their negative attitudes towards to the

products from related countries. In terms of types of animosity, researchers classify CA as general animosity, war animosity, perceived threat, antithetical political attitudes, and negative personal experiences (Klein et al., 1998; Hoffmann, 2011; Jiménez & Martín, 2012).

As for the relationship between CE and CA, Klein and Ettenson (1999) argued that there may be a positive correlation between these two concepts. For instance, both of them can be caused by economic or political issues and both provide penetration into people attitudes towards imported goods. The findings of the studies on CE and CA also provide evidence that both of them show negative predictions to purchase intentions. However, CA is a distinct concept from CA because of their different roles in influencing purchase behaviour (Klein et al., 1998). To be detailed, the consumers can hold animosity towards a special nation, whereas the ethnocentric individuals can hold a general negative attitude towards any products with a foreign COO (Klein, 2002). For example, an increasing number of Chinese avoiding goods from other countries and showing a preference for domestic goods as a result of the developing CE and the improvement in the quality of local products (Zhou & Hui, 2003). Nonetheless, CE cannot be an explanation for the anti-Japanese purchase in China, while there are no boycotts of products from other countries. Some other studies also found that CE and CA have distinct impacts when consumers are evaluating products with products with COOs. For instance, consistent findings showed that CE can be obviously linked to both product judgments and purchase intentions (Shimp & Sharma, 1987; Netemeyer et al., 1991). Consumers who insist that it is inappropriate or unethical to buy foreign products are also likely to keep negative perceptions of the quality of those productions. By contrast, the effects of CA on purchase cannot be definitely related to quality judgments of the goods from the boycotted country. For instance, those who show economic animosity towards Japan tend to have a positive perception of the quality of Japanese products, however, others whose animosity is based on the previous war conducted by Japan might undervalue Japanese products.

2.2.3 Product involvement

In Chattalas et al. (2008)'s framework, consumers' involvement and expertise are another important factors affecting COO effect. This viewpoint was also supported by Cilingir and Basfirinci (2014), who studied the COO effects in Turkey, a developing country. In Cilingir and Basfirinci (2014)'s study, they concluded that consumers' product involvement and knowledge, associated with CE, modulate the COO effect in product evaluation. This framework is illustrated in Figure 4.

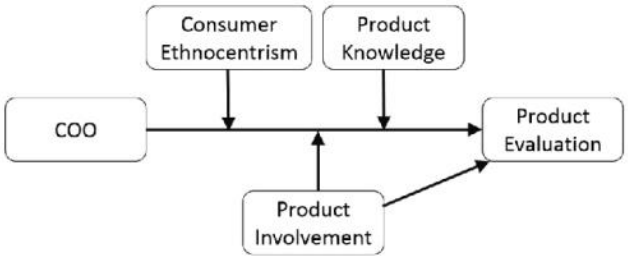

Figure 4: A framework of COO effect in product evaluation

Day (1970) defined product involvement (PI) as "the general level of interest in the object or the centrality of the object to the person's ego structure". Previous studies have been debating that PI might have two directions in its interaction with COO effect: positive or negative correlation.

The first perspective on the PI effect is based on the research on persuasion: persuasion could be formed by either a "central" of "peripheral" approach (Petty et al., 1983; Haugtvedt et al., 1992; Josiassen et al., 2008). When a consumer utilizes a central approach, he/she will make the necessary efforts of cognition on the evaluation of the available information (for example, searching for comments of a product on professional websites). On the other hand, when a consumer utilizes a peripheral approach, the evaluation is more likely to be based on those messages that are more salient and easily comprehensible such as information on the packages. Generally, it shows that consumers tend to utilize a central approach in high involvement conditions and choose a peripheral approach in low involvement conditions (Petty et al., 1983). A few researches on COO (Han, 1989; Maheswaran, 1994) argue that COO information will be more important to those who are purchasing lower-involvement products, because COO is a kind of salient and easily comprehensible information for a purchase decision (for example, the "MADE IN AUSTRALIA" label on the package of fish oil) (Han, 1989; Maheswaran, 1994). It implies COO may have a stronger effect on consumers who purchase fish oil as a low involvement product, while this effect will be weaker when fish oil is a high involvement product to other consumers. This is supported by Gurhan-Canliand Maheswaran (2000) and Verlegh et al. (2005). The researchers concluded that: "Country of Origin has a greater impact on product evaluations when consumers are less motivated to process available information, for example when involvement is low." In other words, the PI has a negative correlation with COO effect.

Another perspective on the PI effect is based on the supposition that people who have higher involvement with a product would search, utilize and pay more attention to the cues of product class before their evaluation and purchase (Celsi & Olson, 1988). As to high-involvement products, people will utilize cues (e.g. prices and designs) when identifying the class of different products and also may adopt other information

including COO image (Ahmed & D'astous, 2004). This means consumers tend to value every possible source of information when they are high involved. As a result, the greater the involvement, the greater the likelihood of consumers will use the COO information in a product evaluation situation (D'astous & Ahmed, 1999). Actually, this is an opposite viewpoint to those previous studies that identified the negative correlation between PI and COO effect. Since there has no agreement reached on the role of PI in COO effect, further research on consumers in different countries and different product categories is necessary.

2.2.4 Consumer's product familiarity and experience.

In terms of the concept of consumer knowledge about products, many studies linked it to other more specific constructs, for example, experience, frequency, expertise, and familiarity (Marks & Olson, 1981; Park & Lessig, 1981; Alba & Hutchinson, 1987; Biswas & Sherrell, 1993). Brucks (1985), specifically divided product knowledge into three groups: "subjective knowledge" (e.g. consumers' perceptions of how much they know about the product), "objective knowledge" (e.g. quantity and types of what a consumer actually kept in the memory), and "experience knowledge" (e.g. how much a consumer previously purchased or utilised the product). Alba and Hutchinson (1987) detailed the concept by another two categories: "familiarity" (e.g. how many experiences a consumer has that relates to the product) and "expertise" (e.g. how much a consumer can understand the product and perform in its related tasks). Generally, the definition of consumer' expertise in those previous studies shows a common view that the amount of consumers' product knowledge can be seen by their familiarity with and experience with the products.

Researches on the interaction of product familiarity and COO effect generally base it on how consumers utilise COO cues in their purchase decision-making process. As it has been discussed earlier, COO image can be considered as a halo that consumers utilized to evaluate a product that they have not been familiar with. It implies that a consumer who has limited direct knowledge of a product, uses COO information as an indirect aid to evaluate a product's performance (Laroche et al., 2005). For example, a consumer may be unfamiliar with a particular hand bag made in Germany, but have a perception that German products generally have high quality. Therefore, based on the hand bag's Germany COO, and the consumer's belief that a general feature of German goods is their greater quality, the consumer is likely to make a positive evaluation of the unfamiliar German hand bag. This viewpoint is also supported by other studies (Huber & McCann, 1982; Johansson et al., 1985; Hong & Toner, 1989; Tse & Gorn, 1993; Li et al., 2003; Insch & Mcbride, 2004; Phau & Suntornnond, 2006). These studies propose that when consumers evaluate a product, COO image is essential only if they have a low product familiarity. By contrast, COO image will play a less important role in consumers' product evaluation once they have knowledge of the product category.

Johansson (1989), however, argues that individuals may generalize their evaluation of a familiar product, and then transfer it into the COO image as a summary cue. In other words, the researcher believes that consumers will utilise COO image as an "agent" for a product' performance or quality if they have experienced the performance of other goods with the same COO. For instance, a consumer who had good experiences with one or more brands of wine made in Australia will draw a conclusion that Australian wines have very high quality. As a result, the consumer will assume that an untried Australia wine brand has the similar high quality of the other Australian wine brands. To sum up, the COO effects are influenced by consumer's familiarity of the product, which comes from their experience. However, there are still two questions: what is the consumers' experience and what kind of experience will impact on consumers' perception and familiarity of products?

To answer the first question, Li et al. (2003) suggest that an experience is more than simply the passive reception of external sensations or subjective mental interpretation of an event or situation; rather, experience is the product of an ongoing transaction that gains in quality, intensity, meaning, and value integrating both psychological and emotional conditions. Based on this, they defined consumer's experience as "the sensation of interaction with a product, service, or event, through all of our senses, over time, and on both physical and cognitive levels". This means product experiences are formed from a consumer's physical interaction (e.g. evaluate, purchase, use or other behaviour) with a product (Hoch, 2002). Some researchers have grouped these interactions into two distinct types of experience: direct experience and indirect experience. In other words, physical interaction with a product provides direct experience while external presentation or description provides indirect experience (such as advertising) (Hoch & Ha, 1986; Kempf & Smith, 1998). Obviously, product usage experience is one type of a direct experience due to the physical product interaction that involves tangible and intrinsic messages of product attributes. A product's COO, which can be normally shown on a "made in" label is an extrinsic message that conveys intangible and extrinsic cues of product attributes such as quality (Peterson & Jolibert, 1995). Therefore, a product's COO can be considered as a similar cue to brand names, packages, or prices because none of these directly bears actual product performances (Peterson & Jolibert, 1995). Yet, indirect product experiences, such as watching advertisements or seeing product displays, sometimes can play a significant role in consumers' purchase decision-making. For example, a consumer may pay attention to the car displays in the store or look at the car users' comments and recommendations online before he/she actually purchase a new van. However, some other researchers maintain that direct product experiences provides individuals with more reliable information than indirect experiences due to their more experiential and physical interactions with products (Hamilton & Thompson, 2007). For instance, when a consumer has a trial of a product, such as coffee, he/she tends to have a higher level confidence on the product than from watching advertisements. This explains why product trials promote more purchase intention than advertising exposures (Hamilton &

Thompson, 2007).

Another study by Thompson et al. (2005) showed that there is a systematic difference in consumers' preferences from their indirect experiences and direct experiences. To be detailed, before the product (such as coffee) usage, a consumer might prefer those with various characters (such as a specific COO) and functions (such as rich in nourishments), but after the product usage, the preference may be those that have a good taste. Therefore, consumers may initially rely on their indirect experiences to choose products, however, their choice can be more determined by the afterwards direct usage experiences. Direct product usage experience could, therefore, change product preferences from one end to the other. Wu and Shaffer (1987) conducted a study to provide evidence that direct experience forms sturdier, more comprehensible brand attitudes, and produces stronger links between present and future purchase behaviour.

While much attention is paid to consumers' direct product experiences, there are increasing number of studies focused on the impact of consumer's indirect product experiences from tourism, particularly in the wine industry. These studies attempted to demonstrate the positive impact of wine tourism experience on consumers' products' COO preference and purchase intention. For instance, Kolyesnikova and Dodd (2008) found that consumers' purchase will be promoted by their positive experience in the winery. Furthermore, the outcome from a study conducted by Bowe (2013) showed that people who have experience in Australia consider Australia as a more preferential COO for wines and seafood than the other countries compared to those who have not visited. It also needs to underline that the COO attribute shows more importance to the visitors than the non-visitors. The outcome of the study does not only support the argument that consumer with higher product familiarity tend to evaluate it more positively (Bird et al., 1970), but also shows a new finding that consumers' familiarity with a country may contribute to their positive evaluation of products from that country. The existing gap is that these studies generally examine those consumers who actually participate in the visitation to the country. However, the halo effect of COO image may also affect those who have not actually visit the related country. For instance, Lockshin and Lee (2011)'s experiment in Australia shows that the tourism destination image can provide an indirect influence to consumer's COO preference via product COO beliefs, especially the Chinese consumers who are unfamiliar with Australia. It assumes that the positive tourism destination image could come from the word-of-mouth of the consumers' friends and/or family members who have visited the related country. Therefore, future studies should not only analyse the impact of consumers' direct product experience (usage) and indirect experience (country visitation), but also check the influence from the consumers' friends and/or family members' visitation to the related country.

2.2.5 Consumers' cultural difference

Previous studies have found that COO effects can be different across various countries. A few researchers have attributed this to the consumers' cultural difference (Narayana, 1981; Chattalas et al., 2008). Generally, consumers with higher collectivism (lower individualism) tend to consistently prefer domestic to foreign products (Gurhan-Canli & Maheswaran, 2000; Chattalas et al., 2008). As to a more individualistic consumer, he/she tends to be more independent. Individuals hold independent relationships with others and give priority to their personal goals rather than those of their in-groups. By contrast, a more collectivistic consumer's self-construal is likely to be interdependent. The independence with others is valued and it is believed that the in-group goals are a priority before personal goals (Shavitt et al., 2006). It suggests that a collectivistic consumer would try to choose domestic products in order to support the domestic workers' jobs in the related industry, accordingly pay more attention to the products' COO.

2.3 Summary of literature review

The previous studies identified the effect of COO impacting on brand equity. This effect is indirect and mediated by brand loyalty, brand association, brand awareness and perceived quality. The forming of COO effect is driven by various factors: country image/ national stereotypes, consumer ethnocentrism and animosity, involvement, consumers' knowledge (product familiarity and experiences) and cultural difference (collectivism/ individualism). Although, each driving factor and impact of the COO effects has been examined in various products and countries, there is still an absence of a comprehensive model for this concept. Based on the conceptual framework shown in Figures 1 to 4, a new framework is created for testing COO effects, which is shown in Figure 5.

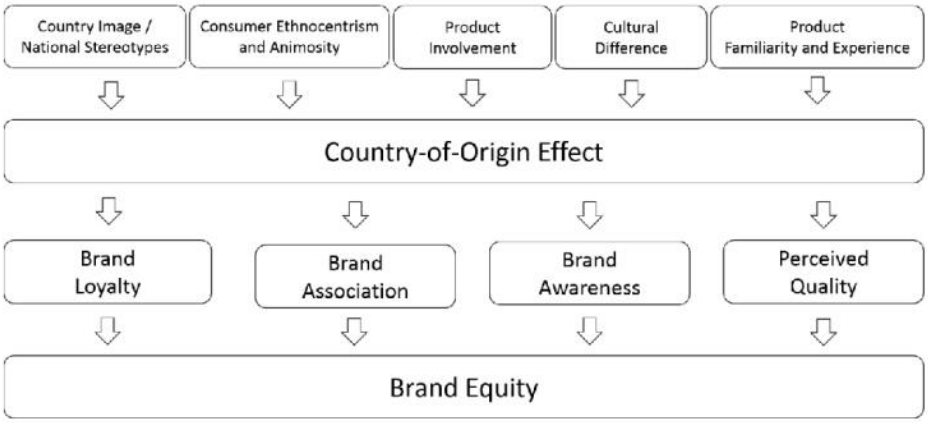

Figure 5: A conceptual framework of the COO effects

Accordingly, some propositions are formed for future study:

P1: Theconsumers are affected by COO cues in their purchase

P1a: The COO image has an impact on consumers' brand loyalty, which in turn influences their purchase intention

P1b: The COO image has an impact on consumers' brand association, which in turn influences their purchase intention

P1c: The COO image has an impact on consumers' brand awareness, which in turn influences their purchase intention

P1d: The COO image has an impact on consumers' perceived quality, which in turn influences their purchase intention

P2: The effect of COO on consumers is driven by their country image and national stereotypes

P2a: When consumers have a positive image of a specific country, they will prefer the products from the country

P2b: The stronger national stereotypes consumers have, the more they will utilise COO in their product evaluations

P3: The effect of COO on consumers is driven by their ethnocentrism and animosity

P3a: When consumers have a strong ethnocentrism, they will prefer domestic products

P3b: The more ethnocentrism consumers have, the more they will utilise COO in their product evaluations

P3c: When consumers have a strong animosity towards a country, they will negatively evaluate the products from that country

P3d: The more animosity consumers have, the more they will utilise COO in their product evaluations

P4: The effect of COO on consumers is driven by their involvement

P4a: When consumers have a strong involvement, they will prefer foreign products

P4b: The more involvement consumers have, the more they will utilise COO in their product evaluations

P5: The effect of COO on consumers is driven by their product familiarity and experience

P5a: The more familiar consumers are with the product, the more theywill prefer foreign products

P5b: The more familiar consumers are with the product, the more they will utilise COO in their product evaluation

P5c: The effect of COO on consumers is driven by their indirect experience

P5d: The effect of COO on consumers is more driven by their direct experience rather

than indirect experience

P6: The effect of COO on consumers is driven by theircultural difference

P6a: The more individualistic consumers are, the more they will prefer foreign products

P6b: The more individualistic consumers are, the more they will utilise COO in their product evaluation

Conclusion

According to the literature, country-of-origin is an important factor for consumers' perceptions and in their purchase decision-making process. This may influence consumer's brand loyalty, brand association, brand awareness and perceived quality and therefore impact on the product's brand equity. Historically, the studies on country-of-origin effect tend to focus on its partial driving factors (e.g. consumers' ethnocentrism) and its one particular impact (e.g. perceived quality). This paper is based on a literature review of previous related studies and initially develops a conceptual model for studying the country-of-origin effect. This more systematic model explains the various drivers of country-of-origin effects, and its various direct effects and indirect effects. Empirical research is needed to verify this proposed model in the future.

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